



# Analysis of Psychological Performance Inventory and Competitive Adjective Profile

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## INTRODUCTION

• The USTA is considering the use of two evaluative instruments in player development: The Psychological Performance Inventory for Sports (PPS) and the Competitive Adjective Profile. In order to make responsible and accurate decisions based on the results of these tools, the USTA must research the reliability and validity of the PPS and CAP.

• Both instruments were developed by James E. Loehr to measure psychological attributes for competitive tennis players. Analysis of data from 160 junior players for the PPS and 140 players for the CAP were provided by the USTA. Only complete sets of responses were analyzed and information regarding sex, age, or skill was not provided or included in the study.

## PURPOSE

- To present the estimated reliability and validity of the PPS and CAP;
- To present an initial estimate of the validity of the seven subscales of the PPS using factor analysis.



## WHAT DID THE STUDY FIND?

- It appears that the USTA has two valid instruments to measure the competitive attributes of tennis players, however statistical analyses other than factor analysis should be considered.
- The CAP appears to be a very reliable instrument according to Cronbach's Alpha Index reliability estimate and no major modifications or deletions are recommended.
- Although no major changes are recommended, the instrument should be redesigned to avoid personal bias. The present format tends to influence players to respond at the top of the scale where the positive qualities are listed. Switching some of the positive attributes to appear at the bottom of the scale and reversing the score may help players to be more objective in self-evaluation.
- The reliability estimate for the total score on PPS is very good, suggesting that the scale is reliable. Reliability estimates for 6 of the 7 subscales were acceptable with motivation being the only subscale with unacceptable reliability.



## COACHING IMPLICATIONS

- If the CAP and PPS are to be used in a test and retest methodology, such as before and after a competition, test-retest reliability should be calculated.
- If these instruments are to be used in screening procedures or diagnostic manner, norm tables containing large data sets sorted by variables of sex and age should be created to compare player responses.
- When conducting additional analysis the age, sex and ranking of the player should be included in the study to examine resulting patterns of responses and potentially reduce current error variance in reliability and factor analysis

## REFERENCES / RESOURCES

- Del Rey, P. (1972). Appropriate feedback for open and closed skill acquisition. *Quest*, 17, 42-45.



**YEAR PERFORMED 1989**