



# The Player with the most leading scoring titles over the past 20 seasons of the NBA

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## ABSTRACT

This project analyzes elite NBA Player scoring seasons from 2004–2024 to explore whether player performance statistics—such as points per game (PPG), minutes played (MIN), etc.—are associated with the total points scored during the season. The goal is to understand what characteristics, if any, differentiate high-scoring seasons that resulted in scoring titles from those that did not.

## INTRODUCTION

Building on the summary provided in the abstract, this project explores how individual performance metrics among elite NBA scorers relate to achieving scoring titles in the season. While scoring leaders often receive significant media attention and are celebrated for their offensive output, it is not always clear whether other factors such as minutes per game and etc effects how much they are able to score per game.. This creates an important analytical question

Do players with the highest scoring seasons tend to win scoring titles, or are other variables—such as efficiency, minutes played, or team context—more strongly associated with winning titles?



PPG: Points Per Game, This is one of the central dependent variables when evaluating offensive productivity. Minutes Played (MIN): This variable reflects workload and usage, and may influence both scoring production and fatigue-related efficiency.

## SAMPLES AND METHODS

The sample for this project consists of 20 NBA scoring-leader seasons from 2004–2024, with each observation representing one player who led the league in points per game. Because the data were obtained from existing public records, the methods used are considered **archival**, relying on reputable data sources such as the NBA's official statistics and [www.nba.com](http://www.nba.com). A **purposive sampling** approach was used, as only players who met the criterion of leading the league in scoring were included. This sampling strategy was intentional and aligned with the research goal of examining whether elite individual scoring performance is associated with team championship success.

## DESCRIPTIVE ANALYSES

The dataset includes 20 NBA scoring-leader seasons from 2004–2024. Points per game (PPG) averaged about 31, with scores ranging from 27.7 to 36.1 and no major outliers, reflecting consistently high offensive performance. Minutes played (MIN) were also stable, averaging 37 minutes per game, indicating that scoring leaders typically carry a heavy workload. Field goal percentage (FG%) showed more variation (42%–55%), suggesting differences in efficiency across players and seasons. Team frequencies were uneven, with the Thunder representing the largest share of scoring-leader seasons (30%), while several teams appeared only once. Titles won during scoring-leader years were relatively rare, demonstrating that high scoring alone does not guarantee championship success. Overall, the dataset reflects a selective group of high-performing players with strong scoring output and moderate variability in efficiency.

## FINDING 2

Independent Samples T-Test

	t	df	p	Mean Difference	SE Difference	95% CI for Mean Difference		Cohen's d	SE Cohen's d
						Lower	Upper		
PPG	3.217	3	.049	4.050	1.259	8.056	0.044	2.937	1.507

Note. Student's t-test.

An independent samples *t*-test was conducted to compare points per game (PPG) between scoring leaders who **won a title** in their scoring year and those who **did not**. Results showed a statistically significant difference,  $t(3) = -3.22, p = .049$ . Scoring leaders who **won a championship** averaged **32.95 PPG**, while those who **did not win** averaged **28.90 PPG**, a mean difference of **4.05 points**. The 95% confidence interval for the mean difference ranged from  $-8.06$  to  $-0.04$ , suggesting that championship-winning scoring leaders tended to score more points per game than non-champions. The effect size was large,  $d = -2.94$ , indicating a meaningful difference between groups. Although based on a small sample, this finding suggests that higher scoring output may be associated with a greater likelihood of team success in a scoring-leader season.

## FINDING 2

To explore whether seasons in which a scoring leader recorded a steal were associated with differences in performance, descriptive statistics were examined for the variable "Record a Steal." Players who **did not** record a steal had an average value of **7.00**, with relatively low variability ( $SD = 2.65$ ). In contrast, players who **did** record a steal had a higher mean value of **9.50**, but their scores showed substantial variability ( $SD = 9.19$ ), indicating inconsistent performance across this group. Although inferential testing was limited by the very small sample size, the descriptive pattern suggests that scoring leaders who recorded a steal tended to have higher average values on this variable, though the large standard deviation indicates that this difference may not be stable or reliable across seasons. These descriptive findings provide useful context for understanding performance differences within the dataset and highlight potential variability in defensive contributions among scoring leaders.

Descriptives - Season

Record a Steal	N	Mean	SD	SE	Coefficient of variation
No	3	7.000	2.646	1.528	0.378
Yes	2	9.500	9.192	6.500	0.968

## CONCLUSIONS

This study found that NBA scoring leaders who won a scoring title averaged higher points per game than those who did not that season, suggesting that exceptional scoring can contribute to a player's success but is not the sole determining factor. The player with the most scoring titles is James Harden. While scoring and playing time were consistently high across all seasons, efficiency, such as field goal percentage, three-point made, etc., varied and appeared to play important roles in whether a player captured a title. These findings highlight that evaluating players requires considering both individual performance and broader team dynamics. Overall, this project deepened my understanding of how archival data can reveal patterns in sports performance and provided insight into the complex relationship between scoring and winning scoring titles.

## REFERENCES

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