



Tennis Ability and its Influence on Perception



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INTRODUCTION

• According to leading tennis authorities, the main goal in tennis is a simple one: to not be the first player to hit a short ball. Said differently, keep the ball deep in the opponent's court. There are several advantages to this strategy: (a) your opponent will be pinned to the baseline, unable to take control of the net; (b) you reduce the angle in which your opponent can return your shot; and (c) you will have more time to react to your opponent's return shot.

• Unfortunately, most beginning and intermediate tennis players have difficulty accomplishing this goal. While stroke technique is undoubtedly one important element that can influence groundstroke depth, it is possible that other less obvious factors may play a role in helping explain why lower level players are unable to consistently keep the ball deep.

• One such factor may be an inadequate awareness of where the shot has landed in the opponent's court in reference to the court's baseline (i.e., perceptual awareness). Beginning and intermediate players when instructed to hit deeper fail to respond, and this may occur because of a perception that the shot is already dangerously close to the baseline.

• This circumstance raises the question, does perceptual development and improvement account for a significant amount of the positive changes associated with improved level of tennis play?

PURPOSE

• The purpose of this study was to determine if changes in level of playing ability is accompanied by improvements in the ability to judge the depth of groundstrokes.

SAMPLE

• Participants for this study were 30 college students (25 males and 5 females) ranging in age from 18 to 29 years who were enrolled in a tennis class at a Midwest university. These individuals were grouped by their tennis playing ability as judged by the National Tennis Rating Program criteria (i.e., beginning, intermediate, and advanced intermediate)

METHOD

• Players were required to stand three feet behind the baseline and watch a tennis professional (standing next to the participant) project 10 tennis balls at random to each of four predetermined court zones.

• After watching the projected ball, the participants were asked to identify which zone the tennis ball had landed and how far (i.e., short depth [between the net and 24 feet], ideal depth [within 6 feet of the baseline], average depth [the middle 9 feet of the court], or out) the ball had landed from the opposite baseline.

RESULTS

• There were no differences found between the beginning, intermediate, and advanced intermediate players' ability to judge the depth of groundstrokes.



COACHING IMPLICATIONS

• The results of this study found no differences in the ability to judge the depth of a groundstroke between beginning, intermediate and advanced intermediate players, which suggests that perceptual development (due to factors such as increased maturity, experience, etc.) do not sufficiently account for performance improvements in tennis players.

• The researchers then explained that these results should be considered with caution for several reasons:

• No differences were found between the different participant groups because all players were extremely successful in correctly judging the appropriate zone and depth of where the balls were hit.

• This high success rate may have been due to the fact that the zones chosen for the study were relatively large, which may have resulted in a perception task that was too easy to discriminate between different ability levels.

• The high success rate may have also been due to the fact that the balls were struck by the professional and not the participants themselves, which would have, again, caused the task of judging the depth of the ball's trajectory to be fairly easy.

• A third possibility for the high success rate could be that the task was made easier because the participants were allowed to focus all of their attention on the ball's path. If placed in a real game situation, a player's attention would be divided because he or she would also have to attend to factors such as opponent's position and body movements (a much more challenging task).

• Therefore, it may be true that if the task used in the study was more challenging and/or more realistic in terms of a true tennis experience, the results may have shown differences in perceptual ability between the three groups of players.

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