

# Does The Amount of 3-Point Shots Made per Game Affect Win Percentage?

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# Hypothesis:

If an NBA team has a 3PM% of at least 35.7% per game in the 2019-2020 season, they will win above 35 games.



Independent Variable: 3-Points Made Percentage

Dependent Variable: Winning Percentage

Constants: All NBA teams, all teams play in NBA arenas, all teams play in the same league.

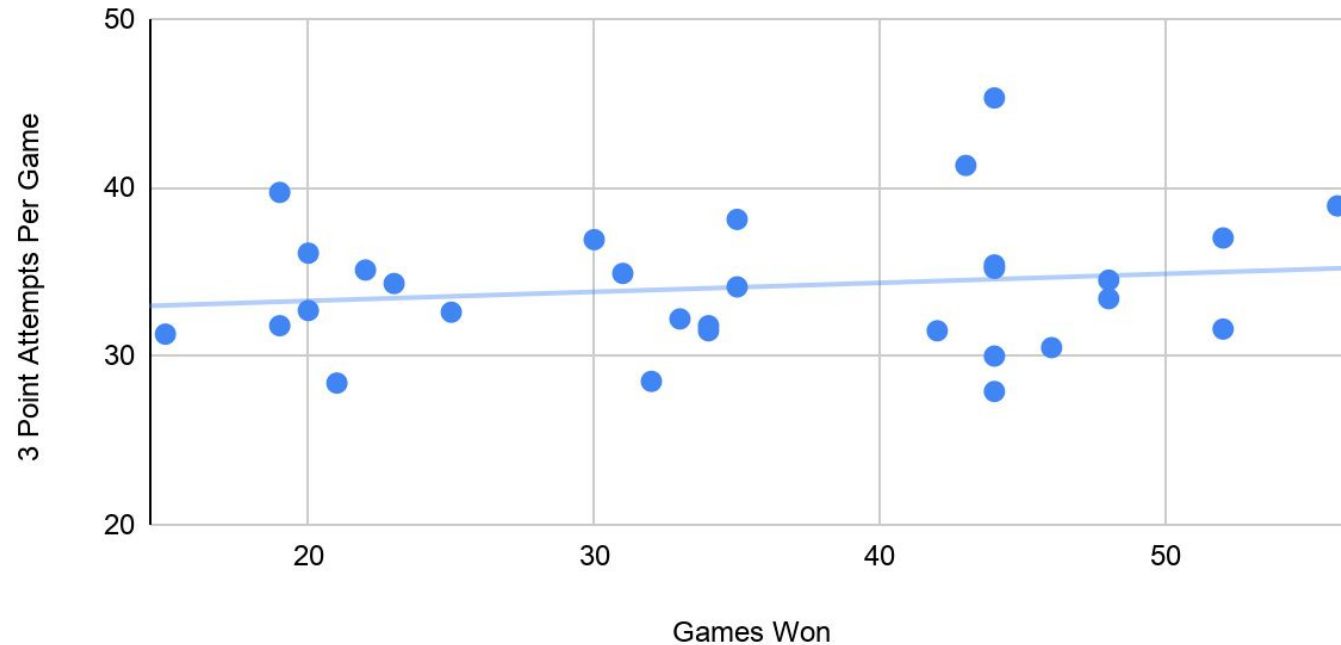
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Sources: Official NBA website.

Control Setup: NBA stats from 2019-2020 season.

## 3 Point Attempts Per Game vs. Games Won

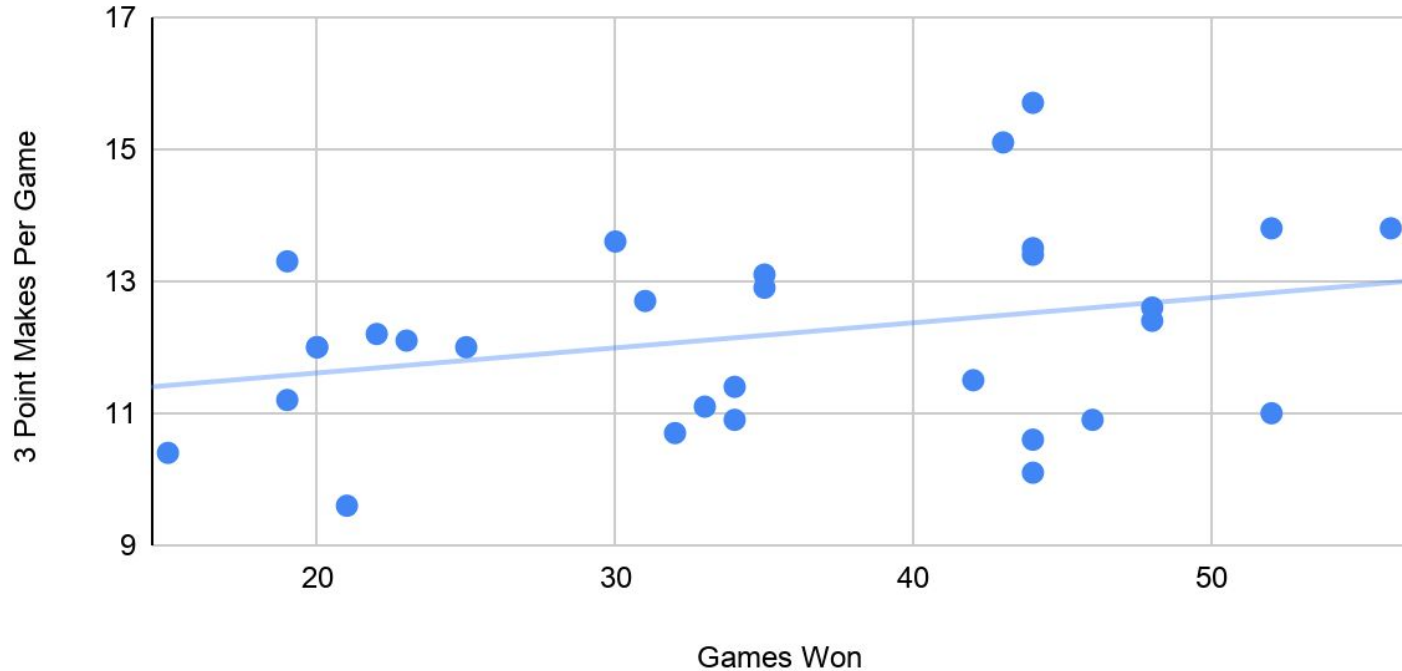
● 3 Point Attempts Per Game    — Trendline for 3 Point Attempts Per Game  $R^2 = 0.026$



