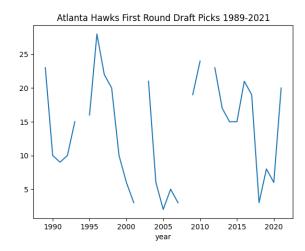
## **NBA Draft Position Analysis 1989-2021**

The NBA franchises that have drafted the most players who went to Duke and were drafted in or before 2000 are the Dallas Mavericks, Minnesota Timberwolves, and Phoenix Suns (2 players each). The NBA franchise that drafted the most players who have first names beginning with "D" and were drafted in an even year draft is the Oklahoma City Thunder, including their earlier counterpart, the Seattle SuperSonics (8 players).

The following table shows the correlation and mean year-to-year difference between a team's pick slot one year vs. the following year:

	correlation	mean year-to-year difference
ATL	0.39068805	-0.1071429
BOS	0.20707574	0.03571429
BRK	0.38096237	0.5555556
CHI	0.64208807	-0.0666667
СНО	0.20801685	0.22222222
CLE	0.24074682	-0.9565217
DAL	0.60543585	0.52631579
DEN	0.34291132	0.44
DET	0.14320258	-1
GSW	0.25969307	-0.25
HOU	-0.0867918	-0.5
IND	0.17495212	0.23076923
LAC	0.544239	0.92
LAL	0.2554109	-0.173913
MEM	0.56219726	0.52380952
MIA	0.13695956	0.84210526
MIL	0.42236305	-0.2222222
MIN	0.20915073	-0.3461538
NOP	0.39443813	-0.6153846
NYK	0.21658718	0.09090909
OKC	0.23051689	-0.3571429
ORL	0.42042597	-0.2142857
PHI	0.57465851	0.33333333
PHO	0.43094355	0.18518519
POR	0.49003288	-0.2307692
SAC	0.78915755	0.27586207
SAS	0.18782837	0.36
TOR	0.15041242	-0.1363636
UTA	0.59015184	0.32142857
WAS	0.15110012	0.27272727

A mean correlation of 0.34 and mean year-to-year difference of 0.03 across all teams suggest that a team's first round pick slot in a given year weakly influences its first round pick slot in the following year. Many factors may influence this, including trades, team performance, and the gradual, multi-year nature of a draftee's impact on the team. A sample graph for the Hawks is below:



As the sample graph shows, and as is corroborated by more extensive analysis, multi-year upswings or downswings in a team's draft position are relatively common. This reflects the tendency of teams to go through multi-year periods of relative strength and weakness compared to the rest of the league; such periods cause a team's first round draft pick number to increase or decrease steadily, corresponding to an increase or decrease in the position at which they finish in the league. While this is affected by the draft lottery and playoff performance, there is still a higher probability of getting an early first round pick for teams that finish closer to the bottom of the standings, and the opposite is true for high-performing teams.

While past performance may demonstrate that certain draft positions have historically produced better players than other, higher positions, past performance does not guarantee future success, and it would be foolish to rank higher pick numbers above lower pick numbers. For this reason, and because teams with earlier picks simply have a wider range of options, valuing pick 1 at a score of 60, pick 2 at 59, ..., pick 60 at 1 would suffice as a method for quantifying draft slot value.

Further areas of exploration include:

- 1. Testing pick value when picks are assigned vs. traded for: Intuitively, a team trades for a pick because they believe that pick, or a trade package including that pick, will be more valuable for the team than what they are giving up for it. Often, this is because a team believes a specific prospect is undervalued, and chooses to trade up to draft that player. It would be useful and interesting to see if players who teams trade up for turn out to be better than the expected value of their draft slot would suggest.
- 2. Segmenting players by position and role to better determine their impact: Different types of players impact the game in different ways, which makes it all the more important to identify the role a player plays and evaluate them accordingly. Pass-first point guards will appear on the stat sheet differently than old-school big men, which is why segmenting players to better compare like versus like would improve predictive accuracy for valuing draft positions.
- **3.** Analyzing how age and experience impact NBA success: Particularly in today's NBA, most early first-round picks are spent on young players, especially one-and-done college stars, teenagers from professional international leagues, and G League Ignite products. Comparing NBA performance with age, number of years in college/professional leagues, and path to the NBA would provide insight into which programs best prepare players for the NBA, and the degree to which experience plays a role in NBA success.