



## EFFECT OF EIGHT WEEKS FITNESS TRAINING ON SELECTED PHYSICAL FITNESS COMPONENTS ON HOCKEY MALE PLAYERS

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### ABSTRACT

*The purpose of this study was to evaluate the effect of eight weeks training on selected physical fitness components on Hockey male players. To achieve the purpose of the study, the twenty-three (n=23) Hockey trainees were selected as a subject, who were the regular trainees at Sports Training centre. The age of all subjects ranged from 16 to 21 years. The subject selected were tested, with 10 X 6 metre run for Agility, 30-meter fly start to assess speed, 2.4 km run to assess endurance, Forward bent and reach test to assess flexibility and standing broad jump to assess explosive strength.*



*The statistical technique 't' test was used at 0.05 significance level for the analysis of pre-test and post-test data. The results revealed that there was a significant difference on selected physical fitness component, it found that the eight weeks' fitness training is more effective to start the advance level of training for hockey male players.*

**KEYWORDS:** 10 X 6 metre run, Agility, 30-meter fly start, speed, 2.4 km run, endurance, Forward bent and reach test, flexibility, standing broad jump, explosive strength.

### INTRODUCTION:

Training for Hockey players is developing day by day at advance level, many of training method were implemented to achieve goal. The Hockey training is becoming harder because the game is now becoming so fast. The players must adapt to the advance level fitness to learn and to mastery over the advance skills. Hence the study conducted to assess the training effect at preparatory phase on selected motor fitness.

### OBJECTIVE OF THE STUDY:

The purpose of this study was to evaluate the effect of eight weeks training on selected physical fitness components on Hockey male players.

### METHODOLOGY:

For the study twenty-three (n=23) Hockey trainees were selected as a subjects, who were the regular trainees. The age of all subjects ranged from 16 to 21 years.

The subject selected were tested, with 10 X 6 metre run for Agility, 30-meter fly start to assess speed, 2.4 km run to assess endurance, Forward bent and reach test to assess flexibility and standing

broad jump to assess explosive strength. The effect of training was assessed through pre-test and post-test data on selected physical fitness components.

### Statistical Technique:

To identify the difference between pre-test and post-test data on selected physical fitness components of Hockey male players the statistical technique T test was applied and the level of significance was set at 0.05.

### RESULT AND DISCUSSION:

The data collected to achieve the objective of the study was statistically analysed and results are presented in the following tables.

**Table -1 showing the mean value, standard deviation and 't' score of 10 X 6 meters run (Agility)**

Sl.No.	Test	Sample size	Mean $\pm$ S.D.	't' value
1	Pre-test	23	14.7365	2.313
2	Post-test	23	14.5357	

\* Significance at 0.05 level

It is clear from the above table that calculated 't' value of 10 X 6 meters run is 2.313 which is greater than table value i.e., 1.960 and is significant at 0.05 level of confidence.

It is clear that general fitness training helps to develop the agility of hockey male players.

**Table -2 showing the mean value, standard deviation and 't' score of 30 meters' fly start (Speed)**

Sl.No.	Test	Sample size	Mean $\pm$ S.D.	't' value
1	Pre-test	23	4.5961	0.637
2	Post-test	23	4.5317	

\* Significance at 0.05 level

It is clear from the above table that calculated 't' value of 10 X 6 meters run is 0.637 which is lesser than the table value i.e., 1.960 and is not significant at 0.05 level of confidence, but when compared to mean value it found improvement.

It is clear that general fitness training helps to develop the speed ability of hockey male players.

**Table -3 showing the mean value, standard deviation and 't' score of 2.4 km run (Endurance)**

Sl.No.	Test	Sample size	Mean $\pm$ S.D.	't' value
1	Pre-test	23	11.8457	3.855
2	Post-test	23	10.9065	

\* Significance at 0.05 level

It is clear from the above table that calculated 't' value of 10 X 6 meters run is 3.855 which is greater than table value i.e., 1.960 and is significant at 0.05 level of confidence.

It is clear that general fitness training helps to develop the Endurance ability of hockey male players.

**Table -4 showing the mean value, standard deviation and 't' score of Forward bent and reach test (Flexibility)**

Sl.No.	Test	Sample size	Mean $\pm$ S.D.	't' value
1	Pre-test	23	5.4870	-.527
2	Post-test	23	5.5783	

\* Significance at 0.05 level

It is clear from the above table that calculated 't' value of 10 X 6 meters run is 0.527 which is lesser than table value i.e., 1.960 and is not significant at 0.05 level of confidence, but when compare to mean value it found improvement.

It is clear that general fitness training which includes the dynamic exercises will help to develop the Flexibility of hockey male players.

**Table -5 showing the mean value, standard deviation and 't' score of Standing Broad Jump test (Explosive strength)**

Sl.No.	test	Sample size	Mean $\pm$ S.D.	't' value
1	Pre-test	23	2.0713	2.199
2	Post-test	23	2.3839	

\* Significance at 0.05 level

It is clear from the above table that calculated 't' value of 10 X 6 meters run is 2.199 which is greater than table value i.e., 1.960 and is significant at 0.05 level of confidence.

It is clear that general fitness training is helps to develop the Explosive strength ability of hockey male players.

#### CONCLUSION:

On the basis of the study and within the limitation already cited, the following conclusions were drawn\_

1. There was a significant difference in the selected physical fitness components; agility, endurance and standing broad jump between pre-test and post-test data of Hockey male trainees.
2. Hence the eight weeks' fitness training is more effective to develop physical fitness components of hockey players.
3. Study also recommended that, minimum eight weeks of physical fitness training at the preparatory phase is necessary to start the effective advance level of training for hockey male players.

#### REFERENCES:

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