

# EFFECT OF SKILL TRAINING WITH AND WITHOUT VIDEO FEEDBACK ON LONG JUMP PERFORMANCE

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## Abstract

The purpose of the study was to find out the effects of skill training (hang technique) with and without Video feedback on Long Jump performance. To achieve this purpose, twenty four students between the ages of 22 – 25 were selected from the Department of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India. The selected subjects were divided into two groups with of 12 subjects. Group I underwent skill training with video feedback and Group II underwent skill training without video feedback for a period of six weeks with three alternative days per week. Long Jump Performance was selected as dependent variable and it was measured by regular competition method. The pre and post tests data on Long Jump performance were collected from the selected subjects. The collected data was analysed by using dependent 't' test and analysis of covariance and the results were discussed at 0.05 level of confidence. The result of study indicated that there was a significant improvement on Long Jump performance due to the effect of skill training with and without video feedback. The result of the study further indicate that significant improvement on skill training with video feedback in compare to skill training without video feedback on Long Jump Performance.

**Key words:** Long Jump, Video Feedback, Hang technique.

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## INTRODUCTION

The development of Technology has created a variety of stuff in sports field which speed up and eases the sportsman performance. All the associated products were assisting the sportsman to increase and improve the performance, which lead more participation thus increases the competition in the area of sports. Long jump is an event in athletics sprint along a runway and jump as far as possible into a sandpit from a wooden take-off board. The distance travelled, from the edge of the board to the closest indentation in the sand to it, is then measured [1]. (IAAF)

Observational learning or traditional method of coaching involves subjective observations and conclusion where coach's perception is considered to be one of the most important methods for learning skills (McCullagh, Weiss, & Ross, 1989) [2]. The information provided as feedback from an external source, such as a supervisor or expert, that influences performance of a skill is called augmented feedback. Augmented feedback, in which visual observation and verbal instruction are combined, leads to better execution of the movement in question in comparison to sole observation of the model (McCullagh & Little, 1989) [3]. Learners gain a lot of information about their actions by receiving feedback. Therefore proper feedbacks by coach may lead to better learning.

Technology advances support a role in the feedback with the development of computer analysis. Video is mostly recognized as an appropriate for obtaining qualitative information about performance (Liebermann & Franks, 2004, 166-188) [4] video replay and information technology enables enhancement of feedback during the replays, where the comparison between one's performance and that of other athletes is possible. Thus providing video feedback to learners is intuitively appealing, as one would expect learners who view their performance would detect their errors and thus improve.

## PURPOSE OF THE STUDY

The purpose of the study was to find out the effect of skill training (hang technique) with and without Video feedback on Long Jump performance.

## METHODOLOGY

To achieve this purpose, twenty four students were selected from the Department of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India and their age ranged between from 22-25 years. Long jump performance was selected as dependent variables and it was measured through regular competition. Group I underwent skill training with Video feedback and Group II underwent skill training without Video feedback for six weeks with three alternative days per week. Both the experimental groups underwent the skill training (skill and drills were given) related to the long jump event in the morning session and the skill practiced by the students were videotaped for group I and it was shown to them during the evening session along with elite athletes video also (video modelling). The pre and post test data on Long Jump Performance was collected prior to and immediately after the experimental period from the selected subjects. The collected data on Long Jump Performance was analysed by using dependent 't' test and analysis of covariance (ANCOVA) and the result were discussed at .05 level of confidence.

## RESULT AND FINDINGS

### Analysis of data

The analysis of dependent 't' test on the data obtained for Long Jump performance of the pre and post tests means of skill training with and without video feedback groups have been analyzed and presented in Table I.

**Table I: Mean and Dependent 't' Test for Pre and Post tests on Long Jump Performance of Skill Training With and Without Video Feedback Groups**

Variables	Mean	Skill training with Video Feedback	Skill training without Video Feedback
Long Jump Performance (in metres)	Pre test Mean	5.15	4.57
	Post test Mean	5.47	4.75
	't' test	12.37*	19.50*

\*Significant at 0.05 level of confidence. (Table Value required for significance at 0.05 level for 't' test with df 11 is 2.14).

From the table I, the dependent 't'- test values between the pre and post tests of skill training with and without video feedback on long jump performance are 12.37 and 19.50 respectively, which are greater than table value of 2.14 with df 11 at 0.05 level of confidence, it is concluded that skill training with and without video feedback had significant improvement on long jump performance. The analysis of covariance (ANCOVA) on Long Jump Performance of skill training with and without video feedback groups have been analyzed and presented in table II.

