

**Research Paper** 

**Physical Education** 

# Effect of Practicing with Standard and Non-Standard Equipments on Improvement of Selected Fundamental Skill in field Hockey

# Mr.S.JonitonPhD Scholar, Department of Physical Education and Sports Sciences<br/>Annamalai UniversityDr. v. GopinathProfessor, Department of Physical Education and Sports Sciences<br/>Annamalai University

**ABSTRACT** The purpose of this study was to find out the effect of practicing with standard and non standard equipment on improvement of selected fundamental skill in field hockey. To achieve the purpose sixty (N=60) men beginners in field hockey were randomly selected and they were divided in to Experimental group I [(Non standard equipments practitioners), n =30, practicing fundamental hockey skill namely dribbling, pushing, and hitting, 90 to 120 min/day for 4 to 5 day/week over the period of eight weeks] and Experimental group II [(Standard equipment practitioners), n=30, practicing fundamental solution for 4 to 5 day/weeks over the period of eight weeks] and Experimental group II [(Standard equipment practitioners), n=30, practicing fundamental skills namely dribbling, pushing, and hitting, 90 to 120 min/day for 4 to 5 days/weeks over the period of eight weeks] were selected as subjects their age were 19 to 21 years. After eight weeks they were measured dribbling, pushing, and hitting (standard test) the collected data were statistically treated by using independent "t" test, 0.05 level of confidence was fixed to test the significance. The result shows those non-standard equipment practiced groups were better than standard equipment practiced group improvement of selected hockey skills. Hence it was concluded that non-standard equipment practiced beginners.

# KEYWORDS : Standard Equipment, Non- Standard Equipment, Fundamental, Field hockey, Practiced

## Introduction

Hockey is a game played with cured sticks and a ball is known to mankind for last several thousand of years. There are 4000 years old drawings from Egypt hurling date to before 1272 BC. Ancient Greece when the game was called 'kerytezin' because it was played with a horn and a ball –like object. Hockey was recorded in the Galway statues of 1527. According the FIH rules and regulation all the field hockey equipments specification was fixed. This equipment was called as standard equipments. Players can successful only when they have a good control with the ball in all situations. Handling a small ball with hockey sticks is very difficult which requires great skills.

To become a good player one needs the perfection in execution of all skill Hardayal Sign (1984) defined that skill is a degree of automatisation of a movement which is achieved through proper training. Jenson and Fisher (1972) have stated that skill is the ability to use the correct muscles at the correct time with exact force necessary to perform the desired movement in the proper sequence and timing. Hodson (1971) describes that ability to execute all strokes with real skill, coordination and speed which are the essential qualities for the top players. A few related researches have been documented in the similar area but studies on Non- standardized hockey stick and balls have not been documented.

Raymond (1972) has found that experimental group that practiced with the smaller tennis rackets showed significant improvement in both the forehand and backhand strokes when compared to control group among beginner's tennis players. It has been documented by Jable(1972)that practicing with the regulation basket ball and the sixteen ounce ball improved free shooting accuracy, where as practicing with the forty ounce basketball did have any effect on free throw shooting accuracy. The effect of practicing with tennis ball on the performance of dribbling in soccer was investigated by Varghese (1981) and it was found that there was a significant improvement in dribbling in soccer favor of the group which practiced with tennis balls. Radhalaksmi(1992) conducted a study on the effect of practicing with various sized ball on dribbling ability in hockey and found significant improvement in dribbling in beginners after a period of six weeks training with various sized balls.

The present study to find out the effect of practicing with standard and non-standard equipment on improvement of fundamental skills in field hockey.

## Methods

To achieve the purpose of this study thirty (n=30) non-standard equipment practices beginners and thirty (n=30) standard equipment beginners from 1st year sports sciences and physical education students sabaragamuwa university of Sri Lanka. Were selected and their age 19 to 21 years. Experimental group I had been practicing 90-120 min per day 4to5 days per were, over a period of minimum eight weeks was given practice with sticks like a curved branches cut from trees, walking sticks, smaller(junior) hockey sticks, regulation golf, tennis and base ball. No attempt was made to control the weight or shape of the ball or stick used by the non-standard group. They were practiced regulation hockey and ball last day every week. And Experimental group II had been practicing 90to120 min per day 4 to 5days per week over the period of eight weeks. Data were collected, the skill test were contacted on the subject after the experimental of eight weeks in dribbling, pushing and hitting. Using standard skill test. The subject used regulation hockey sticks and ball during the test. The collected data were subjected to statistical treatment using independent't' test in the all the case 0.05 level of confidences was fixed to test the significant, which was considered as appropriate.

