



ORIGINAL RESEARCH PAPER

Physical Education

EFFECT OF PLYOMETRIC TRAINING ON SPECIFIC SOCCER SKILL AND PLAYING ABILITY OF COLLEGE GOING MALE SOCCER PLAYERS

KEY WORDS: Six Weeks Training, Mc Donald Soccer Skill Test & playing ability

Mr. Keshab Bhattacharya

Ph.D. Scholar & SACT, Sukumar Sengupta Mahavidyalaya (Vidyasagar University), Keshpur, Paschim Medinipur, West Bengal

Dr. Bibhuti Bhusan Mishra*

Assistant Professor, Baliapal College of Physical Education, Baliapal, Balasore, Odisha*Corresponding Author

ABSTRACT

Background: - Football is one of the most popular games in the world. It has been played by most of the countries. Training programme plays an important role in the lives of human beings for developing their fitness and performances. **Purpose:** - The purpose of the study was to analyse the effect of six weeks plyometric training programmes on specific soccer skill and playing ability of college going soccer male players age ranging between 18– 22 years. **Materials & Methods:** - Total 32 subjects were taken for the study from baliapal college of physical education, baliapal, balasore, odisha. They were given the six weeks training programme in the college campus. The training schedule were fixed in the morning session as well as in the afternoon session minimum time duration 90-120 minutes per session with various types of physical exercise and training including warming up, warm down and resting time between and set of exercises. In this investigation, data was collected before and after the training period. The Independent Paired-'t' test was conducted for evaluate the data and the level of significance was fixed at 0.05 level of confidence. **Results & Discussion:** - The result of the study indicates that the six weeks training programmes were influenced the selected variables such as (i) Mc Donald Soccer Skill Test- Legal kicks within 30 seconds. (ii) Playing ability –It will be taken by the three expert coaches. In Mc Donald Soccer Skill Test, the post-test mean scores (12.40) were increased than the pre-test means (8.30) and there was significant difference found in the pre-test and post-test results. Similarly, post-test mean scores (20.50) in playing ability of the college going soccer players were developed than the pre-test means scores (14.44). The Calculated value of the soccer skill (3.86) and playing ability (4.34) both were better than the table value. So, the results were significant at 0.05 level of confidence. **Conclusion:** -On the basis of the obtained result, it has been observed that six weeks plyometric training programmes have been affected positively on both kicking performance and playing ability among the college going soccer players.

INTRODUCTION:-

Football is one of the most popular games in the world. It is played in almost all the countries having some differences in abided rules. The game which is played abided with the similar rules all over the world is known as "SOCCER". Most of the countries play soccer and participated in the international competitions. These competitions brought a consciousness among the players and coaches, as well that they keenly trying to develop the skills and performances of the player. We can develop our strength and endurance and improve our soccer playing ability with the involvement of soccer. The football is kicked by legs, it is concerned with the power of leg, and this power can be developed by both the isometric and isotonic exercise which will be more effective for this purpose. Thus, the soccer became more popular in all over the world quickly. The rules were revised by time to time. By the end of the Nineteenth Century the ground was marked out as it is today. In this study the scholar will try to find out the effectiveness of six weeks training programmes on specific soccer skill and playing ability of college going soccer players in West Bengal.



Football Playing Ability

Plyometric training is a form of training that offers a huge amount of athletic reward because it develops speed and power through replicating the pace and movement patterns of the chosen sport. Plyometric training is suitable for all athletes particularly Track and field athlete, explosive sports

like volleyball and basketball players. By doing these high intensity drills, you can be able to jump those extra inches, sprint that bit quicker or throw harder and faster. Besides, these exercises can be practiced absolutely anywhere. All you need are the necessary workouts to do it.



Best Plyometric Exercises

HYPOTHESIS:-

It is hypothesized that the effect of six weeks Plyometric training programmes can improve the specific soccer skill and playing ability of college going soccer players.

METHODOLOGY:-

SUBJECTS: - Total thirty-two (32) football players were randomly selected from baliapal college of physical education, baliapal, balasore, odisha. Their age range was 18 to 22 years according to their college records. The selection of the player was made by the three expert coaches who were given the training to the players. The data was collected before and after the six weeks training programmes.

PROCEDURE: - Total 32 college level soccer players' age ranging between 18 to 22 years were tested. A pre-test was taken on all the selected football players and the scores were recorded. Similarly, after six weeks of plyometric training programmes a post-test data was taken and scores were recorded. The training was given based on the prepared schedule for six (6) weeks with maintaining the proper diet.

All the selected players were tested prior to the training schedule and after the training schedule. To test the subjects, they were used the Mc Donald Soccer Skill test—a standard test to assess the skill efficiency of the players. To assess the playing ability of the players the three reputed coaches have been taken of the national level. These three coaches were assessed the players two times i.e before and after the training. The coaches gave the scores out of 10 to the players after observing their overall playing ability of a football match. The average of all the three scores were given by the coaches and considered as the final score for analysing.