**Table II: Analysis of Covariance on Long Jump Performance of Skill Training With and Without Video Feedback Groups**

Adjusted Post Test Means		Source of Variance	Sum of Squares	Df	Mean Squares	'F' – Ratio
Skill training with Video Feedback	Skill training without Video Feedback					
5.21	5.01	Between	0.161	1	0.161	71.971*
		Within	0.047	21	0.002	

\*Significant at .05 level of confidence. (The table value required for significance at 0.05 level with df 1 and 21 is 4.85).

From the table II shows that the obtained F-ratio value for adjusted post test means of skill training with and without video feedback group on Long Jump performance is 71.92 which is greater than the table value 4.85 with df 1 and 21 required for significance at 0.05 level. Since, the value of F-ratio is greater than the table value, it indicates that there was a significant difference between the adjusted post-test means of skill training with and without video feedback group on improving the Long Jump performance. Skill training with video feedback group (Adj.post test mean = 5.21) outperformed then the skill training without video feedback group (Adj.post test mean = 5.01) on long jump performance.

The mean values of skill training with and without video feedback group on Long Jump performance were graphically represented in the figure I.

## DISCUSSION

The result of study indicates that there was a significant improvement on Long Jump performance due to the effect of skill training with video feedback among college level students. According to Jose Manuel Palao, (2015) the augmented feedback provided by the video was a positive outcome [5]. Also the result of Sethu, S (2014) support that there was a significant improvement on High Jump Performance and Technique due to the effect of skill training with and without visual feedback [6]. Present days students were adopted with video in learning. From the feedback the students were aware about their own movements and mistakes. The study by Martien lee (2011) revealed that young players are use video to assist their game sense and old players were not rely on video but to study the team's system as well as their own [7].

## RESULTS

From the analysis of the data, the following results were drawn.

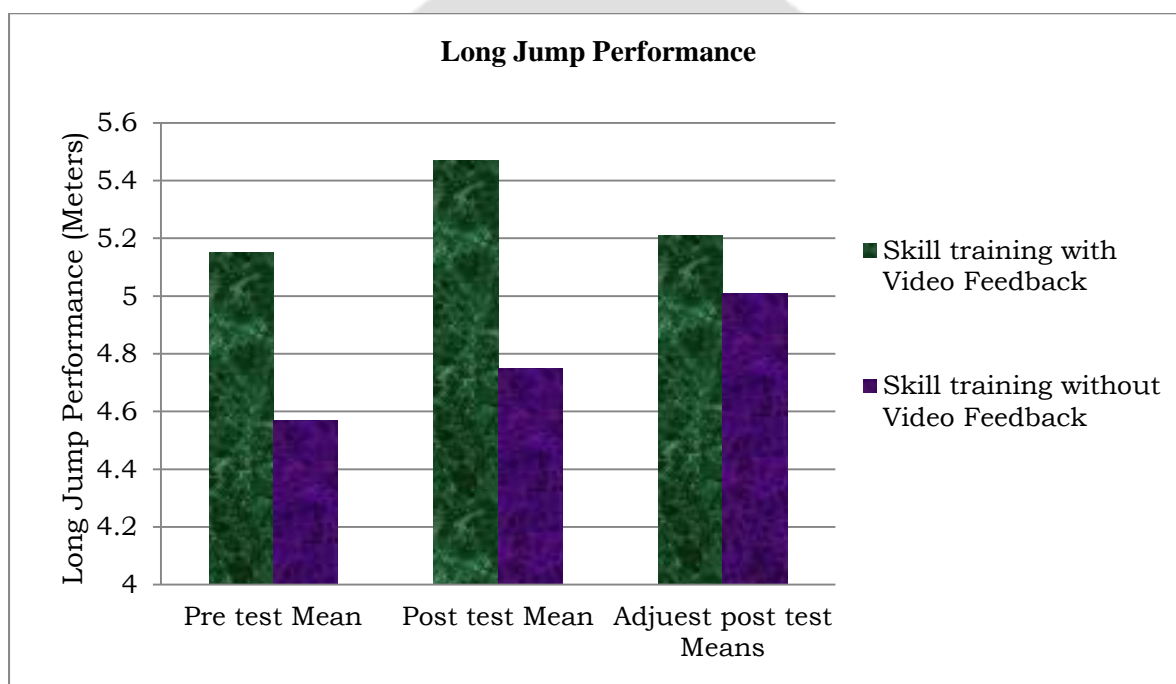
There was significant improvement on Long Jump performance due to the effect of video feedback and without video feedback among Physical Education Students.

There was significant difference between skill training with and without video feedback groups towards improving the Long Jump performance and skill among Physical Education Students. It was found that skill training with video feedback group outperformed than skill training without video feedback group on Long Jump performance among Physical Education Students.

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**Figure I: Mean Values of Skill Training With and Without Visual Feedback on Long Jump Performance**

**BIOGRAPHIES**

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