

A Case Study of the Effectiveness of a Mental Training Program

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INTRODUCTION

Numerous studies indicate that mental training can be an effective approach to improving the performance of athletes involved in a variety of sports. It has also been discovered that there is no magical formula or universal mental training program that works for every athlete. Many factors such as an individual's strengths and weaknesses, goals, sport, and personality determine what type of approach should be used. This study sought to determine the usefulness of a mental skills training program designed for a female collegiate tennis player who suffered from performance disruptions such as letting down on weaker opponents, losing concentration after getting a lead, and negative results from not taking sufficient time to warm up and prepare mentally before a match. It was decided that a mental skills program comprised of Cognitive Behavior Therapy (CBT) and a Preshot Routine (PR) would be beneficial for this particular player. CBT is an intervention strategy that is designed to identify and combat unproductive and disruptive thoughts that negatively affect an individual's feelings and behaviors (e.g., on court performance). PRs are systematic and ritualistic routines for a very specific situation (e.g., the moments before a serve) that can help a player increase concentration, better control the pace of play, plan for the next point, and increase consistency across various match situations.

PURPOSE

- The purpose of this study was to examine the effects on competitive tennis performance of an individually-tailored, mental training program containing Cognitive Behavior Therapy (CBT) and Preshot Routine (PR) components. Performance was measured by the average number of unforced errors per game, service return errors, and percentage of first serves in.
- The one participant for this case study was a 20 year old, female playing her third year of collegiate tennis at a large, urban, southeastern university. This athlete was described by her coach as having superior athletic ability relative to her teammates but lacking the mental skills necessary to realize her full potential in tennis. To help determine what components to include in the mental skills training program several assessments were completed by the player that measured characteristics such as anxiety, mood, motivation, reasons for being physically active, and thoughts, feelings, and mental skills already used during competition. The first portion of the program, CBT, took place over five sessions and focused on the players' negative thoughts that occurred before and during a match that appeared to disrupt her concentration and ability to perform. The PR intervention began four weeks after the CBT training and was conducted over three and a half sessions on and off the court. The developed PR was comprised of four stages (Plan, Ready, Focus, and Fire) and was completed before each service and return of serve during practices and matches. During the Plan stage, the player mentally "dismissed" the previous point and planned a strategy for the next point. For the Ready phase, she used deep breathing and shoulder slouching to physically relax while she was getting into position. The Focus stage involved selecting a specific visual target (e.g., racket throat when serving) so that distractions were minimized. Finally, the Fire stage was the actual skill execution. The performance indicators (i.e., average number of unforced errors per game, service return errors, and percentage of first serves in) were assessed before the mental skills intervention began and throughout the following competitive season (13 of the 22 matches played).

RESULTS

- Overall, the player's feedback for both the Cognitive Behavior Therapy (CBT) and Preshot Routine (PR) was positive.
 - However, her feelings about receiving results of her initial psychological testing were mixed. She indicated that while the test results were interesting, she did not think they had a significant impact on her performance.
 - On the other hand, she believed the CBT helped her understand she could control her thoughts during a match to positively affect her performance.
 - The player also indicated the PR was effective in helping her control her emotions on court because it made her feel more in control of herself, especially the on-court sessions.
 - She also felt the PR sessions increased her overall motivation to play tennis. This is a rather important finding because the player had expressed earlier in the season the desire to quit the team.
- The mental training program had mixed results on the player's tennis performance.
 - Both CBT and PR had a positive effect on the average number of unforced errors per game and on service return errors.
 - However, because performance measures before the training varied it is difficult to determine if the decreases in errors after the training was due to the intervention or just the natural variation in the performance.
 - This variation also made it impossible to determine if the training program had an effect on percentage of first serve in. However, there is some evidence that service percentage did show some improvement.



COACHING IMPLICATIONS

- In general, the performance indicators that were measured before and after participation in the mental training program and the player's reports about her experiences suggest that the program had a positive effect on the athlete's on-court performance and overall enjoyment of her sport participation.
 - Performance improvements (i.e., the average number of unforced errors per game, service return errors, and percentage of first serves in) were likely due to the player's increased focus and confidence during her matches.
 - The player's increased motivation also played an important role in increasing her effectiveness during practices and competition.
- The components for the training program that was designed for this player were determined from the results of interviews with the athlete and her coach as well as results from several psychological assessments. While the athlete did not feel that becoming aware of these results had a direct impact on her performance, it seems that they were useful in informing the choice of mental training program goals and elements.
 - To most effectively tailor programs such as these to your athletes, it is important to first understand his or her individual strengths, weakness, and goals.
 - While CBT and PR proved to be useful strategies for this athlete, they may not work for all players in all situations, so this assessment period is critical for determining the most needed and useful strategies.
 - According to the player, an especially useful component of the training program was the on-court PR sessions.
 - This component may be effective for helping athletes focus and better control their emotions during practice and competitions.
 - Another benefit of a mental training program is that it can increase communication between you and your players. Through this process, both you and your player will become more aware of his or her thoughts and feelings and are given the opportunity to discuss and work through the tennis related issues together.

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