EFFECT OF SPECIFIC TRAINING PROGRAMME ON AGILITY AMONG ADHIKAVI NANNAYA UNIVERSITY HOCKEY PLAYERS

Thota Jayakumar* & Dr. S. Bappi Reddy**
* Research Scholar, Department of Physical Education, Dravidan University, Kuppam, Andhra Pradesh, India
** Lecturer, Department of Physical Education, S.V.D Government Degree College, Nidadavolu, Andhra Pradesh, India

Abstract:
The purpose of the study was to find out the effect of specific training on agility among Adhikavi Nannaya university hockey players. To achieve this purpose of the study, thirty men hockey players were selected as subjects who were from the various faculties, Adhikavi Nannaya University, Rajahmundry. The selected subjects were aged between 19 to 24 years. They were divided into two equal groups of fifteen each, Group I underwent specific training and Group II acted as control that did not participate in any special training apart from their regular sports and games practices. The subjects were tested on selected criterion variables such as agility prior to any immediately after the training period. The selected criterion variable such as agility was measuring by hexagon test. The analysis of covariance (ANCOVA) was used to find out the significant differences if any, between the experimental group and control group on selected criterion variable. The 0.05 level of confidence was fixed to test the significance, which was considered as an appropriate. The result of the present study has revealed that there was a significant difference among the experimental and control group on agility.

Keywords: Specific Training – Agility - Hockey.

1. Introduction:

The primary objective of sports training is to stress various bodily systems to bring about positive adaptation in order to enhance sporting performance. To achieve this objective, coaches and athletes systematically apply a number of training principles including overload, specificity and progression, organized through what is commonly termed periodization. The application of these principles involves the manipulation of various programme design variables including choice of exercise, order of training activities/exercises, training intensity (load and repetition), rest periods between sets and activities/exercises and training frequency and volume in order to provide periods of stimulus and recovery, with the successful balance of these factors resulting in positive adaptation (1). Sport specific training is simply fitness and performance training designed specifically for athletic performance enhancement. Training programs for athletic performance enhancement could include such areas as strength, speed, power, endurance, flexibility, mobility, agility, mental preparedness (including goal setting), sleep, recovery/regeneration techniques and strategies, nutrition, rehabilitation, pre-habilitation, and injury risk reduction. A general program should include all of these components and a more specific program may only include a few, depending upon the athlete's specific needs (based on strengths, weaknesses and/or imbalances) and the demands of the sport they participate in (2). While there may be some sense of specificity to a program designed for an athlete of a specific sport, the truth is that there is a limit to the amount of application/carryover of a sports performance exercise to a sports skill. The most sports specific training that can be done is the sport itself. Sports specific skills practiced for the sport are as specific as one can get. Take Ice Hockey, for example: there are no exercises that can be performed in the

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weight room that are more specific to hockey than skating on the ice. The same is true for shooting the puck. However, while there are sports specific skills necessary for each sport, there are also physical skills necessary for each sport. Sports preparation is necessary for the sport specific skills (shooting a basketball, pitching a baseball, etc.) and physical preparation is needed for specific performance enhancement such as foot speed, strength, power, etc (3).

1.1 Objectives of the study:
The main objective of the study was to assess the effect of specific training on agility which would help to enhance physical fitness of hockey players. The present study was designed to obtain the data on the men players from various faculties of Adhikavi Nannaya university, Rajahmundry .

1.2 Statement of the problem:
The purpose of the study was to determine the effect of specific training programme on agility among Adhikavi Nannaya university hockey players.

