



COMPLEX TRAINING'S IMPACT ON PARTICULAR PHYSICAL VARIABLES IN HOCKEY PLAYERS

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Abstract:

The purpose of the study was to find out the effect of complex training on selected physical variables among hockey players. To achieve the purpose of the present study, thirty hockey players from Namakkal, Tamil Nadu were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into two equal groups of fifteen each. Group I acted as Experimental Group I (Complex training) and Group II acted as Control Group. The variables that were chosen as criteria were the speed and the agility. Before and right after the training programme, all of the participants in the two groups were tested on a few chosen dependent variables, using 50 meter run and shuttle run, respectively. Dependent 't' test was used to test the treatment effect of the training programmes on all the variables used in the study. It was observed that the six weeks of complex training have significantly increased in the selected physical variables.

Key Words: Complex Training, Selected Physical Variables, Hockey.

Introduction:

Sports is "carrying away from work", suggesting an absolute freedom of activity. The major aim of sports is recreation. Having become highly competitive, sports today are seen in a much broader perspective than ever before. Sport, in fact, is an attitude of mind. Hockey is the fastest and most beautiful of ball games. Though it was introduced into the sub-continent by the British, Indians have developed their own style game (Goodman et al. 1995). The origin of the game is lost in antiquity. There are various theories as to where and when and how it originated, we really do not know its exact origin. However, one fact is clear. Hockey is one of the oldest games in the world. According to Kumar (2017), complex training entails a plyometric exercise after a strenuous strength exercise. Both the nervous system and fast-twitch muscle fibres are simultaneously activated and worked during complex training. There is little information on systemic training programs to enhance skill-related physical fitness in hockey players, despite the fact that complex training has been suggested as a way to combine strength training with plyometrics and sport-specific movement. The researcher in this study asked whether complex training could be used to improve the skill-related physical fitness of collegiate hockey players, who require a high level of speed, agility, and coordination fitness, in light of the aforementioned and related research findings.

Methodology:

The purpose of the study was to find out the effect of complex training on selected physical variables among hockey players. To achieve the purpose of the present study, thirty hockey players from Namakkal, Tamil Nadu were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into two equal groups of fifteen each. Group I acted as Experimental Group I (Complex training) and Group II acted as Control Group. The variables that were chosen as criteria were the speed and the agility. Before and right after the training programme, all of the participants in the two groups were tested on a few chosen dependent variables, using 50 meter run and shuttle run, respectively. Dependent 't' test was used to test the treatment effect of the training programmes on all the variables used in the study.

Results:

Table 1: Descriptive Analysis of Pre and Post Test Means of Experimental and Control Group On Selected Fitness Variables

S.No	Variables	Pre Test Mean	Post Test Mean
1	Speed	Exp:7.56	Exp:7.13
		Con:7.73	Con:7.56
2	Agility	Exp:11.73	Exp:9.49
		Con:11.20	Con:10.30

Table 2: Computation of 't' Ratio Between the Pre Test and Post Test Means of Speed of Experimental and Control Group

S. No	Variables	Mean diff	SD	σ DM	't' ratio
1	Speed	Exp:0.44	Exp:0.39	Exp:0.10	4.34*
		Con:0.16	Con:0.32	Con:0.08	1.97

*Significant at 0.05 level

An examination of table II indicates that the obtained 't' ratio for speed of experimental group was 4.34. The obtained 't' ratio on speed was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The obtained 't' ratio for speed of control group was 1.97. The obtained 't' ratio on speed was found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant.

Figure 1: Bar Diagram Showing the Pre Mean and Post Mean of Speed of Experimental and Control Group

