IOSR Journal of Sports and Physical Education (IOSR-JSPE)
e-ISSN: 2347-6737, p-ISSN: 2347-6745, Volume 8, Issue 2, (Mar. – Apr. 2021), PP 43-45
www.iosrjournals.org

Selected Perceptual Ability comparison between Cricket and Hockey Players

Dr. Shashi Kanaujia
**Assistant Professor, Department of Physical Education, University of Lucknow, INDIA*

Mr. Amit Dixit
**Cricket Coach, LNIPE, Gwalior, INDIA*

Abstract
Background: *The purpose of the study was to compare the selected perceptual ability (Anticipation and Depth perception ability) between Cricket and Hockey Players.*
Method: The purpose of the study was to compare the selected perceptual ability between Cricket and Hockey Players. For achieve this purpose 10 Cricket and 10 Hockey Players, their age were ranged between 19 to 25 years old from LNIPE, Gwalior, were selected as a subjects of this study. To compare the selected perceptual ability (Anticipation Perception and Depth Perception) between cricket and hockey players, independent 'T – Test' were employed. Perceptual Ability like Anticipation perception ability and Depth perception ability were measured by Anticipation Test and Depth perception Test.
Result: *The analysis of data reveals that there is significant differences exist between mean of the depth perception between cricket and hockey players. These significant differences were occurred due to the cognitive function leading to coordination of visual perception and muscular contraction and coordination between these two aspects. Probably the nature of game is not same concept of playing is different with each other so that ultimately they have different depth perception ability as required in both the game situations. Second think is that the subjects were energetic enthusiastic and alert but due to physical and mental fatigue they became lethargic, inattentive & lost their perceptual ability this would be the reasons for the statistical significance in relation to their perceptual ability. On the other hand there was no significant difference found between the means of cricket and hockey players for the Anticipation Perception, These insignificant differences were occurred because the subjects were involved in similar type of daily routine of playing activity and resting.*
Conclusion: *With the limitations of the study it may be concluded that, there was significant difference found between the means of cricket and hockey players for the Depth Perception.*
On the other hand there was no significant difference found between the means of Cricket and hockey players for the Anticipation Perception.
Key Words: *Depth perception, Anticipation Perception*

I. Introduction

The essence of human behaviour and motor performance is based on the ability to receive andinterpret sensory information. Human beings live in a vast sea of sensory information, yet they thrive rather than drawn because of an elaborate network of perceptual systems. The human perceptual system,in fact, has a constant need to receive sensory input from the external world and from its own internal environment. When sensory input is reduced or eliminated, the system reacts negatively. This same negative reaction can also occur when the system is our loaded by to much sensory input, as happens when you try to carry on a telephone conversation while reading a paper or when a beginner in dance class tries to stay in step with the teachers instruction during a fast passed song.

Perception refers to the process used together and interpret sensory information from theexternal and internal environment. Although external information is perceived by fetes, the amount of sensory data received is magnified tremendously from the movement of birth. The four related process of sensation and perception enable the body to receive stimulation and organize it for further processing.High level performance of a sportsman is dependent upon his Psychological make-up. Different psychic abilities play a decisive role in achieving top performance in track and field athletics. Wining in International sports competitions highly depends on the psychological abilities. Therefore, "Superb psychological Fitness" and training of the individual are important factors which help in achievingoutstanding performance. Sports being a psycho-social activity loaded with competition and co-operation spirits, gives rise to psychological strain and stress, especially when an athlete has to face anexpected defeat. The athletes have many emotional problems during training as well as during competition days. Many psycho-somatic problems of the players are caused

primarily by stress, an accumulation of excessive worry, over work and emotional tension.

Objective of the Study: The purpose of the study was to compare the selected perceptual ability (Anticipation and Depth perception ability) between Cricket and Hockey Players.

Methodology: The purpose of the study was to compare the selected perceptual ability between Cricket and Hockey Players. For achieve this purpose 10 Cricket and 10 Hockey Players, their age were rangedbetween 19 to 25 years old from LNIPE, Gwalior, were selected as a subjects of this study. To compare the selected perceptual ability (Anticipation Perception and Depth Perception) between cricket and hockey players, independent 'T' Test were employed. Perceptual Ability like Anticipation perception ability and Depth perception ability were measured by Anticipation Test and Depth perception Test apparatus. Dr. Stanley Bassin originally developed the Anticipation perception Timer at California State Polytechnic University, Pomona. Bassin anticipation timer is to test the area of human visual activity related to eye-hand co-ordination & anticipation. And depth perception apparatus is manufactured andprovided by Medy system, Pune, INDIA .

Statistical Methods:

Independent **'t' test** was applied to compare the selected perceptual ability between cricket andhockey players. The hypothesis was tested at 0.05 level of significance.

Table I Descriptive Statistics

Variables	Sports	N	Mean	Std. Deviation
Depth Perception	Cricket	10	3.41	1.12
	Hockey	10	4.74	1.20
Anticipation Perception	Cricket	10	72.09	22.40
	Hockey	10	89.13	23.90

Table II

Significant Difference of Mean between Cricket and hockey players for the Depth Perception

Variable	Group Mean		Mean Diff.	Std. error difference	't'
	Cricket	Hockey			
Depth Perception	3.41	4.74	-1.33	0.52	2.564

***Significant at .05 level of confidence $t_{.05}$ (18) = 2.101**

It is evident from table- II that there was significant difference found between the means of Cricket and hockey players for the Depth Perception since the calculated value of 't' (2.564) was more than the tabulated value of 't' (2.101) which was required to be significant at (18) degree of freedom with 95 % level of confidence.

