

# Skill Analysis through Mobile Application

<sup>1</sup>Dr. S. Sethu & <sup>2</sup>R. Ramakrishnan

<sup>1</sup>Asst. Professor & Head (i/c), Dept. of Physical Education and Sports, M.S. University, Tirunelveli, Tamil Nadu (India)

<sup>2</sup>Research Assistant, Dept. of Physical Education and Sports, M.S. University, Tirunelveli, Tamil Nadu (India)

## ARTICLE DETAILS

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### Corresponding Author

Email: drsksethu[at]gmail.com

## ABSTRACT

The aim of this study was to investigate the skill analysis through mobile application. To achieve the purpose of the study 15 volleyball men players were selected as subjects from department of Physical Education & sports, M.S University Tirunelveli District. The training period was restricted to six week and the number of sessions per week was confined to 3 days (alternative days) and their age ranged between 21 to 24 years. The experimental group received their own video and elite player video through mobile connected with projector programmes such as video shows, clippings, and so forth for skills in Volleyball. Serving were selected as dependent variables and it was tested by using Brumback volleyball service test. For skill analysis used mobile application namely Hudl technique. The collected data were statistically analysed by using descriptive analysis, paired sample 't' test. There was a significant improvement on passing and serving of Volleyball players due to the effect of skill analysis through mobile application.

## 1. Introduction

Sport at all level is constantly developing. With this, so is the development of technology and its use within sport. New thoughts, inventions and systems are being devised and implemented in sport frequently to try and improve such areas as performance, assessment, skill execution, athlete tracking etc.

The use of mobile technology in sport is also an emerging activity. It has already been proven to benefit the business world, and its use is revolutionizing sport in certain dimensions. Mobile technology is shaping the future of sport. Looking broadly at the approval of mobile technology into modern sport, we can see that the vast majority of the public have welcomed the idea of its use in sport for teaching/coaching. It's ease of use and accessibility results in more opportunities for use in sport. In keeping with contemporary trends, the popularity of application being used on mobile in sport is increasing. People are becoming more obsessed with monitoring their own performance, fitness etc., and with smart phones developing over time, applications are being developed and created to suit the needs of the sporting individual.

Applications are also being developed to suit the social aspect of sport – aimed at bringing the sport fanatic “closer to the action”. The modern proliferation of applications is largely being driven by the convenience, portability, connectivity, and functionality that the latest generation of mobile devices provides. Providing videotape instruction as a form of knowledge of performance to learners is a common instructional tool in teaching and coaching in training. Video capture feedback is intended to provide learners with information concerning errors in skill execution and has been described as “a essential component in the process of coaching and feedback” (Franks & Maile, 1991). The aim of this study was to examine on the skill analysis through mobile

application in improving volleyball skills. Keeping the above concept in view, the research attempted to find out the skill analysis through mobile application on volleyball skills.

## 2. Methodology

### Participants:

To achieve this purpose, fifteen men volleyball players were selected from the Department of Physical Education & Sports, M.S University, Tirunelveli and their age ranged between from 21-24 years. The selected subjects assigned as experimental group. There is only one group.

### Software:

For this study we used the application for skill analysis through mobile application namely

- Hudl Technique

This application available in the play store for androids users.

### Variables and Tests:

For this study I was selected Volleyball skill.

**Table: I**  
**Table Shows that Dependent variables and test item**

S.No	Variable	Test item
1.	Serving	Brumback volleyball serving test

### Training Procedure:

Group underwent skill analysis training of their event for six weeks with three alternative days per week. The groups underwent the skill training which were related to the volleyball event at the morning session and the skill practiced by the

subjects were videotaped through mobile application and it was shown to them during the evening session along own and with

elite athletes video. Through the application compare their angle, contact of the ball etc as shown in the figure I, II & III

