# Comparative effect of visual and auditory perception for the sixteen Yard Hitting Test of hockey performance

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Abstract - The objective of this study is to analyse the within group improvement in two experimental groups and one control group on the performance of the field hockey sixteen yard hitting skill test due to kinaesthetic perception drills. In this study Descriptive statistics was used for to compare within group difference was analysed using paired"t' test and the difference between experimental and control group was using the information studying tools spss- 21 software turned into used. The purpose of this study is to find out to comparative effect of visual and auditory perception sixteen yard hitting test drills on the hockey performance. The objective of this study is to analyse the within group improvement in two experimental groups and one control group on the performance of the field hockey sixteen yard hitting test due to kinaesthetic perception drills. The study was select to 14 to 18 years of hockey players of Indore district participating at different levels of achievement and who voluntary opt hockey for their sports period. The study was further defined to the basic skills of sixteen yard hitting test, The total number , of subjects forty five (N = 45) subjects from three groups two experimental groups and one control groups were selected for the each group equal subjects fifteen (15) for this study age ranged between 14-18 years players of Hockey comprising from Indore district, who voluntary opt hockey for their sports period. In this study Descriptive statistics was used, the within group difference was analysed using paired' test and the difference between experimental and control group was analysed the data analysing tools SPSS- 21 software was used. The level of significance was set at 0.05 level. There was significance Mean effects of two experimental and one control groups Sixteen yard hitting test of kinaesthetic perception drills of hockey performance.

Keyword - Effect, training, drills, hockey, performance, control, experimental etc.

#### INTRODUCTION

The period kinesthesis refers to the potential to pick out bodily motion as nicely as the motion of unique segments of the human body. Kinesthesis is related to the thinking of spatial attitude. it is commonly understood as a lasting and unchanging attribute of wholesome human beings and is viewed to be an extra sense, whose use does no longer require aware participation. An analogy between kinesthetic and sensual appreciation is satirically inclined in the direction of the opinion that the grasp of function and spatial physique actions are a procedure emanating from realized experience. An instance should be the differentiation between scent and style when recalling sensory impressions from the past. A comparable foundation exists in the improvement of stability thru the perfection of a range of types of locomotion in the course of the ontogenetic improvement of a human being (from crawling to balanced walking). By accepting the above arguments, dialogue can be accepted on the adaptive motion of the human being as a system that makes bodily exercise possible. i.e., thru the engagement of person motor skills as nicely as the kinesthetic transformation of one's body. Treating kinaesthetic as an adaptive process, managed by way of humans, is essential in grasp the trouble undertaken in this find out about.

A largely suitable definition of an experience would be "A machine that consists of a team of sensory cells kinds that respond to a precise bodily phenomenon, and that corresponds to a precise Group of areas inside the talent the place the indicators are obtained and interpreted." Disputes about the wide variety of senses usually occur around the classification of the range of mobile kinds and their mapping to areas of the brain. Kinaesthetic experience can be increased with exercise and training. Various drills can be developed for improving the kinaesthetic grasp of the hockey players. Drills the use of ball experience is one of the instances of kinaesthetic perception. Practising the abilities blindfolded, the usage of quite a number of

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auditory alerts and training in low mild or darkish is the range of approaches used in the improvement of kinaesthetic perception.

Hockey, as a sport of stick and ball, dates back to middle-age. Some of the carvings of this sport were found in Ireland and Greece in 1200 and 600 BC respectively. It is assumed that the sport existed some 4000 years ago. However, hockey took its actual form with government organization to recognize the sport. Hence, specific rules of the game were introduced in early 19th century. Countries like England, Germany, Argentina, Spain, India, Malaysia, and Pakistan have international teams and take part in all the annual events organized by International Hockey Federation (FIH) formed in 1924.

Hockey is a recreation that desires a very specific accuracy which is required in their capabilities i.e. hitting, dribbling, passing, scooping, taking pictures etc. Ball and stick actions additionally wish very coordinated actions or we can say that a tactile feeling is critical to operating these abilities accurately. Here comes the understanding which is very a good deal required for a sport like a hockey.

# **OBJECTIVES OF THE STUDY**

The objective of this study is to analyse the within group improvement in two experimental groups and one control group on the performance of the field hockey sixteen yard hitting skill test due to kinaesthetic perception drills.

# STATISTICAL PROCEDURE

In this study Descriptive statistics was used for to compare within group difference was analysed using paired"t' test and the difference between experimental and control group was using the information studying tools spss- 21 software turned into used.

# **METHODOLOGY**

The purpose of this study is to find out to comparative effect of visual and auditory perception sixteen yard hitting test drills on the hockey performance. The objective of this study is to analyse the within group improvement in two experimental groups and one control group on the performance of the field hockey sixteen yard hitting test due to kinaesthetic perception drills. The study was select to 14 to 18 years of hockey players of Indore district participating at different levels of achievement and who voluntary opt hockey for their sports period. The study was further defined to the basic skills of sixteen yard hitting test, The total number, of subjects forty five (N = 45)subjects from three groups two experimental groups and one control groups were selected forthe each group equal subjects fifteen (15) for this study age ranged between 14-18 years players of Hockey comprising from Indore district, who voluntary opt hockey for their sports period. In this study Descriptive statistics was used, the within group difference was analysed using paired' test and the difference between experimental and control group was analysed the data analysing tools SPSS- 21 software was used. The level of significance was set at 0.05 level.

