

From College to NBA:

Does Conference Prestige Predict Player Success?

project super seniors

Introduction & Motivation

- Every year, college basketball players from both power and non-power conferences enter the NBA Draft.
- Players from **power conferences** often receive greater national exposure and recognition.
- However, talented players also emerge from **non-power conferences**, raising questions about the importance of **college prestige**.
- **Our motivation**: Investigate whether playing for a power conference school translates to greater NBA success, even when players are drafted at similar positions.



Introducing the Data

Source:

- **Kaggle** dataset originally collected from Basketball-Reference in 2022.
- **Observations**: 1,922 NBA players drafted between 1989 and 2021.
- **Variables:** 24 variables describing players' college backgrounds, draft information, and NBA career statistics.

Key Variables:

- **College background:** College attended
- **Draft information**: Draft year and overall pick
- **Career statistics**: Years active, points, assists, total rebounds, win shares, and value over replacement player (VORP)

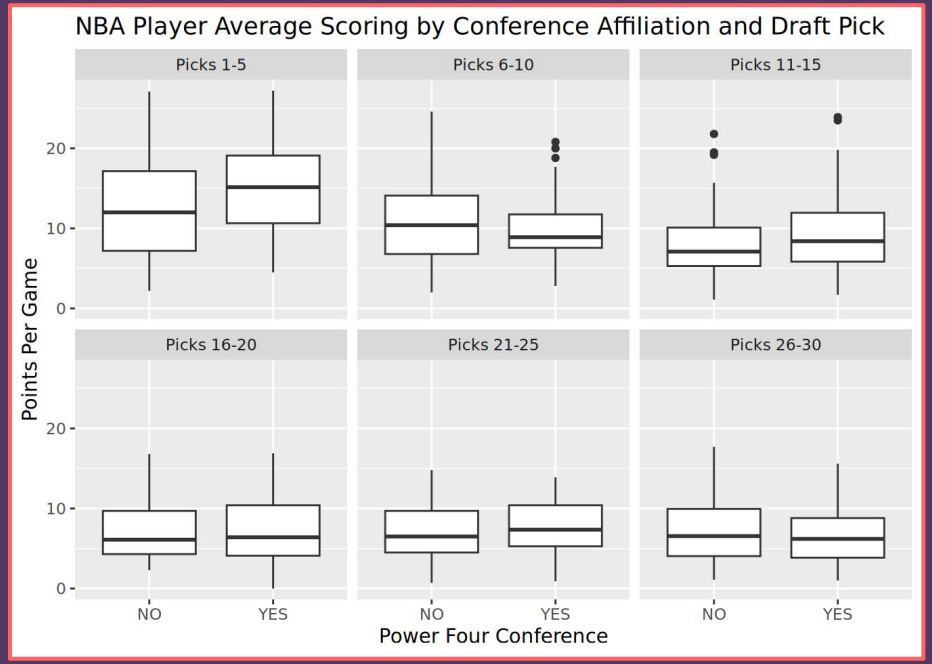
Scope of our analysis: Players drafted since 2000, comparing power and non-power conferences within similar draft pick ranges (1–5, 6–10, 11–15, etc.).



Scoring - Points per Game

Key findings:

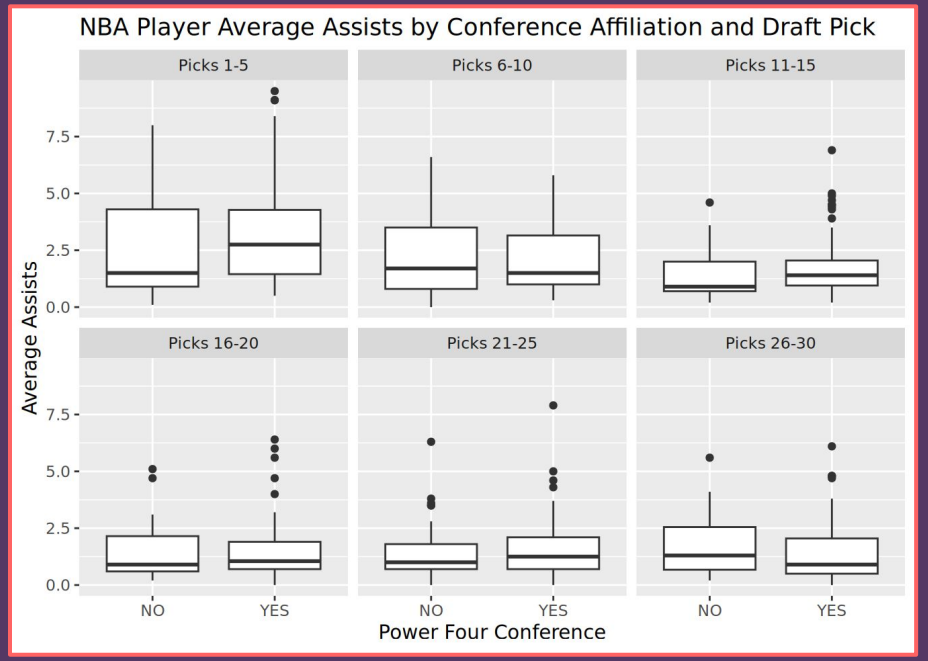
- For picks 1–5, Power Four players have a higher median scoring average (15 vs. 12 PPG).
- For picks 6–30, median scoring averages are relatively similar between conference groups.
- **Takeaway**: Power Four affiliation is associated with higher scoring among top-five picks, but this pattern does not consistently hold for later picks.