- Correlation coefficient of  $r=0.161$ .
- A very weak positive correlation.

## 3 Point Makes Per Game vs. Games Won

● 3 Point Makes Per Game    — Trendline for 3 Point Makes Per Game  $R^2 = 0.095$

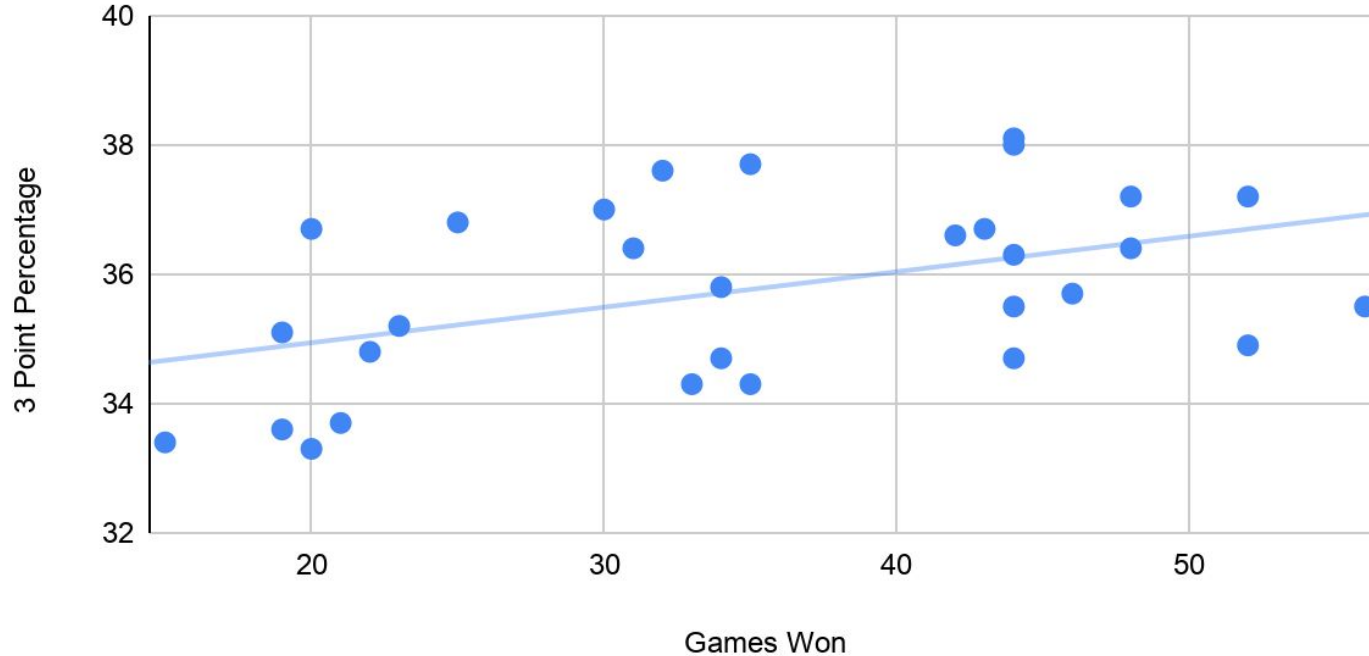


- Correlation Coefficient of  $r=0.308$ .

- Slightly stronger evidence

## 3 Point Percentage vs. Games Won

● 3 Point Percentage    — Trendline for 3 Point Percentage  $R^2 = 0.21$



- Correlation Coefficient of  $r=0.458$ .

- Strongest evidence.

# Conclusion:

Hypothesis was disproved and overall question of correlation between 3-pointers and win percentage inconclusive.



# Other Variables:

- What individual players does each team have?
- What are the stats of those individual players?
- What are each players shot % and 3-point %?
- How many 'good' shooters are on a team?
- Varying coaching styles and gameplay strategies.
- Factor clutch situations differently when riskier shots must be taken.





THANK YOU!