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Effects of SAR training on selected fitness and performance parameters of male hockey players

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Abstract
To achieve the purpose of the study was to effect of SAR training on selected fitness and performance parameters of male Hockey players. To achieve the purpose of the study, their age ranged from 18 to 25 years. Thirty subjects were selected at randomly. The study was conducted on 30 subjects from Bharathiar University Inter-collegiate Hockey tournaments. The selected subjects were divided into two equal groups consisting of fifteen each. No attempt was made to equate the groups. Experimental Group I underwent the SAR Training group (SARTG), for three days a week and for a duration of 6 weeks. Group II acted as control group (CG), the subjects in control group were not engaged in any training programme other than their regular work. At the end of the treatment period, as post-test, the subjects belonging to the treatment group namely experimental group-ISAR Training Group (SARTG) and group II Control Group (CG) were tested on selected fitness and performance parameters namely Speed, Agility and Dribbling. Further, the group mean gains pre and post-test recorded by two groups during the experimental period of six weeks to the criterion measures were tested for significance by applying 't' – test.

Keywords: SAR, speed, agility and dribbling, hockey

1. Introduction
Derived from the Swedish term that means 'Speed Play', fartlek can provide an excellent endurance and strength session, as well as help improve our speed and race awareness. Fart speed and lek play. The use of 'fartlek' came about to provide a less structured approach to that of interval training. Its origins and use were developed in the 1930's. Whereas, in interval training the structure prescribes a given distance run in a given time with a given rest, fartlek's approach was to have to run at a given time, 2 minutes for example over undulating terrain or flat wherever your run may take you. The effort prescribed can be at 10k race pace to whatever speed we wish to make effort. The rest in-between was normally at an easy pace to allow recovery before the next effort. The intensity, duration and terrain is determined by the runner. Fartlek can be used on all terrains, even on a track surface. The session was known to stress both the aerobic and anaerobic energy pathways. Fartlek has grown into a popular method of training used by runners to provide an enjoyable and constructive alternative to simply pounding the streets with no purpose and plan. Fartlek – speed play, is essentially a training session that comprises some speed [effort] change and at the same time as enjoying the session. It is similar but unlike interval training. Interval training is more disciplined and precise in its training goal. Fartlek is not as demanding and can be incorporated to suit one's needs.

In this study, the players those who have represented at Inter - Collegiate level and played the league were chosen as subjects. In order to achieve the next level, combined training is felt more than sufficient to prove an individual's capability to move forward. Hence, the investigator of the study tried to attempt by adopting these two training methods to find out which would be the appropriate module to prepare a hockey player for competition seasons. In the present scenario more training methods are tried out by the coaches and experts to improve the standard of the game. This study may reveal that which would be the suitable module for the hockey players to improve the fitness and performance related variables as well. The purpose of the study was to find out the effect of SAR training on selected fitness and performance para meter so female Hockey players.

2. Methodology
To fulfill the purpose of the study thirty male Hockey players were randomly selected from the inter-collegiate Hockey tournaments held in Bharathiar University, Coimbatore and Hockey players have been selected for this study. Their age ranged between 18 and 25 years. The subjects had a training age of at least four years in Hockey and only who those represented their respective college teams were taken as subjects. A series of test was carried out on each participant. Speed was assessed by 50m dash Test, Agility was assessed by 4x10 meters Shuttle run and Dribbling was assessed by French filed hockey test. Group I underwent SAR training (SARTG) and group II acted as a control (CG) who did not participate in any specific training. The experimental training group participated in SAR training for three days a week, one session per day and for 6 weeks each session lasted 60 minutes. The control group maintained their daily routine activities and no special training was given. The collected data will be comparing on balance to analyses in "t- ratio" will be used in 0.05 level of confidence.

3. Results and Discussion
All the subjects were tested on selected criterion variable prior to and immediately after the training period. The collected data will be comparing on balance to analyses in "t-ratio" will be used in 0.05 level of confidence.