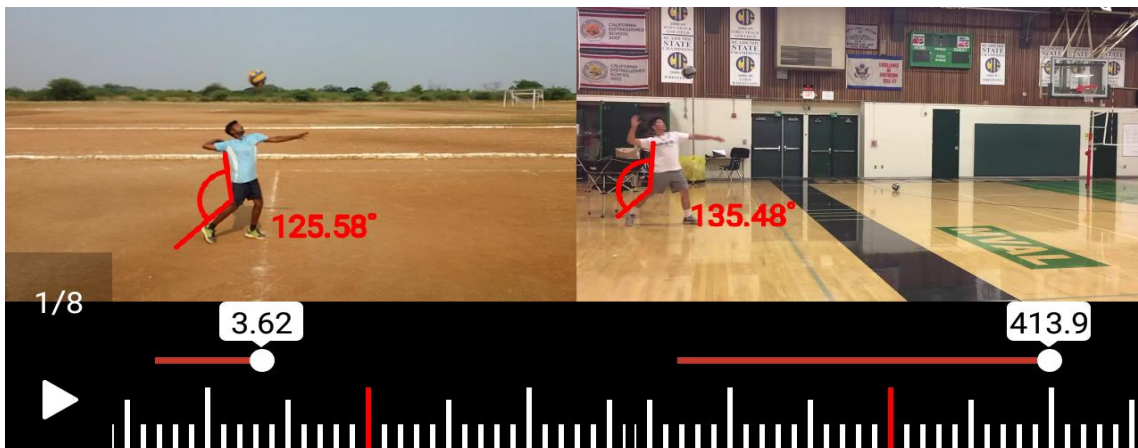


Figure - I

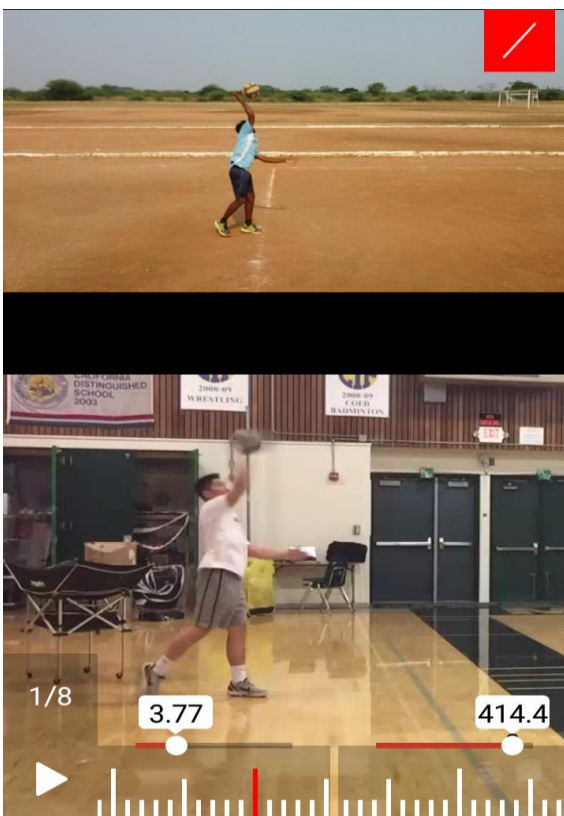


Figure- II

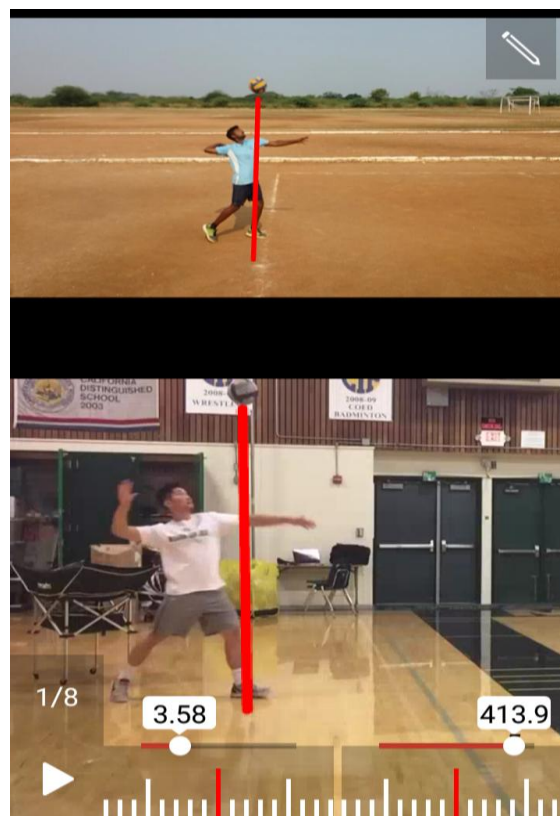


Figure III

### 3. Statistical Analysis

The pre and post test data on volleyball skills such as serving were conducted prior to and immediately after the experimental period from the selected subjects. The collected data on serving was analyzed by using dependent 't' test.

**TABLE II**  
Means, SD and Dependent t-test values on serving skill

Test	EXPERIMENTAL GROUP		T-value
	Mean	Standard deviation	
Pre-test	16.6	0.46	17.80*
Post-test	25.87	0.62	

\*significant at 0.05 level  $t(14)$  is 2.14.

From the table, the obtained t-test value of experimental group are 17.80\* which is greater than the tabulated t-value of 2.14 with df 14 at .05 level of confidence. It indicates that there is an significant improvement on serving skill on volleyball.

### 4. Discussion and comparison to the Literature

The results of the present study point out that there was significant improvement on serving in volleyball due to the effect of skill analysis through mobile application among volleyball players.

The results from this study were parallel with the results reported in the literature. Some evidence suggests that the technology helps to improve the skills.

Jambor (1995) saw an improvement in swimming skills for two 'college age' beginners who used the Interpersonal Process Recall method, which uses both visual and verbal cues, twice a week for 14 weeks. Video programmed feedback combined with a video of an expert model has increased baseball hitting performance Leslie (1998).

Swinnen et al. (1996) reported that real time visual feedback on five different training days was a good alternative to overcoming existing and thus preferred coordination modes for a cyclical elbow flexion extension movement. It was assumed that the rowers used the feedback information to maintain a more constant pattern of power output to increase propulsive output (Smith & Spinks 1995; Spinks 1994).

## 5. Conclusion

The following conclusions were drawn from the present study.

1. There was a significant improvement on serving due to the effect of skill analysis through mobile application among men volleyball players.

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## 6. Recommendations

Based on the result of the study, the following recommendations were drawn.

1. The same study may be conducted in other games like tennis, football, basketball, hockey, kabaddi and so forth.
2. The same study may be conducted in other subjects like Human Anatomy, kinesiology and so forth.
3. The effective study may be conducted in rural and urban areas students as subject.
4. Further is needed to identify variables that may influence learning and retention.
5. More studies should be conducted to investigate the effect skill analysis in different ages and for various sport activities. Also, it is critical to continue researching into how students learn in different technological environments, since the researchers have only begun to explore the uses and practicality of visual feedback.