

Overview of the Mental Performance Index (MPI)™

Who, What, Where, When, Why and How?

Who?

Licensed clinical and sports performance psychologist John F. Murray, Ph.D., works with professional, college, and high school football teams and players. His doctoral dissertation dealt with the players on the 1996 national champion Florida Gators football team and how they responded to adversity. He himself played football in his youth and is a long-time student and fan of all aspects of football in America.

What?

Dr. Murray's Mental Performance Index (MPI) is the first statistical system in sports that rates overall team performance by incorporating mental performance in the rating. The MPI is the product of seven years of research and demonstrates with one single statistic - representing degree of perfection on a scale of .000 to 1.000 - how well a football team performed in a game, in a quarter, or in any number of selected plays such as a particular drive, the final two minutes or an overtime period. Since the MPI standardizes performance on a scale of 0 to 1, the performance of teams can be meaningfully compared from one game to the next or even across decades, by using this consistent and proven method of generating the index score. Validity for the MPI has been established over six consecutive NFL seasons in which the MPI was used to rate all playoff games. The performance data of the teams was shared publicly before each of these six Super Bowls and proved to be extremely accurate in estimating how the teams would perform in the Super Bowl in 5 of 6 games, and the data enabled the MPI creator to beat the official pre-game spread in 4 of 6 of these games.

Where?

Dr. Murray developed The MPI in his West Palm Beach and Boca Raton offices. Assistance with the computerized scoring program was provided by a paid computer consultant in Boca Raton.

When?

Groundwork for the MPI dates back to 2002. The system was fully functional before the 2003 NFL season.

Why?

There are a number of reasons for why the MPI was needed.

- (1) As a sports psychologist helping football teams and players perform better, the focus has to be on the performance rather than on outcome (winning or losing). Players who maintain this focus play by play and consistently perform well on as many plays as possible have the best chance of winning the game. Focusing on winning and losing is a needless distraction that detracts from execution. For this first reason, Dr. Murray wanted to develop a measure of team performance that matched what he was telling his athlete and team clients. There was nothing available on the market that did this. With one MPI number now, the total team performance is understood more precisely than ever. This allows coaches to know exactly how their team is performing and where the effort needs to be placed next. It also allows scouting of other teams. The final score is often a very poor indicator of exactly how the teams performed, so the MPI fixes this problem.
- (2) A second major motivator was that mental skills (such as performing under pressure and avoiding careless mistakes) are known to be crucial and part of a team's performance, but they were not being measured or taken into account in any scoring system. The MPI corrects that by including mental performance as a component of all 7 MPI index scores. Teams that perform well mentally (as well as physically) will score higher on the MPI, so in this sense it is a more accurate rating of reality.
- (3) A third and unintended benefit of the MPI is that the standardized scoring on the 0 to 1 scale now allows everyone to compare teams across years and even across decades. Through an MPI analysis we will now be able to say with precision which team performed best in Super Bowl history, for example.
- (4) Fourth, the richness of the data and 7 scale scores will allow us to answer crucial questions and challenge old assumptions. For example, does defense win football games as often claimed? By correlating the MPI score for defense with the outcome measures, we will definitively

answer these questions and many more. It may be that defense does not actually correlate with outcome better than pressure offense or special teams play, but we will find out. So this final benefit is to increase our overall knowledge about football performance and that could really help coaches to know where to put their emphasis. For example, if pressure offense is far more important than defense in winning games, that area would need to be trained more in the weeks leading up to games.

- (5) A final but as yet unexplored purpose of the MPI could be in prognostication. Analyzing team performance with such precision never before seen would likely benefit anyone involved in predicting games. To date this has not been explored yet except for Dr. Murray's fun pick before each of 6 straight Super Bowls, and that effort was to establish the validity of the MPI, and it has held up well.

How?

The MPI system incorporates every meaningful play in a football game (often not scoring a team's performance when there is a penalty on the other team, a kneel-down, or a play intended to run out the clock at the end, for example).

The MPI takes special note of mental factors such as performing well in pressure moments, avoiding careless errors, and executing with consistency.

The MPI grades and produces a total team performance rating as well as sub-scores for offensive performance, defensive performance, special teams performance, offensive performance in pressure situations, defensive performance in pressure situations, and total performance in pressure situations.

The exact details of scoring are proprietary and used by the creator of the MPI in helping football teams.

To rate games, Dr. Murray enters data into his computer program on every play of the game, rating both teams at the same time. The computer converts the rating into a percentage score and gives an ongoing running score in all 7 categories and an ongoing visual/graphic representation of how the teams are doing on these 7 factors as well. At any point in the

game, Dr. Murray can provide feedback to a coach or to the media about how the team is performing in each category on the 0 to 1 scale.