#### Result

Table I: Mean value, Mean Difference, Standard Deviation, and't' Value of the Post Test Scores of the Non -Standard and Standard Equipment practicing Groups in Dribbling,Pushig,And Hitting Test in Field Hockey

Fundamen- tal skills	Group	Post test mean	Mean different	Standard deviation	"t" value
Dribbling (sec)	N.S.E.G	0.50	0.15	0.068	9.61*
	S.E.G	0.35		0.052	
Pushing (meters)	N.S.E.G	42.96	13.30	6.65	9.57*
	S.E.G	29.66		3.68	
Hitting (meters)	N.S.E.G	50.73	11.43	5.64	6.89*
	S.E.G	39.30		7.11	

## Significant 0.05 levels of confidences with df (1, 58) is 2.00

The result shows that Non-standard equipment practiceners (NSEP) were better than standard equipment practiceners.

#### Volume-4, Issue-9, Sept-2015 • ISSN No 2277 - 8160

Figure I: Bar diagram for the post test mean values for dribbling, pushing, and hitting skills between the Non standard and standard groups.

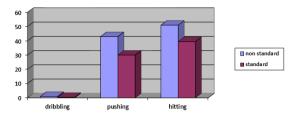
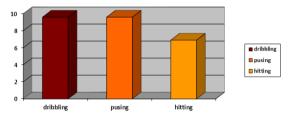


Figure II: Bar Diagram of the Obtained't' Values and Required't' Values of the Post Test for Dribbling, Pushing, and hitting Skills Between the Non standard group and standard group.



#### Discussion

Playing is an art from that generally refers to movement concepts of the body. It was clear from the results the group which practiced with non standard equipments had higher mean values in all the selected fundamental skills in hockey and the post test mean differences were significant (p<0.05). so this showed that practicing with non-standard equipment was more effective than the practicing with the standard equipments in learning intensity ,acquisition, and frequency of selected fundamental skills in field hockey. Non standard equipments practicing beginner put the subjects in difficult situations which might have helped then to learn the fundamental skills effectively. These results of this study corroborate with studies of Raymond (1972), Varghese (1981) and J. Kriubakaran (2004)

Based on the result of this study it could be understood that practicing with non standard Equipments could be a better methods than practicing with regulation standard equipments in learning ,improving, and perfecting the basic skill in hockey as this types of practice created a difficult and challenging situation for beginners while they and learning the skills. It becomes easier for the beginners to execute the skill better in hockey when they were given the regulation hockey sticks and balls and after the practicing non standard equipments.



Bosen, K, O, (1983) Training and teaching throwing, National Institute of Sports, Patiala. | Hodon, C. (1971) A Guide for Selection: Selected field Hockey and Lacrose Articles, American Alliance for Health Physical Education and Recreation, Washington. | Jable, J.T.(1972). The Relative Effects of Training with Basketball of Varying Weight upon free Throw Shooting Accuracy, Completed Research, 14. | Vidyasager (1977) Training Systerm in Throwing, National Institute of Sports, Patiala. | Sing, H (1984) Sports Training: General Theory and Methods, NIS Publication, Patiala. | Raymond, B. (1972) The Effect of the two Size of Racquets on Performance of Fore hand and back hand tennis stroke, completed Research .14 | Vargheese, R.(1981) Effect of Practicing with Tennis ball on Performance of Dribbling in Soccer, | J. Kirubakaran ,and Jamila Jothi Bai.(2004) Relative effect of Practicing Standard ,Non Standard Equipment on Improve of Selected Hockey Skills. | Radhalaskshmi(1992) Effect of practicing with various Size balls on dribbling ability in hockey. Unpublished Master's thesis University of Madras. | Jonson, C, R and Fisher, A, G, (1972) Scientific Basis of Athletic Condition, Lea and Febiger, Philadelphia.