



## EFFECT OF VISION TRAINING AMONG SKILL ABILITY OF FOOTBALL PLAYERS

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**ABSTRACT**

The study intended to find out the effect of vision training among skill ability of University level male football players. A total of 20 healthy male university level football players were selected for the purpose of study. They were of the age between 18 to 24 years with normal vision. The participants were randomly categorised into two groups: Group I- experimental (n=10), Group II- control (n=10). To assess the skill ability of football players McDonald soccer skill test was conducted as pre-test for both experimental and control groups. Various specific vision training (Depth perception, Ocular motility, Quick Exposure, Opaque lifesaver card, Dice pursuits, Near-far chart, Gaze work, Vergennes, Tracking and Focusing) was assigned to the experimental group for a period of eight weeks with training of five days in a week; whereas the control group did not undergo any treatment. After eight weeks of vision training programme the post-test was conducted for experimental and control group. The collected data on selected criterion variable was statistically analysed by using 't' ratio. The result of the present study revealed that there was significant improvement in skill ability of experimental group due to vision training. The hypothesis was accepted at 0.05 confidence level. It was concluded that eight weeks of vision training programme helped to improve the skill ability of experimental group. The control group had seen no improvement in skill ability.

**KEYWORDS :** Vision Training, Mcdonald Soccer Skill Test, Gaze Work**INTRODUCTION**

Sports persons and coaches are in constant search of new ways to enhance sports performance and to gain a competitive edge in a particular sporting activity. Vision is the ability to process or interpret the information which is seen. Visual abilities affect sports performance and help in the enhancement of motor skills and may be the most selective of all the senses. Vision plays an important role in response time, hand-eye body coordination, balance, spatial orientation and anticipation which could influence the sports performances.

Football requires endurance, speed, fast reaction time, and agility; besides, attempting to observe very fast movements also places a great demand on human vision. In the game of football, the use of vision is very high, when a player has the ball his vision goes to the opponent, his teammates and the goal. The tremendous visual demands of football vary by the specific needs and activities of different positions. Vision, balance, tracking, eye movements, peripheral awareness, eye-hand coordination, and near-far focusing are all required in football.

Clark JF (2012) has conducted a study on High-performance vision training improves batting statistics for university of Cincinnati baseball players. Baseball requires an incredible amount of visual acuity and eye-hand coordination, especially for the batters. The learning objective of this work is to observe that traditional vision training as part of injury prevention or conditioning can be added to a team's training schedule to improve some performance parameters such as batting and hitting. All players for the 2010 to 2011 season underwent normal pre-season physicals and baseline testing that is standard for the University of Cincinnati Athletics Department. Standard vision training exercises were implemented 6 weeks before the start of the season. Results are reported as compared to the 2009 to 2010 season. Pre-season conditioning was followed by a maintenance program during the season of vision training. The university of Cincinnati team batting average increased from 0.251 in 2010 to 0.285 in 2011 and the slugging percentage increased by 0.033. The rest of the Big East's slugging percentage fell over that same time frame 0.082. This produces a difference of 0.115 with 95% confidence interval (0.024, 0.206). As with the batting average, the change for University of Cincinnati is significantly different from the rest of the Big East. Essentially all batting parameters improved by 10% or more. Similar differences were seen when restricting the analysis to games within the Big East conference. Vision training can combine traditional and technological methodologies to train the athletes' eyes and improve batting.

Doayan B (2011 March) has conducted a study on multiple-choice visual perception and reaction in female and male elite athletes. A total of 48 athletes (26 males, 22 females). Their age ranged 18-26 years (mean age of 21.84) participated in this study. The participants were the college football players, basketball players, volleyball players,

handball players, Gymnasts and swimmers. Two tests were applied to investigate the multiple choice visual perception and reaction of athletes: Vienna Determination Test and visual pursuit Test. The results of the study showed that female athletes and that individual sports had a higher total amount of incorrect responses given to a stimulus compared to male athletes had lower total amount of incorrect responses to a stimulus, compared with team sports. For one-time response, there were significance differences for individual and team sports in interval 3. Significant differences were found between female and male athletes in the amount of selected responses given to a stimulus response in interval 3. The results of the study point out the importance of reaction time related to the aspects of sports branch.

**PURPOSE OF THE STUDY**

The purpose of the study was to assess the effect of vision training among skill ability of University level male football players.

**HYPOTHESIS**

There will be significance difference on football skill ability due to vision training.

**METHODOLOGY****SELECTION OF SUBJECTS**

For the purpose of the study twenty (N=20) University level male football players were selected from University of Kerala. From twenty players ten (N=10) were Control group and ten (N=10) were Experimental group. Their age was ranged between 18 to 24 years.

**THE FOLLOWING VARIABLES ARE SELECTED FOR THE PURPOSE OF THIS STUDY**

1. Dependent Variable: Skill ability
2. Independent Variable: Vision training.
3. Criterion Variable: McDonald soccer skill test

**ANALYSIS OF DATA AND RESULTS OF THE STUDY**

Statistical tests used in this study were the paired and unpaired t-test. In all the groups, the variable significance was determined at 0.05 levels. The detailed statistical analysis of the data collected is presented in the following tables and figures:

**Table I Mean difference on Skill ability among pre and post-test of Control group**

Group	N	MEAN	SD	DF	T
PRE	10	41.60	6.16	9	.231
POST	10	41.50	7.18	9	

The above table shows that there is no significant difference between the pre and post-test of Skill ability among control group, since the calculated 't' value of Skill ability .231 is lesser than tabulated 't' value of 1.833 at 0.05 level of significant with 9 degrees of freedom. The

difference in means of Skill ability among pre and post is shown in fig I.

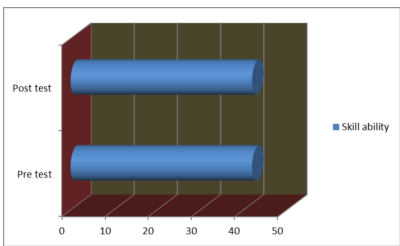


Figure I Pre and Post mean score of Skill ability

Table 2 Mean difference on Skill ability among pre and post-test of Experimental group

Group	N	MEAN	SD	DF	T
PRE	10	42.30	5.45	9	3.772*
POST	10	43.70	5.63	9	

\*Significant at 0.05 level of confidence, the tabulate value is 1.833

The above table indicates that there is a significant difference between pre and post-test of Skill ability of experimental group, since the calculated 't' value of skill ability 3.772 is higher than tabulated 't' value of 1.833 at 0.05 level of significance with 9 degrees of freedom. The difference in means of Skill ability among pre and post is shown in fig II

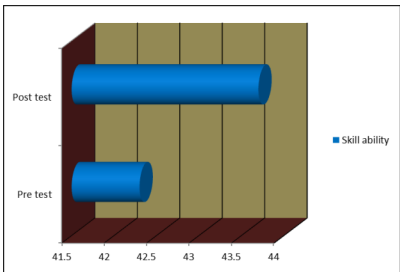


Fig 2 Pre and Post mean score of Skill ability

**DISCUSSION ON HYPOTHESIS**

In the hypothesis, it was stated that there would be a significant difference on football skill ability due to vision training. The result of the study showed that there was significant difference on selected football skill ability due to vision training. The statistical technique proved that the hypothesis was accepted.

**CONCLUSION**

It was concluded from the results of the study that eight weeks of vision training programme help to improve the skill ability of experimental group. The control group had seen no change in skill ability.

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