SELECTION OF VARIABLES:-

Keeping the feasibility criterion in mind, especially in the case of availability of instruments, the following variables are chosen:-

1. Mc Donald Soccer Skill Test- Legal kicks within 30 seconds.
2. Playing ability –It will be taken by the three expert coaches.

EXPERIMENTAL DESIGN:-

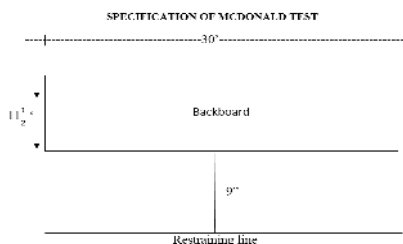
Random group design was followed for this study and the subjects were randomly selected. Six (6) weeks of training were applied on the subjects.

STATISTICAL TECHNIQUES: To find out the significant difference between pre-test and post-test of each data the Mean, SD and t-ratio will be calculated. The level of significant will be set at 0.05.

MC DONALD SOCCER SKILL TEST:-

- Purpose:-** To measure the general soccer ability.
- Age and Sex:-** College men and women.
- Equipments:-** A wall or backboard 30ft wide and 11

- 1) College Varsity Players-----0.94
- 2) Junior Varsity Players-----0.63
- 3) Freshman Varsity Players-----0.76
- 4) Combined Group-----0.85



RESULTS & DISCUSSION:-

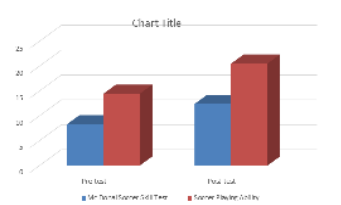
The result of the study was discussed under the following table with the graphical presentation.

TABLE NO-1 Significance Difference between Pre-test and Post-test of Mc Donald soccer skill test & Playing ability after calculating the Mean, SD and t-ratio of college going soccer players.

Sl. No	Variables	TEST	Mean	SD	MD	t-ratio	Significant
1.	Mc Donald Soccer Skill	Pre - test	8.30	3.24	4.10	3.86	0.05*
		Post - test	12.40	3.05			
2.	Playing Ability	Pre - test	14.44	3.08	6.06	4.34	
		Post - test	20.50	3.26			

*Significant at 0.05 level

Graph Showing the Significance Difference between Pre-test and Post-test mean scores.



DISCUSSIONS:-

It has been observed from the above table that the pre-test mean score of the Mc Donald soccer skill test was 8.30. It was increased in post-test to 12.40. Similarly, the pre-test mean score of the playing ability (it was taken by the three expert coaches) was 14.44. It was increased in post-test to 20.50. It was also evident from the above table that the calculated value of each variable was better than the Table value at 0.05 level of significant. So, the results were significant. The hypothesis was accepted since there was a significant improvement in skill and playing ability of college going soccer players due to six weeks training programme. Physical fitness comprises of several components and muscular strength and endurance, resistance to disease, cardio-vascular and respiratory endurance, muscular power, flexibility, speed, agility, co-ordination, balance and accuracy. Barik and Banerjee (1990) viewed that Speed, endurance, strength and agility were increased significantly after training.

Abraham (1980) investigated the effect of 6 weeks training program on selected physiological variables (Hemoglobin, pulse-rate, vital capacity, cardio-vascular endurance and peak expiratory flow rate) of professional college students. The data was collected before and after the experiment and analyzed with the help of 't' test. The study concluded that cardio-vascular endurance and peak expiratory flow rate was improved due to training. There was a significant reduction in resting pulse-rate of the subjects and there were no significant changes in Hemoglobin content and vital capacity after 6 weeks of training.

Amusa and Sohi's, (1985) were examined the changes in muscular strength, muscular endurance, muscular power, speed, agility, cardio-respiratory endurance and body composition in college age Basketball players following a twenty weeks training. The study concluded that all the muscular, speed, agility and cardio-respiratory endurance improved significantly, whereas a reduction in fat percentage was also seen.

Therefore, it is clearly seen that six weeks plyometric training programmes have been affected positively on specific soccer skill and playing ability of college going soccer players. Six weeks training always helps them to cope and emerge stronger and more physically, mentally and emotionally fit. Hence, the researcher was motivated to take up the present study.

CONCLUSION:-

On the basis of the results obtained from the present empirical investigation and within the limitation, the following conclusions may be drawn.

** Six weeks plyometric training programmes have been influenced the performance both skill and playing ability of the college level soccer players positively and the results were also significant after the given period of six weeks (6) training programme.

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