# **Criterion measure:**

# **Visual Perception Drills**

#### **TEST-1: 16-YARD HITTING TEST**

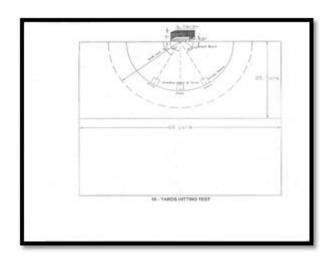
**Purpose:** To evaluate the ability of hitting skill in Hockey.

**Age and Gender:** Male Hockey players of 14-18 years of age.

**Equipment:** Hockey sticks, balls, stop-watch, whistle, score-sheet and marked Hockey play field.

Field Marking: The Hockey play field was marked as shown in Fig.1. Inside the shooting circle, three hitting squares of 2x2 Yards were marked at 60° at right and left, and at 90° in the center.

A hitting target board, 4 yards in length and 18 inches above the ground was placed on the goal line. The target board was marked with the numbers 5, 4, 3, 2, 1, 2, 3, 4 and 5 of equal width as shown in fig.2.



**Directions:** The player stood inside the hitting square with a Hockey stick and a ball. With the sound of the whistle the player tried to hit the ball on to the target-board.

**Scoring:** Points were awarded according to the numbers on which the ball was hit by the player on the target board. No point was awarded for missing the target board. Every player was given ten trials from each angle and the best score of the three trials was reckoned as the final score of the player. If the ball was hit in between the two numbers, the higher point value was awarded to the player.

#### **Additional Pointers:**

- Practice session's was given to the players prior to the test.
- Before the description of test, the scholar was explained the purpose of the present study and procedure of test.

Table 1: Pre And Post Test Mean, Standard
Deviation, Standard Error, Mean Difference And 'T'
Ratio For Experimental Group One, Experimental
Group Two And Control Groups On Kinaesthetic
Perception Drills of Hockey Performance for the
(16 Yard Hitting) Test.

Groups	Pre Mean	Post Mean	MD	SD Pre	SD Post	SE (DM)	Cal 't'	Tab " t"
Experimental Group One	19.13	22.27	-3.13	2.10	1.58	0.53	-5.87*	2.15
Experimental Group Two	20.60	23.13	-2.53	1.35	1.41	0.29	-8.72*	2.15
Control Group	19.20	21.20	-2.00	1.08	1.08	0.40	-4.97*	2.15

<sup>\*</sup>significant set at 0.05 level.

Table 1: clearly imparts the knowledge Experimental Group one show significant with the other two groups are improvements Experimental Group two and control groups. And this difference is significant as the required 't' value for significant set at 0.05 is 2.15 and calculated 't' value for Experimental Group one is 5.87\* for the 16 yard hitting test, Experimental Group two for the calculated value is 8.72\* more than the tabulated 't' 2.15 value there was significant difference between Pretest and Post Test and last one is control group calculated 't' value is 4.97\* more than the tabulated 't' 2.15 value there was significant difference between Pre-test and Post Test all groups are significant On Kinaesthetic Perception Drills of Hockey Performance for the (16 Yard Hitting) Test.

The graphical representation Figure 1 explained the mean value of both experimental group and control group on 16 Yard Hitting Test with respect to before and after the Kinaesthetic Perception training.

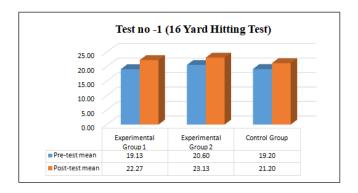


Figure 1: Mean of two experimental groups and one control group for 16 yard hitting test

#### **DISCUSSION OF FINDINGS**

The reason of these differences can be associated with above results this is probably due to the different nature of the physical components training and pre-requisite for coaches. Number of training and level of participation. The reason may be attributed that the physically trained Coaches or level of athletes achievements and taken deferent types nutrition food. These results may be due to a small sample of size and other factors such as different types of body, differences in body composition. These results may be nutrition diet schedule deference. The reason may be Psychological variables like stress, sports competition anxiety, aggression, fear, motivation confidence, attention concentration etc. the findings of present study is supported by the study conducted by Abbas PourhosseinGilakjani (2011) "The Effect of Visual, Auditory, and Kinaesthetic Learning Styles on Language Teaching", Ahmed Abdul Allah El Roby (2010) "The Effect of a Tae Bo Exercise Program on Physical Fitnessand Some Kinesthetic Perceptions for University Level Basketball Players in Egypt" Ahmed Abdul Allah El Roby, (2010) "The Effect Of A Tae Bo Exercise Program On Physical Fitness And Some Kinesthetic Perceptions For University Level Basketball Players In Egypt", BindiyaRawat and Deepak Bangari (2019) "Association of impulsive behavior with motor ability, motor educability and kinesthetic perception among players of individual, team and combat sports"

# **CONCLUSIONS**

According to objectives of the study the following conclusions were drawn:

There was significance Mean effects of two experimental and one control groups Sixteen yard hitting test of kinaesthetic perception drills of hockey performance.

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