

# EFFECTS OF SKILL TRAINING WITH AND WITHOUT VISUAL TRAINING ON CATCHING ABILITY AMONG CRICKET PLAYERS

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## Abstract

The purpose of the study was to investigate the effect of skill training with and without visual training on catching ability among cricket players. Thirty six (n=36) men Cricket players from Tirunelveli District, Tamil Nadu, India were selected as subjects at random and their age is ranged between 16 to 19 years. The selected participants were randomly (simple random sample) assigned to one of three groups of twelve (n=12) each, such as experimental group I, experimental group II and control group. The group I (n=12) underwent skills training with visual practices, and group II (n=12) underwent skills training without visual practices for a duration of 6 weeks and the number of sessions per week is confined to three days, in addition to the regular schedule and group III (n=12) acted as control. Catching ability was selected as dependent variables and it was measured through expert rating method. Skill training with and without visual training was selected as independent variables. The level of significance was fixed at .05 level, which was considered to be appropriate. The pre test and post test random group design was used as experimental design. The collected data from the three groups prior to and immediately after the training programme on selected criterion variables were statistically analyzed with dependent test to find out the significant improvement between pre and post- test means of both groups and analysis of covariance (ANCOVA) was used to find out the significant difference between experimental and control groups. Whenever the F ratio for adjusted test was found to be significant, the Scheffe's test was applied as post-hoc test to find out paired mean difference. The skill training with and without visual training had significantly improved the participants' catching ability among cricketers aged 16 to 19 years. Skill training with visual training outperformed the skill training without visual training on participants' catching ability among cricketers aged 16 to 19 years.

**Keywords:** Visual Training, Catching Ability, Cricket.

## INTRODUCTION

Visual system is one of the most important sensory systems in performing sport skills. Despite such important role, such function is rarely taken into consideration when designing training program by coaches and athletes as well (Wood & Abrnethy, 1997). Despite the fact that eye training program is not a new subject in sport, however, the program has been carried out in laboratories and clinical settings with heavy expense for the athletes (Cross., Stadler., Parkinson., Schütz-Bosbach., & Prinz, 2011).

The majority of coaches think that having 20/20 vision ability is sufficient vision for successful performance in sport context and no extra effort is needed to devote to visual training. Such belief is also very common among the trainer and athletes as well (McLeod, 1989).

In recent years, there has been a growing acceptance that perceptual skills precedes and determines skilful actions in sport and other contexts (Harris & Jenkin, 1998; Williams, Davids & Williams, 1999). In particular, the visual system plays a crucial role in guiding the player's search (visual search strategies) for essential information underlying skilful behaviour.

When focusing on cricket, it is argued that the ability to quickly and accurately perceive events in complex sport settings is an essential requirement of skilled performance. For example, in cricket, players are confronted with a rapidly changing, information-rich environment involving the cricket ball, other cricketers, the field of play, and spectators in the stands.

According to Bard and Fleury (1976) from a cognitive perspective, the cricket player has very little time in which to interpret all available data. This is due to the player's limited information processing capacity and the constrained circumstances from the sport demands; therefore, only the most pertinent information is selected and acted upon.

### Purpose of the Study

The purpose of the study was to investigate the effect of skill training with and without visual training on catching ability among cricket players.

### METHODOLOGY

To achieve the purpose of the present study, thirty six (n=36) men Cricket players from Tirunelveli District, Tamil Nadu, India were selected as subjects at random and their age is ranged between 16 to 19 years. The selected participants were randomly (simple random sample) assigned to one of three groups of twelve (n=12) each, such as experimental group I, experimental group II and control group. The group I (n=12) underwent skills training with visual practices, and group II (n=12) underwent skills training without visual practices for a duration of 6 weeks and the number of sessions per week is confined to three days, in addition to the regular schedule and group III (n=12) acted as control. Catching ability was selected as dependent variables and it was measured through expert rating method. The following independent variables were selected for this study such as skill training with and without visual training.

The pre test and post test random group design was used as experimental design. The collected data from the three groups prior to and immediately after the training programme on selected criterion variables were statistically analyzed with dependent test to find out the significant improvement between pre and post- test means of both groups and analysis of covariance (ANCOVA) was used to find out the significant difference between experimental and control groups. Whenever the F ratio for adjusted test was found to be significant, the Scheffe's test was applied as post-hoc test to find out paired mean difference. In all the case 0.05 level of significant was fixed to test hypothesis.

