

Do NBA Teams with Better Teamwork *or* Star Players Win Playoffs?





Formulate question

While watching an NBA game, I realized that one team had a star player, but the other team with no star was winning. A question that I got out of this was whether or not having a star on the team helped a team win a playoff, or were other aspects like teamwork more important?

Analyze Data

Matrix Plot of AST:PTS Ratio vs. Team Rank 95% CI for Pearson Correlation MIA PHX 🔴 BOS Team Rank w MIL GSW DAL PHI UTA TOR CI = (0.123, 0.922) 0.180 0.225 0.240 0.210 AST:PTS Ratio

The "AST:PTS ratio" has a strong, positive correlation with "Team Rank" (r=0.69).

Collect data

I made two metrics using 2021-22 season data from www.nba.com/stats

- (1) "AST:PTS Ratio": To measure the teams teamwork I took the total assists (AST) in the season, and divided by the total points (PTS). A higher ratio means more teamwork.
- (2) **"Average PTS of Top Player**": To measure the strength of a team's star player, I took the average points of each team's top player.
- My dependent variable was "Team Rank."



"Average PTS of Top Player" is NOT correlated to Team Rank (r=-.0148.)

Interpret results

The data shows that the "AST:PTS ratio" has a strong correlation with Team Rank, but "Average PTS of Top Player" is not correlated. This means that teams working together to score is more effective than feeding into a star. To win the NBA playoffs, a team needs talent, but talent wont reach its full potential unless the team works together. This insight can be useful when drafting a player, such as prospect Victor Wembanyama, who many NBA teams building around.