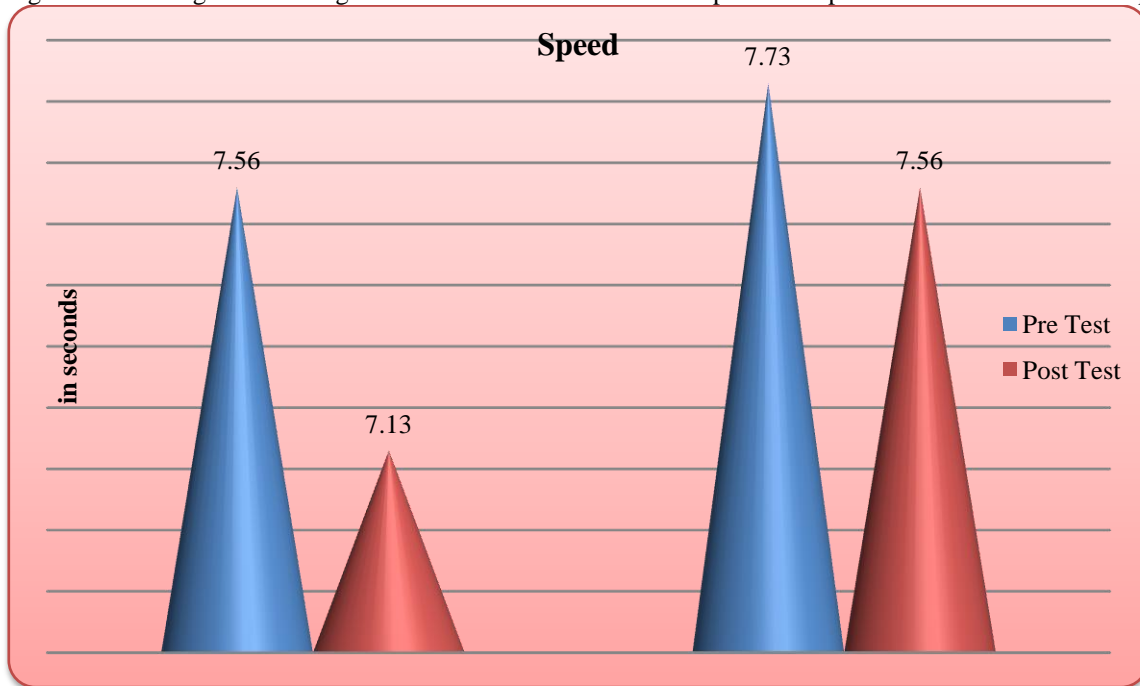


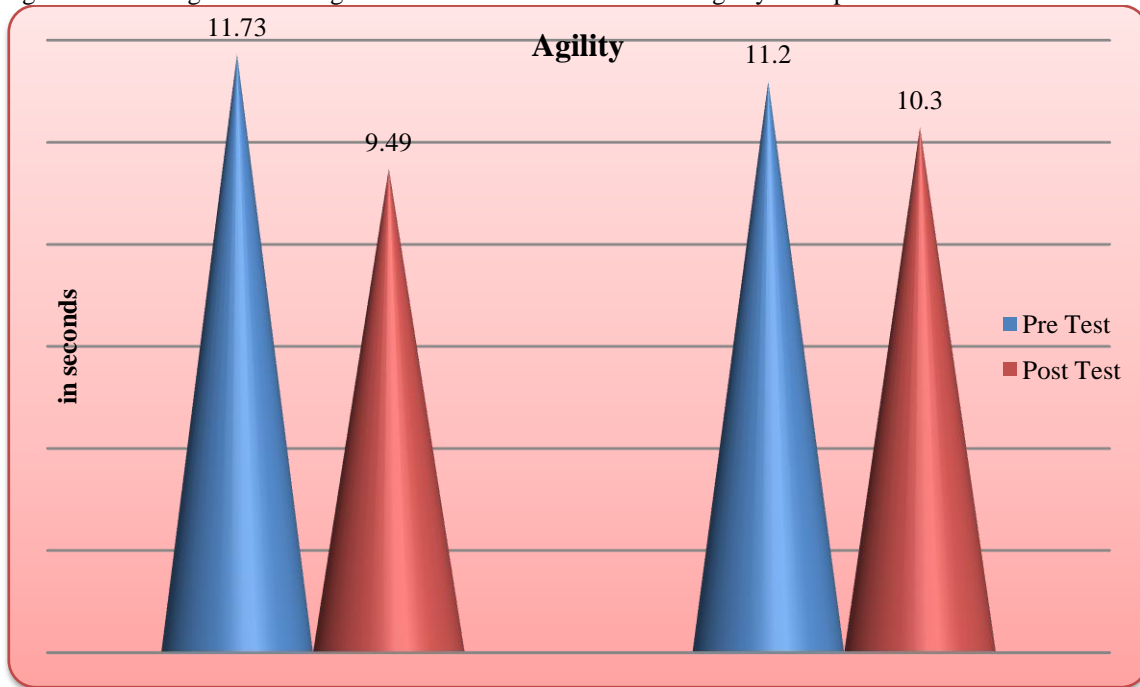
Table 3: Computation of ‘t’ Ratio Between the Pre Test and Post Test Means of Agility of Experimental and Control Group

S.No	Variables	Mean diff	SD	σ DM	‘t’ ratio
1	Agility	Exp:2.24	Exp:0.80	Exp:0.21	25.79*
		Con:0.89	Con:1.79	Con:0.46	1.94

*Significant at 0.05 level

An examination of table III indicates that the obtained ‘t’ ratio for agility of experimental group was 25.79. The obtained ‘t’ ratio on agility was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The obtained ‘t’ ratios for agility of control group was 1.94. The obtained ‘t’ ratio on agility was found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant.

Figure 2: Bar Diagram Showing the Pre Mean and Post Mean of Agility of Experimental and Control Group



Conclusion:

It was observed that the six weeks of complex training have significantly increased the selected physical variables.

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