### ANALYSIS OF DATA

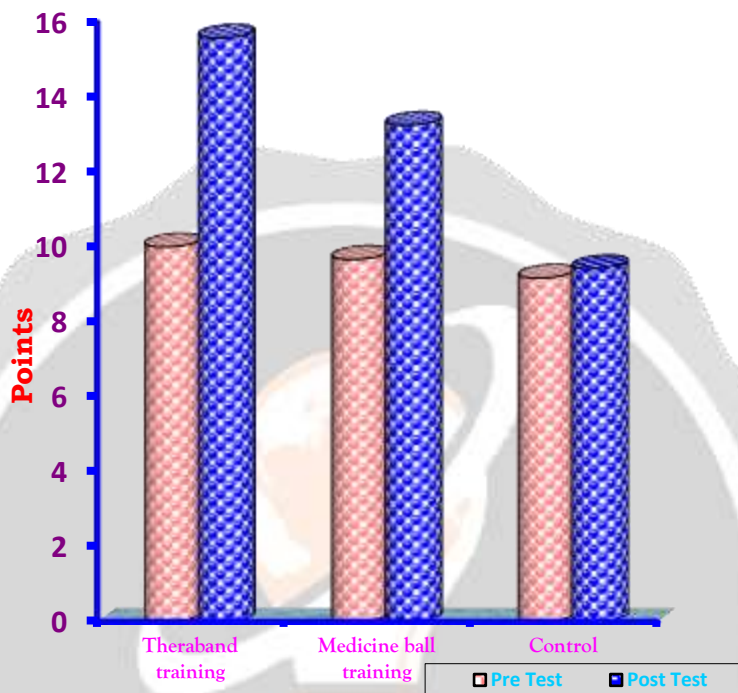
Table 1 presents pre and post test means, standard deviations and dependent 't' test values on catching ability of experimental and control groups.

**TABLE 1**  
**MEANS, STANDARD DEVIATION AND DEPENDENT 'T' TEST VALUES ON CATCHING ABILITY OF EXPERIMENTAL AND CONTROL GROUPS**

Tests	Skill training with visual Training group		Skill training without visual group		Control Group	
	Mean	SD	Mean	SD	Mean	SD
Pre test	10.00	1.41	9.67	1.07	9.17	1.19
Post test	15.58	0.79	13.25	1.22	9.42	1.00
<b>T-Test</b>	<b>12.36*</b>		<b>11.46*</b>		<b>0.90</b>	

\*Significant at .05 level. The Table Value required at .05 level with df 11 is 2.20

From the table, the obtained t-test value of skill training with visual and skill training without visual groups are 12.36 and 11.46 respectively which are greater than the tabulated t-value of 2.20 with df 11 at .05 level of confidence. This means that the skill training with visual and skill training without visual groups had effects on participants' catching ability. However, control group did not show any significant improvement on participants' catching ability because they were not undergone any special training. Figure 1 illustrate the pre and post test means of skill training with visual and skill training without visual groups and control group on catching ability of Cricket players.



**FIGURE 1 : MEAN VALUES OF PRE AND POST TEST SKILL TRAINING WITH VISUAL AND SKILL TRAINING WITHOUT VISUAL AND CONTROL GROUPS ON CATCHING ABILITY.**

Table 2 presents the results of the Univariate ANCOVA tests on Catching ability of experimental and control groups.

**TABLE 2  
RESULTS OF ANALYSIS OF COVARIANCE ON CATCHING ABILITY AMONG EXPERIMENTAL AND CONTROL GROUPS**

Adjusted Post Test Means			Sources Of Variance	Sum of Square	df	Mean Squares	F-ratio
Skill training with visual Training Group	Skill training without visual Group	Control Group					
15.45	13.23	9.57	Between	195.41	2	97.70	110.76*
			Within	28.23	32	0.88	

\*Significant at .05 level. The Table value required at .05 level with df 2 & 32 is 3.29.

The obtained F-ratio value is 110.76, which is higher than the table value 3.29 with df 2 and 32 required for significance at .05 level. Since the value of F-ratio is higher than the table value, it indicates that there was significant difference among the adjusted post-test means skill training with visual and skill training without visual groups and control group. To find out which of the three paired means had a significant difference, the Scheffe's post-hoc test was applied and the results are presented in Table 3.

**TABLE 3**  
**SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS OF CATCHING ABILITY**

Adjusted Post Test Mean			Mean Differences	Confidence Interval
Skill training with visual Training Group	Skill training without visual Group	Control Group		
15.45	13.23		2.22*	0.98
15.45		9.57	5.89*	
	13.23	9.57	3.66*	

\*Significant at .05 level.

Table above shows that the adjusted post test mean differences on catching ability between skill training with visual and skill training without visual groups; skill training with visual training and control groups; and skill training without visual and control groups 2.22, 5.89 and 3.66 which are greater than the confidence interval value 0.98, which shows significant difference at .05 level of confidence. It may be concluded from the results of the study that there was a significant difference on catching ability between skill training with visual and skill training without visual groups; skill training with visual training and control groups; and skill training without visual and control groups.

It was concluded that skill training with visual training programme is better than skill training without visual programme and control groups in improving catching ability.

## DISCUSSION ON FINDING

The result indicates that the control group does not show any significant difference on catching ability variables. The results of catching had shown significant improvement due to training effects of skill training with visual training and skill training without visual training. The effect of the skill training with visual training was much greater than skill training without visual on catching among the Cricket players. The results of this investigation are also supported by the following **Balaji (2008)**, **Manicam (2009)** and **Sisodiya, Amansigh (2005)**.

## CONCLUSION

The following conclusions were derived from the present study.

1. The skill training with visual training had significantly improved the participants' catching ability.
2. The skill training without visual training had significantly improved the participants' catching ability.
3. The skill training with visual training and skill training without visual training had significant difference towards improving the participants catching ability.
4. Skill training with visual training outperformed the skill training without visual training on participants' catching ability among cricketers aged 16 to 19 years.

## REFERENCE

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