

**UNIVERSITI TEKNOLOGI MARA**

**THE EFFECT OF DIRECT VIDEO FEEDBACK  
ON THE ACCURACY OF TENNIS SERVE**

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## Abstract

The purpose of this study was to examine if junior tennis players could improve their speed and accuracy of the serve by using direct video feedback. Ten intermediate junior tennis players completed 50 acceptable maximum effort serves, aiming to land the ball within a 1m square area adjacent to the service box T. Time series design was used in the study as part of the analysis of the data. The results showed that the test on Day 4 had significantly higher accuracy than intervention day (Day 3). Specifically, the results suggest that when video feedback was given on Day 3, the accuracy of the serve improved on the next day (Day 4). The implication of these findings is that it is a good tool to use the direct video feedback as a way to enhance technique execution in serve.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the study

Feedback from coaches to the athletes on their technique is crucial in getting to high performance achievements. Due to the advance in technology, the feedback given has evolved from the conventional to the more sophisticated ways. A variety of techniques to give the feedback can be used in order to deliver feedback to athletes such as videotaping or direct video during training of a motor task.

Augmented information in forms of knowledge of results (KR) or knowledge of performance (KP) is considered an important variable to improve motor learning (Magill, 2001; Swinnen, 1996). Manipulation of timing, precision, frequency and type of knowledge of results are often done to set the training and giving education in an efficient way (Wulf and Shea, 2002). The appropriate frequency and distribution of augmented information for enhancement of performance and learning seems to be rather controversial. Many recommend, based on evidence revealed a reversal effect (Vicker, 1994; Wiemeyer, 1998). Reduced frequency of augmented feedback degrades acquisition performance but enhances learning, whereas full feedback generally has the opposite effect. However, there are studies which were not in agreement with the reversal effect but indicate no decrease in acquisition performance under reduced frequency conditions