

## SUMMARY: EFFECTS OF EARLY CAREER NBA PLAYING TIME

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Can NBA teams directly impact the future production of their draft picks?

This question has gained relevance as NBA teams have given more value to young players are team friendly rookie-scale contracts. However, while sports analytics researchers have given substantial attention to evaluating players and projecting performance, few have focused directly on whether team decisions can affect players.

To make an initial step towards answering this question, I conducted an analysis of players drafted between 2000 and 2013 who entered the NBA out of college. Using modern statistical techniques, I evaluated whether giving these players more minutes across their first two years in the league would improve two metrics: their overall fourth-year performance and their change in performance from their first two years to their fourth year, what I call their *fourth-year jump*.

I found that increasing the number of minutes a player received in their first two years had a significant and substantial effect on their fourth-year performance. A gain of about 1,312 minutes over their first two seasons (about 8 mpg) leads to a change in overall fourth-year performance comparable to going from Jimmer Fredette's fourth season to Aaron Gordon's fourth season.

Similarly, increasing the number of early-career minutes a player received had a significant and substantial effect on their change in performance from their first two seasons to their fourth. Giving a player that same 1,312-minute increase over their first two years leads to an increase in their fourth-year jump comparable to going from Corey Brewer's jump to Kyle Korver's jump.

These results suggest that NBA teams not focused on winning a league title in the short term should prioritize playing time for young players on two grounds. First, doing so will help these players to improve and reach a playable level faster. Second, players' responses to additional playing time will provide information about which players should be extended a qualifying offer. Additionally, these results suggest that NBA teams, especially those drafting out of the lottery, should give additional weight to players' abilities to learn from sensory information, as midlevel prospects high in this ability are most likely to benefit from additional playing time.

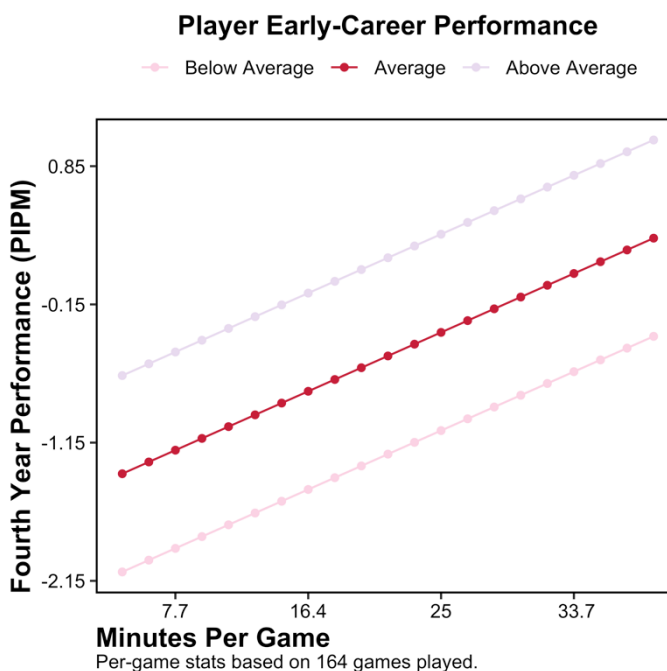


Figure 1: Predicted fourth-year performance based on minutes played per game, broken out by player early-career average performance level.