Playmaking - Assists per Game

Key findings:

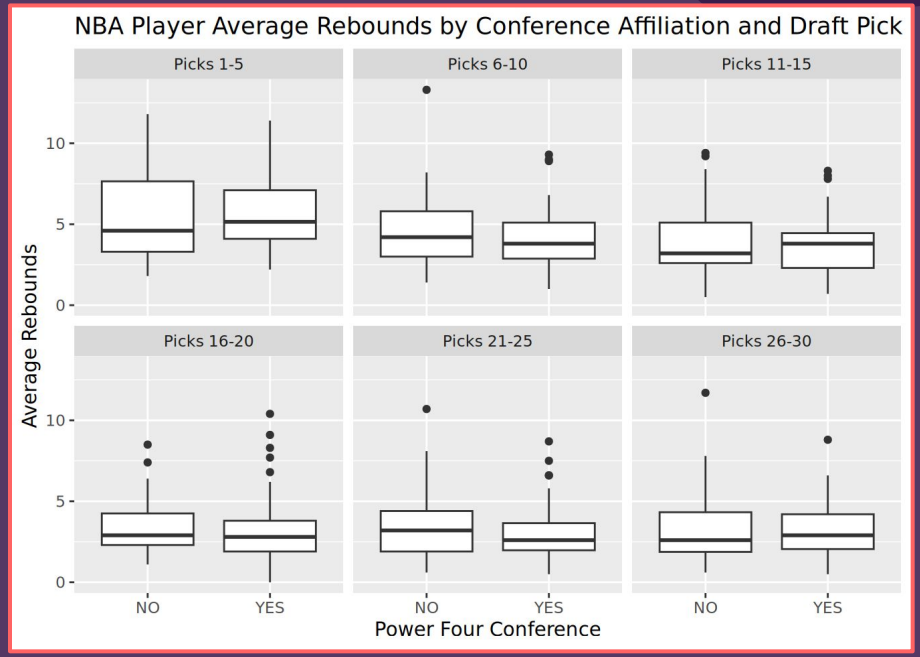
- Players from both conference groups generally have similar median assists per game (roughly 1–3 APG).
- Distributions appear right-skewed, with several high-performing outliers.
- Picks 16–20 and 21–25 each contain several high-assist outliers.
- **Takeaway**: Conference affiliation does not appear to be a strong predictor of assists per game within draft ranges.



Rebounding - Rebounds per Game

Key findings:

- For picks 1–5, Power Four players have a slightly higher median rebounding average (~5.1 vs. 4.6 RPG).
- For picks 6–10, non-Power Four players have a slightly higher median (~4.2 vs. 3.8 RPG).
- Among later picks (11–30), median rebounding averages are generally similar between the two groups.
- **Takeaway**: Neither group consistently dominates in rebounding across draft positions.



Conclusion, Discussion, Limitations

- **Key Findings**
  - Power Four and non-Power Four players generally had **similar** NBA performance **within comparable draft pick ranges.**
  - The **largest difference** was among picks 1–5, where Power Four players had a higher median scoring average (15 vs. 12 PPG).
  - Our original hypothesis was **not consistently supported** by the data.

- **Limitations & Critique**
  - **Missing values (NA)** may affect comparisons and conference classifications.
  - Players drafted more recently have **shorter recorded careers**, limiting our ability to measure long-term success.
  - **Points, assists, and rebounds** alone may not fully capture a player's NBA success.

- **Future Research**
  - Examine how player performance changes throughout NBA careers.
  - Incorporate additional metrics, such as win shares and value over replacement player (VORP), to better measure overall success.

Bottom line: College conference prestige alone does not appear to consistently predict NBA success when comparing players drafted at similar positions.