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Effect of specific drill training package on selected physiological variables among college men football players

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Abstract
The purpose of the study was to find out the effect of specific drill training package on selected physiological variables namely resting pulse rate and breath holding time among college men football players. To achieve the said purpose, thirty men football players were selected at random from Government Boy's Degree College Baramulla of Jammu and Kashmir State, India as subjects. The selected subjects were divided into two equal groups of fifteen subjects each. The group I underwent specific drill training package for four days per week for twelve weeks. Group II acted as control group who did not participate any special training programmes apart from their regular routine, as per their curriculum. The following variables namely resting pulse rate and breath holding time 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 analysis of covariance (ANCOVA) was used to analyze the significant difference, if any between 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 revealed that there was a significant difference between specific drill training package group and control group on selected physiological variables namely resting pulse rate and breath holding time.

Keywords: specific training, drill, physiological fitness, football

Introduction
Sports training are always planed and systematic for achieving the highest performance in a given competition; desired results cannot be achieved without proper planning and proper training. The main objective of sports training is to develop physical fitness level of the sports person. (Gupta, 2013) [2]
Football is a complex and demanding game requiring sophisticated training. Players must have good aerobic fitness, speed, strength, ball skills, tactical efficiency and understanding basic football strategies. To create a training program that addresses the multiple demands of the game, one must became familiar with the different methods of training for the sport of football. (Canard, 1960)
Physiology is the science of the function of living systems. This includes how organisms, organ systems, organs, cells, and bio-molecules carry out the chemical or physical functions that exist in a living system. Physiology is the science of the functions and phenomena of living things. Human body contains vast numbers of cells which are the fundamental units of all living organisms. (John and Bray, 1994) [3]
Physiology is the study of the body and how if functions. A physiologist studies the stracture and operation of the tissues, organs, and systems of the body. Sports physiology is the study of the immediate and long term effects of training and sport participation on the body's physical systems. (Brain and Shurkey, 1986) [1]
The physiological system of the body should be fit; it must function well enough to support the specific activity that the individual is performing. Moreover, different activities make different demands upon the organism with respect to circulatory, respiratory, metabolic, and neurological and thermo regulatory functions.

Methodology
The purpose of the study was to find out the effect of specific drill training package on selected physiological variables namely resting pulse rate and breath holding time among college men football players. To achieve the said purpose, thirty men football players were selected at random from Government Boy's Degree College Baramulla of Jammu and Kashmir State, India were selected as subjects. The selected subjects were divided into two equal groups of fifteen subjects each. The group I underwent specific drill training package for four days per week for twelve weeks. Group II acted as control group who did not participate any special training programmes apart from their regular routine, as per their curriculum. The following variables namely resting pulse rate and breath holding time 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 analysis of covariance (ANCOVA) was used to analyze the significant difference, if any between 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.

Training Programme

For experimental group, the specific drill package had been given for four days per week for twelve weeks. Training was given in the evening session. The training session includes warming up and cooling down. Every day the workout lasted for 45 to 60 minutes approximately. The subjects underwent their training programmes as per the schedules under the strict supervision of the investigator. During experimental period, control group did not participate in any of the special training.

Analysis of the data

The influence of specific drill training package programme on each criterion variables are analysed separately and presented below.

Resting pulse rate

The analysis of covariance of the data obtained for pre and post test scores on resting pulse rate of specific drill training package and control groups have been presented in table I.

Table 1: Analysis of covariance for the pre and post tests on resting pulse rate of specific drill training package and control groups (in numbers)

Test	Specific drill training package group	Control group	Sov	Ss	Df	Ms	F- Ratio
Pre test							
Mean	68.60	68.07	B	3.24	1	1.62	0.37
Sd	2.18	1.61	W	180.53	28	4.29	
Post test							
Mean	65.60	68.13	B	51.73	1	25.87	7.53*
Sd	1.82	1.45	W	144.27	28	3.43	
Adjusted post test							
Mean	65.31	68.25	B	65.73	1	32.87	38.53*
			W	34.97	27	0.85	

*significant at .05 level of confidence.

(The table values required for significance at .05 levels with df 1 and 28 is 4.20 and 1 and 27 is 4.215 respectively).

The table I show's that the adjusted post-test means on resting pulse rate of specific drill training package group and control group are 65.31 and 68.25 respectively. The obtained "F" ratio of 38.53 for adjusted post-test means is greater than the table value of 4.215 for df 1 and 27 required for significance at .05 level of confidence on resting pulse rate.

The results of the study indicated that there was a significant difference between the adjusted post-test means of specific drill training package group and control group on resting pulse rate.

