

Effect of Selected Exercises on Flexibility and Co-ordination of Badminton Players

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ABSTRACT

Effect of selected exercises on the flexibility and co-ordination of Badminton players. For that purpose twenty Ball Badminton players of Arts & Science College Kurha were selected as the subject. The age of the subject was ranging in between 18 to 25 years. Random group design was adopted for the study. The subjects were equally divided in two homogeneous groups i.e. experimental and control group. Each group was consisted of 10 subjects. The experimental group went through a training programme of selected exercises for a period of six weeks. The control group engaged with their regular physical activity only. The data were collected before and immediate after completion of 6 weeks training programme by using the Sit and Reach Test, Shoulder Elevation Test, Eye-Hand Co-ordination test and Eye-Foot Co-ordination Test. To find out the significant difference of mean performance of control group and experimental group t-test was applied. The finding of this study revealed that there is a significant improvement in the performance of the experimental group after six weeks training programme but there is no significant improvement to the performance of the control group.

Keywords : - Flexibility, co- ordination , Badminton

Introduction

Badminton is popular sports in the world. It appeals to all age groups of various skill levels, and men and women play it indoors or outdoors for recreation as well as competition. The shuttlecock does not bounce and must be played in the air, task making a fast game requiring quick reflexes and some degree of fitness. Badminton today, with its increasing popularity has become intensely competitive. The demand is for highly skilled players with the maximum physical conditioning. To achieve this, today's serious Badmintoner puts himself through a vigorous and varied training programme. The training programmes, therefore, should be designed to develop the essential components of fitness, strength, flexibility, cardio-respiratory endurance, agility, balance, speed and co-ordination.

Perfection of players in skills and technique are very much dependent on effective way of training practice and some suitable exercise for the development of general strength and power, flexibility, co-ordination, agility to related games and sports. So fitness training is very much needed regarding player's position because-"A person physically fit is all respect does not exist".

Fitness has become increasing important part of Badminton both physical and mental fitness are required in Badminton. Players required arm and shoulder strength to maintain the smash and overhead clear for Badminton. "Co-ordination is the ability to integrate muscles movement into an efficient patterns of movement" co-ordination make the difference between good performance and poor performance. The efficiency of skill patterns depends upon the interrelation of speed, agility, balance and muscle movements to be

performed and see the relationship of each movement to the total pattern. Development of kinesthetic perception usually allows movement's to become rhythmic and efficient". For any type of work co-ordination is very important. If the organs of the body are weak then the Nero-muscular co-ordination would be affected. This Nero-muscular co-ordination is very important for any physical activities. The Nero-muscular co-ordination of the individual which includes his ability to learn new skilled and finally achieve competency in physical activities is essential to all phases of Physical Education.

Purpose of the Study :

The main purpose of this study was to determine the effect of selected exercises on flexibility and co-ordination of badminton players.

Delimitation :

The scope of the present study was delimited to the following aspects.

1. This study was restricted to the male Badminton players of Art & Science College Kurha.
2. The age of the players was ranging from 18-25 years.
3. The Training was given at Indoor Stadium of Art & Science College Kurha.
4. A total period of six weeks training was administered on the experimental groups.
5. The variables selected for this study were:-
 - Trunk flexibility
 - Shoulder flexibility
 - Eye-hand co-ordination
 - Eye-foot co-ordination

Sources of Data :

The data pertaining to this study were collected on 20 Badminton players of Art & Science College Kurha.

Methodology :-

To collect data pertaining to this study the following tests were administered. :- Sit and Reach Test was administered to measure trunk flexibility and the score was recorded in centimeters.

Shoulder Elevation Test was used to measure shoulder and wrist flexibility and the score was recorded in centimeters. Eye- Hand Co-Ordination Test was applied to assess the co- ordination between eye and hand, and the score was recorded in seconds.

Eye-Foot Co-ordination Test was applied to assess the co-ordination between eye and foot and the score was recorded in seconds **Various activities like flexibility and co- ordination exercise, Trunk twisting rope shipping shoulder and chest stret zig-zag running, alternative toetouch, Hip stretch stepping with Badminton court, Hasmstring, have been worked out for six weeks. From Monday to Friday.**

Collection of Data :-

To determined the effect of training on the flexibility and co-ordination of Bdmintan players the 't' test statistical technique was employed and the level of confidence was kept and 0.5 to test the hypothesis.

