ANTICIPATION IN HIGH PERFORMANCE PLAYERS

By Miguel Crespo & Machar Reid
In this session we will...

- Explain the definition of anticipation for high performance tennis
- Understand the importance of effectively anticipate at this level of play
- Provide guidelines on how players can anticipate better during matches
Anticipation time in beginner and intermediate players

- Research has shown that players of both levels:
  - Are not very successful when predicting latitude, longitude or exact placement of the ball if exposed to restricted vision conditions
  - Are unable to identify relevant cues produced by the server
Anticipation time in beginner and intermediate players

- Advanced players were faster and more precise in serve and groundstrokes anticipation than beginners.
- When performing a split-step, advanced players were faster than beginners and male players faster than female players.
Training anticipation in intermediate players: Research

- The study proved that video presentations could improve on-court tennis serve returns.
- The training consisted of a series of tennis-serve video presentations that were replayed with gradually increasing speed.
- All serves were occluded on racquet/ball contact, and participants were asked to predict the type, depth, and width of the serve.
- On-court tests results suggested that anticipation ability and performance did improve as a result of the intervention.

Scott, Scott & Howe (1998)
Training anticipation skills in tennis: Research

- **Materials:** Realistic film simulations, movement-based response measures, and a portable eye movement recording system.
- **Skilled players** were faster than their less skilled counterparts in anticipating the direction of opponents' tennis strokes.
- This superior performance being based, at least in part, on more effective visual search behaviours.
- **Players who received perceptual training** improved their performance on laboratory- and field-based tests of anticipation when compared with those that did not receive any instruction regarding expert performance strategies.

Williams, Ward, Knowles, Smeeton (2002)
Training anticipation skills in tennis: Research

- Examined the effectiveness of explicit (E), guided discovery (GD), and discovery (D) techniques in developing anticipation skill in tennis.
- E and GD groups showed greatest improvements over the training period and demonstrated similar skill development during acquisition.
- E group developed more explicit rules than the GD group who, in turn, developed more rules than the D group.

Smeeton, Williams, Hodges, & Scott (2002)
Training anticipation skills in tennis: Research

- Directing attention to the important postural information cues facilitates early acquisition.
- Participants in the E and GD groups used this information to improve their ability to discriminate task relevant features and predict shot direction.
- Perceptual skill was achieved later in acquisition for the D group, although performance on the post-test matched the E and GD groups.

Smeeton, Williams, Hodges, & Scott (2002)
Anticipation and mental training (I)

• With mental training is possible to:
  – Make decision faster when reacting to the serve
  – Achieve shorter anticipation time
  – Improve precision on judging the type and placement of the serve
Anticipation and mental training (II)

• In filmed game situations, it is possible to improve reaction times and reduce errors.
• Advanced players focus their attention on more significant and predictive cues, thus improving a faster and more precise decision making.
Anticipation and mental training (III)

• Advanced players solve better the uncertain situations referred to opponent’s actions by interpreting previous cues

• Anticipation abilities can be improved in less skilled players if adequate training methods are used
Anticipation and mental training (IV)

- Training the selection and interpretation of certain anticipation cues of the opponent’s serve can highly improve the decision making process of the return of serve.
- The player has to be taught to determine the adequate anticipatory cues which appear in the different game situations of tennis.
Research on Anticipation and Visual Search - Summary

• Cues in preparing the return of serve
• Visual search & anticipation
• Vision and visual aids
• Timing