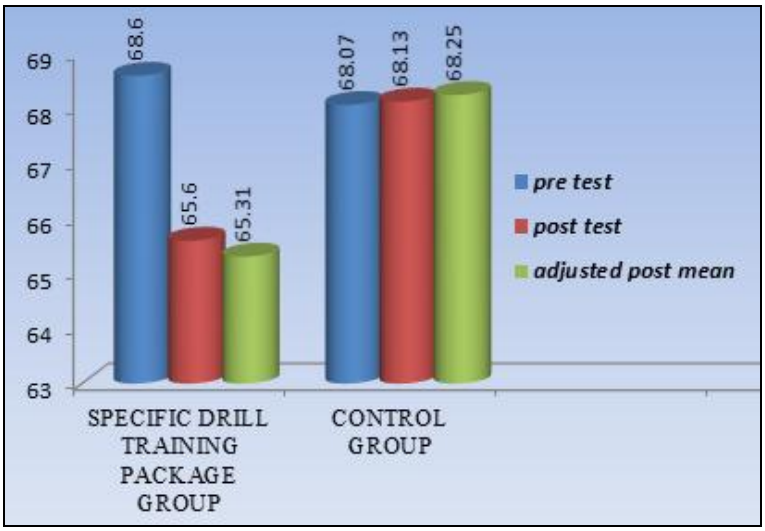

Fig 1: The Pre, Post and Adjusted Post Test Mean of specific drill training package and control groups on resting pulse rate.

Breath holding time

The analysis of covariance of the data obtained for pre and post test scores on breath holding time of specific drill training package and control groups have been presented in table II.

Table 2: Analysis of covariance for the pre and post tests on breath holding time of specific drill training package and control groups (in seconds)

Test	Specific drill training package group	Control group	Sov	Ss	Df	Ms	F-ratio
Pre test							
Mean	27.33	28.53	B	12.98	1	6.49	0.30
SD	4.16	3.76	W	896.67	28	21.35	
Post test							
Mean	34.07	29.60	B	149.64	1	74.82	3.47*

SD	3.87	3.81	W	904.27	28	21.53	
Adjusted post test							
Mean	34.77	29.19	B	232.45	1	116.23	37.42*
			W	127.31	27	3.10	

*significant at .05 level of confidence.

(The table values required for significance at .05 levels with df 1 and 28 is 4.20 and 1 and 27 is 4.215 respectively).

The table II show's that the adjusted post-test means on breath holding time of specific drill training package group and control group are 34.77 and 29.19 respectively. The obtained "F" ratio of 37.42 for adjusted post-test means is greater than the table value of 4.215 for df 1 and 27 required for significance at .05 level of confidence on breath holding time. The results of the study indicated that there was a significant difference between the adjusted post-test means of specific drill training package group and control group on breath holding time.

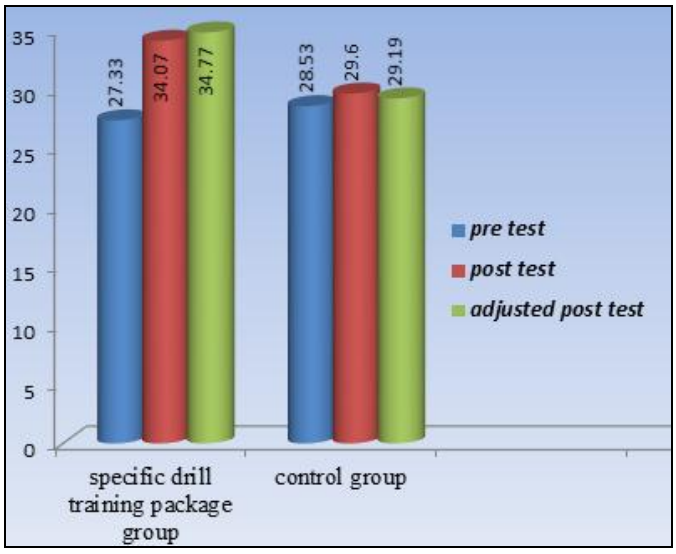

Fig 2: The Pre, Post and Adjusted Post Test Mean of specific drill training package and control groups on breath holding time.

Conclusions

1. There was a significant difference between specific drill training package and control groups on resting pulse rate of the football players.
2. There was a significant difference between specific drill training package and control groups on breath holding time of the football players.
3. And it was found that there was a significant improvement on selected criterion variables such as resting pulse rate and breath holding time due to specific drill training package among football players.

References

1. Brian J Shurkey, Coaches Guide to Sport Physiology, Human Kinetics Publishers USA, 1986, 9.
2. Gupta R, UGC net/set physical education, (Ramesh Publishing House New Delhi, 2013, 349.
3. John J Bray *et al*. Human Physiology, London; Black well Scientific Publication, 1994, 1.
4. Conard L, Understanding Soccer Tactics, London: Faber and Faber Publications, 1960, 39.