1.3 Delimitations:
1. The study was delimited to Adhikavi Nannaya University, Rajahmundry.
2. The study was delimited to 30 hockey players, their age was 19 to 24 years.
3. The study was restricted to the dependent variable is agility and independent variables are specific training.
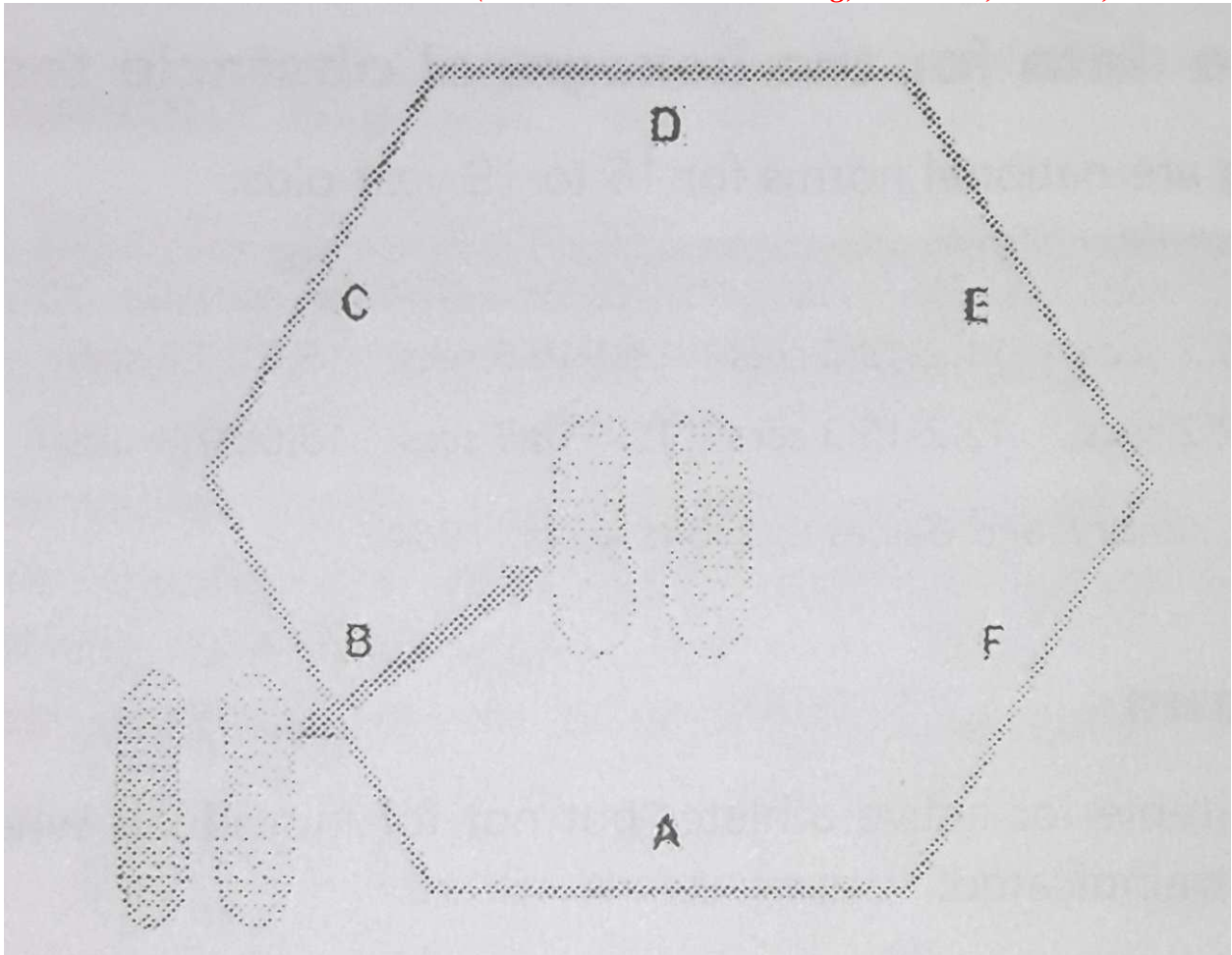
1.4 Significance of the Study:
1. The findings of the study may be helpful for university hockey players to apply specific training which will help in better health and fitness.
2. The findings of the study would be helpful for the trainers to know the role of agility influence their physical fitness.
3. The results of the study may be helpful to fitness trainers, coaches, physical educationist and exercise physiologists to design proper training protocol for other populations.

2. Methodology:
In the present study all the students studying in various faculties, Adhikavi Nannaya University, Rajahmundry were considered as population for the study. A representative sample of 30 hockey players in the age of 19-24 years was chosen as sample for the study. The selected participants were divided into two groups. Group I underwent specific training and group II act as control group. The experimental groups underwent eight weeks of training in their particular workout. For this study dependent variable is agility.

2.1 Test Administration – Hexagonal Obstacle Test:
The subject stands in the middle of the hexagonal, facing line A. At all times throughout the test the subject is to face line A. On the command GO the watch is started and the subject jumps with both feet over line B and back to the middle, then over line C and back to the middle, then line D and so on. When the subject jumps over line A and back to the middle this counts as one circuit. The subject is to complete three circuits. On completion of three circuits the watch is stopped and the time recorded. The subject rests and repeats the test. On completion of the second test determine the average of the two recorded times. If you jump the wrong line or land on a line then the test is to be restarted.

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The athletes score is the time taken to complete three full revolutions. The best score from two trials is recorded. Comparison of the anti-clockwise and clockwise directions will show if any imbalances exist between left and right movement skills.

2.2 Analysis of Data

The data obtained were analyzed by analysis of covariance (ANCOVA). Analysis of covariance was computed for any number of experimental groups, the obtained 'F' ratio compared with critical F value for significance (4).

3. Results:

The statistical analyses of agility due to specific training have been presented in Table I.

The table I shows that the pre-test means of specific training group and control group are 12.41 ± 0.57 and 12.44 ± 0.68 respectively. The obtained 'F' ratio of 0.25 for pre-test means of agility was not significant at .05 levels indicating that the two groups were no significant variation. The post-test means of specific training group and control group are 12.11 ± 0.63 and 12.42 ± 0.67 respectively. The obtained 'F' ratio of 5.41 for post-test means of agility was a significant at .05 levels indicating that the two groups were significant variation. The adjusted post-test means of specific training group and control group are 12.21 and 12.42 respectively. The obtained 'F' ratio of 25.35 for adjusted post-test means of agility was significant at .05 level. The results of the study indicate that there is a significant difference among specific training group and control group on agility.

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Table - I

		Specific Training Group	**Control Group**	**F ratio**
Pre Test	Mean	12.41	12.44	0.25
	S D	0.57	0.68	
Post Test	Mean	12.11	12.42	5.41*
	S D	0.63	0.67	
Ad Post Test	Mean	12.21	12.42	25.35*

4. Discussion/Conclusions:

The results of the study proved that there were significant differences between control group and specific training group. The eight weeks of experimental treatment significantly influence on agility in university hockey players. The above results are supported by Cosio-Lima (5), willardson (6) and Staton, Reaburn and Humpries (7).

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