Table III

Significant Difference of Mean between Cricket and Hockey Players for the Anticipation Perception

Variable	Group Mean		MeanDiff.	Std. error difference	't'
	Cricket	Hockey			
Anticipation Perception	72.09	89.13	-17.04	10.36	1.645

***Significant at .05 level of confidence $t_{.05}$ (18) = 2.101**

It is evident from table- III that there was no significant difference found between the means of Cricket and hockey players for the Anticipation Perception since the calculated value of 't' (1.645) wasless than the tabulated value of 't' (2.101) which was required to be significant at (18) degree of freedomwith 95 % level of confidence.

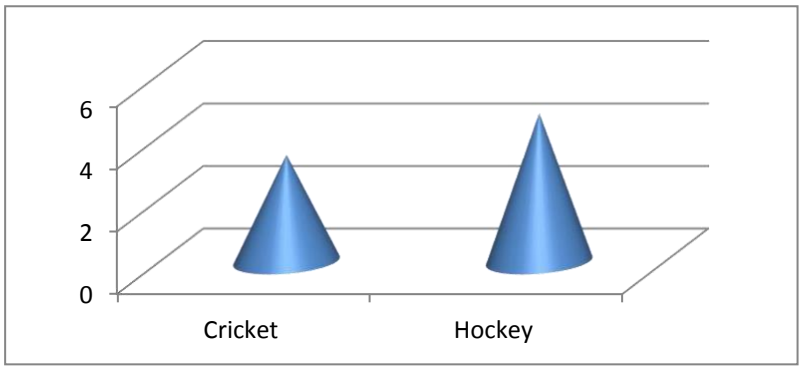

Figure-1: Graphical representation of the depth perception between cricket and hockey players

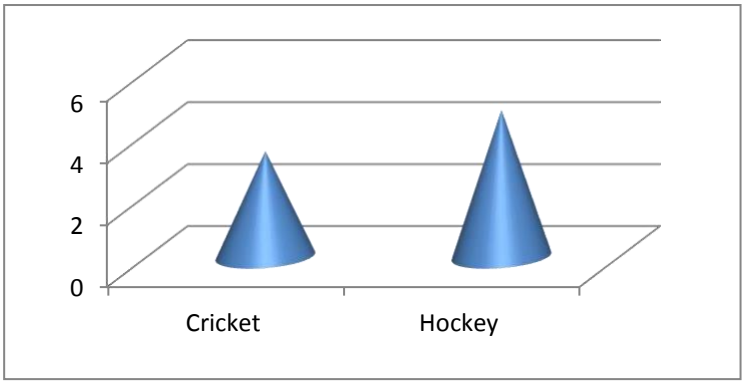

Figure-2: Graphical representation of the anticipation perception between cricket and hockey players

II. Discussion of Findings:

The analysis of data reveals that there is significant differences exist between mean of the depth perception between cricket and hockey players. These significant differences were occurred due to thecognitive function leading to coordination of visual perception and muscular contraction and coordination between these two aspects. Probably both the nature of game is same because they both are related to the racket sports but their concept of playing is different with each other so that ultimatelythey have different depth perception ability as required in both the game situations. Second think is thatthe subjects were energetics enthusiastic and alert but due to physical and mental fatigue they became lethargic, inattentive & lost their perceptual ability this would be the reasons for the statistical significance in relation to their perceptual ability. On the other hand there was no significant differencefound between the means of Cricket and hockey players for the Anticipation Perception, These insignificant differences were occurred because the subjects were involved in similar type of daily routine of playing and resting.

III. Conclusions:

With the limitations of the study it may be concluded that, there was significant differencefound between the means of Cricket and hockey players for the Depth Perception.

On the other hand there was no significant difference found between the means of Cricket andhockey players for the Anticipation Perception.

References:

[1]. Agya Jit Singh**, "Psychological Aspects of Physical Fitness"** SNIPES Journal S. (January 1985).
[2]. Baldev Singh Brar**, "Psychological performance variation resulting from inducted physical and mental fatigue in high and low fitness groups.** Unpublished Doctoral Thesis, Jiwaji University, 1984.
[3]. Barrow, Harold M. and Mc Gee, Rosemary. **A Practical Approach to Measurement in Physical Education.** Philadelphia Lee and Febiger Publishers, 1979.
[4]. Joginder S.Tiger: H.A.Khan and J.S.Saini**, "A Survey of Psychological Demands of High Level Performance in Athletic Events as perceived by the experienced coaches and Athletes"** SNIPES Journal 9:3 (July 1986)
[5]. Sarhid and Abdul Rahman, "**The Effect of local fatigue and motor performance and the implication for Physical Education Instruction**", Dissertation Abstract International 335 (June 1987)
[6]. Singer, Robert N. **Myths and Truths in Sports Psychology**. New York: Harper and Row Publishers, 1975.