Table 1: computation of 't' ratio for the difference between the mean values of experimental group on speed agility and Dribbling

Variables	Group	N	Df	Mean	Standard Deviation	Standard error	't'
Speed	Pre	15	14	6.92	0.86	0.22	13.73*
	Post	15		6.16	0.84	0.21	
Agility	Pre	15	14	10.41	1.71	0.44	10.09*
	Post	15		10.12	1.68	0.43	
Dribbling	Pre	15	14	2.93	1.28	0.33	5.55*
	Post	15		4.20	0.68	0.17	

*Significant at 0.05 level of confidence (1, 14), 2.048

Table I indicate that the mean values of experimental group on Speed, Agility and Dribbling as a result of the study. The mean value of pretest on Speed was 6.92 and means value of posttest on Speed was 6.16, the mean value of pretest on Agility was 10.41 and means value of posttest on Agility was 10.12 and the mean value of pretest on Dribbling was 2.93 and means value of posttest on Dribbling was 4.20. The obtained 't' ratio is 13.73 for Speed, 10.09 for Agility and 5.55 for Dribbling and the table 't' ratio is 2.048, it was significant at 0.05 level confidence for the degrees of freedom 1 and 14. This clearly indicated that compared, significantly differences on Speed, Agility and Dribbling of experimental group among male Hockey players.

Table 2: Computation of 'T' Ratio for the Difference between the Mean Values of Control Group On Speed Agility And Dribbling

Variables	Group	N	Df	Mean	Standard Deviation	Standard error	't'
Speed	PRE	15	14	6.75	0.84	0.22	1.83
	POST	15		6.74	0.83	0.21	
Agility	PRE	15	14	10.82	1.69	0.44	1.89
	POST	15		10.80	1.66	0.43	
Dribbling	PRE	15	14	3.20	0.94	0.24	0.68
	POST	15		3.00	0.65	0.17	

Table I indicate that the mean values of control group on Speed, Agility and Dribbling as a result of the study. The mean value of pretest on Speed was 6.75 and means value of posttest on Speed was 6.74, the mean value of pretest on Agility was 10.82 and means value of posttest on Agility was 10.80 and the mean value of pretest on Dribbling was 3.20 and means value of posttest on Dribbling was 3.00. The obtained 't' ratio is 1.83 for Speed, 1.89 for Agility and 0.68 for Dribbling and the table 't' ratio is 2.048, it was insignificant at 0.05 level confidence for the degrees of freedom 1 and 14. This clearly indicated that compared, insignificantly differences on Speed, Agility and Dribbling of control group among male Hockey players.

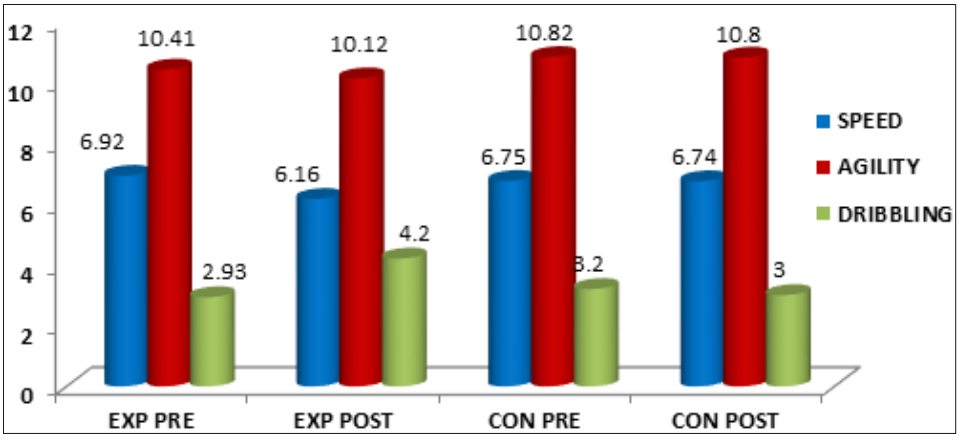

Fig 1: Bar Diagram Shows That the Mean Differences Between Experimental and Control Group On Speed Agility And Dribbling Of Male Hockey Players

4. Discussion

The result of the study showed that the SAR training (SARTG) had produced a significant improvement on Speed, Agility and Drib blingo female Hockey players.

5. Conclusion

In light of the above findings of the present study the following conclusion have been made

1. It was concluded that the SAR Training had produced a significant improvement on Speed, Agility and Drib blingo female Hockey players.

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