Sit and Reach, Shoulder Elevation, Eye-Hand Co- ordination and Eye-Foot Co- ordination Test. The Pre-test data were collected before training programme and post test data were also collected immediate after training programme.

Discussion

Twenty Badminton players were selected as the subject by simple Random method. The researcher divided the players into two equal groups on the basis of the mean performance of pre-test score. The group were equated and distributed into two homogeneous group namely.

- i) Experimental Group &
- ii) Control Group

Table No.1 Pre test Mean of Control Group and Experimental Group.p

Sr.No.	Name of the Group	Pre test Means of Composite Score
1.	Control Group	199.48
2.	Experimental Group	199.48

Graph No. 1 The Pre test mean of all the Control and Experimental Group

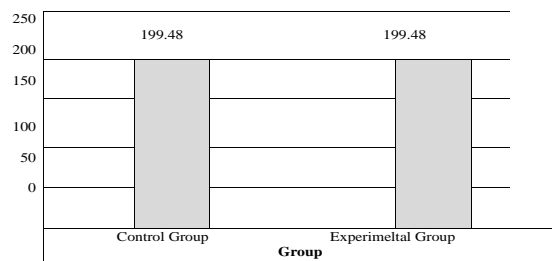


Table No. 2 Significant of Mean Difference between Pre-test and Post test of Control Group

Group	Mean	S.D.	MD	S.E. t-ratio
Pre-Test	199.48	18.93	7.65	8.140.94@
Post Test	207.13	17.46		

@ Not significant at 0.05 level of confidence. Tabulated t 0.05 (9) = 2.262

Graph No.2 Significant of mean Difference between Pre-test and Post test of Control group.

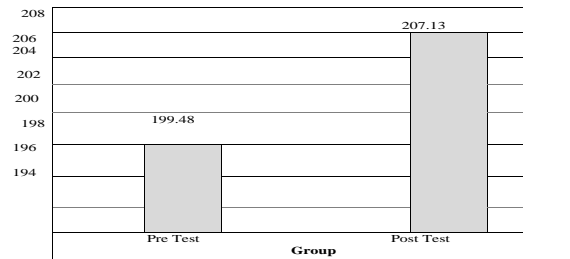


Table No.3 Significant of Mean Difference between Pre-Test and Post Test of Experimental Group

Group	Mean	S.D.	MD	S.E.	t-ratio
Pre-Test	199.48	29.77	35.257	10.83	3.255
Post Test	234.73	16.93			

* Significant at 0.05 level of confidence Tabulated t 0.05(9) = 2.262

Graph No. 3 Significant of mean Difference between Pre-test and Post test of Experimental group.

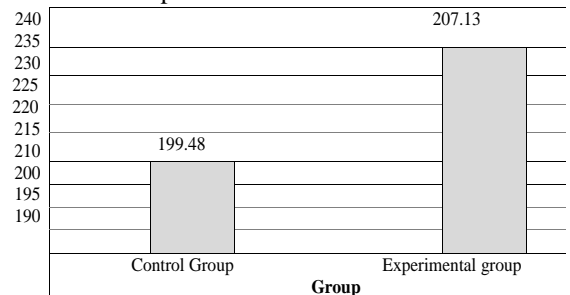


Table No. 4 Significant of Mean Difference between Post test of Control and Experimental Group

Post Test	Mean	S.D.	MD	S.E.	T-ratio
Control Group	207.13	17.46	27.60	7.69	3.589
Experimental Group	234.73	16.93			

* Significant at 0.05 level of confidence Tabulated t 0.05(18) = 2.31

Graph No.4 Significant of mean Difference between control and Experimental



Discussion of Finding :

It has been observed from the result of the finding of this study that the experimental group had shown significant improvement in flexibility and co-ordinative ability compared to control group. It may be because of due to nature of regular exercise programme. The regular selected exercise programme might have developed the muscle tone, joint mobility, and neuro-muscular co-ordination. Hence, a significant improvement in the performance has shown the selected subjects.

Conclusion :-

Exercise is very important for the development of co-ordination and flexibility of Badminton players. The flexibility and co-ordination help the Badminton

players to give their best performance. Therefore, the research scholar tried to make effective training schedule for the optimum development of flexibility & co-ordination so as enhance the performance of Badminton players.

1. Selected exercises improved the Co-ordination and Flexibility of Badminton players significantly.
2. The control group which engaged in daily physical activity did not show significant improvement in Badminton performance.

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