

1.28.21 Is Our Rookie Better Than Yours?

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1/27/2021

There is no clear contender among news sources for rookie of the year. Below are 3 newssources and who they listed as most likely to be Rookie of the Year as of 1/27/21.

- **Basketball Insiders:** Ball, Haliburton, Wiseman, Maxey, and Williams
- **CBS NBA Rookie Power Rankings:** Quickley, Jones, Tillman, Anthony, and Wiseman
- **DraftKings:** Ball, Wiseman, Williams, Anthony, and Toppin, Quickley, Hailburton, and Maxey

Rookies who appeared on 2 of the 3 above lists were compared to determine if Cole Anthony of the Orlando Magic had better stat lines than the other contenders.

Step 1: Web Scraping Basketball Reference

Cole Anthony 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

LeMelo Ball 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

Haliburton 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

Maxey 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

Quickley 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

Williams 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

Wiseman 2020-2021 Season

```
## {html_document}
## <html data-version="klecko-" data-root="/home/bbr/deploy/www" itemscope="" itemtype="https://schema.
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=UTF-8 ...
## [2] <body class="bbr">\n<div id="wrap">\n \n <div id="header" role="banner" ...
```

Step 2: Merge & Clean the Datasets

```
## [1] "TeamGame"      "PlayerGame"    "Date"           "Age"            "Team"
## [6] "Location"      "Opponent"       "GameStarted"    "MinsPlayed"     "FG"
## [11] "FGA"           "FG%"           "3P"             "3PA"            "3P%"
## [16] "FT"            "FTA"           "FT%"           "ORB"            "DRB"
## [21] "TRB"           "AST"           "STL"           "BLK"            "TOV"
## [26] "PF"            "PTS"           "GmSc"          "+/-"            "Player"
## [31] "Minutes"       "Seconds"       "WinLoss"
```

Step 3: Check Your Work with a Data Dictionary

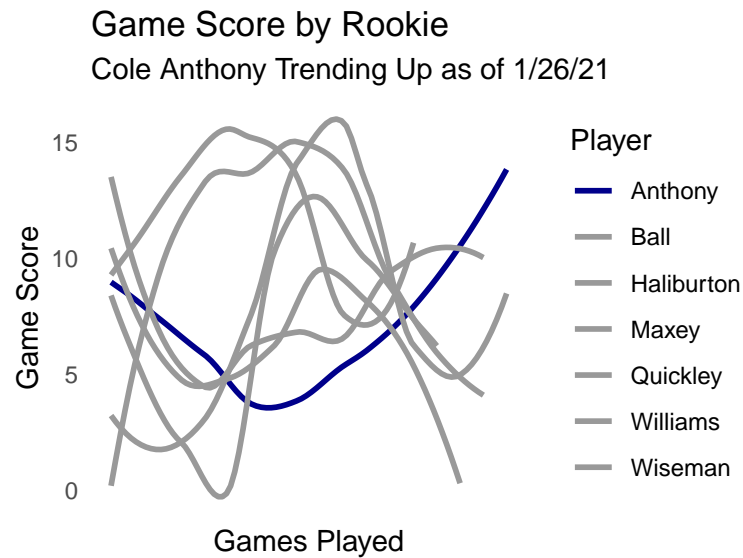
```
##   ColNumber VariableName  DataType
## 1         1    TeamGame   integer
## 2         2   PlayerGame   integer
## 3         3         Date    Date
## 4         4         Age character
## 5         5         Team   factor
## 6         6    Location   factor
```

Step 4: Explore Data with Charts in ggPlot

Game Score: Line Plot

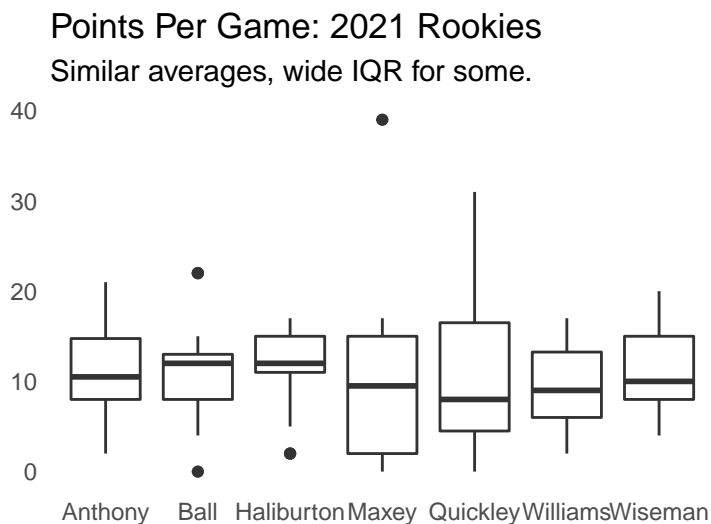
Game Score calculates a player's overall impact on a game. The higher the game score the larger the contribution to the team.

```
## 'geom_smooth()' using method = 'loess' and formula 'y ~ x'
```



Points Per Game, Boxplot

A box plot shows us whether a player is consistently scoring in a narrow range, or if their game shows wider variability. The best players would have both a higher average score, and a smaller interquartile range.

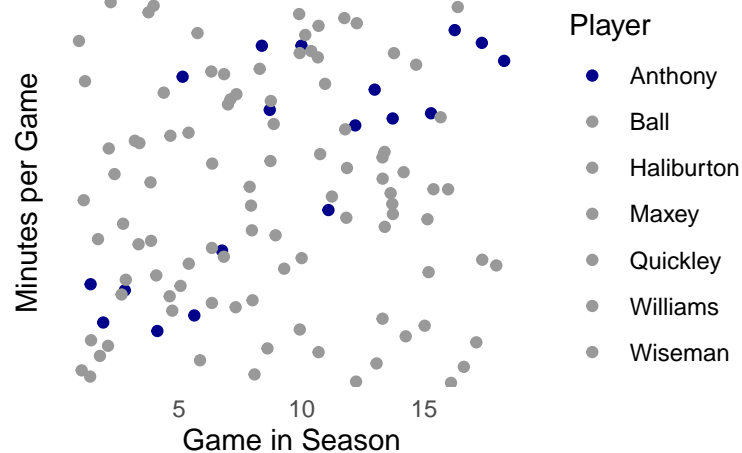


Mins Per Game, Scatter Plot

We are looking to see if a player has increased scoring potential with increased playing time.

Minutes Per Game: 2021 Rookies

Maxey minutes have been reduced the past 3 games.

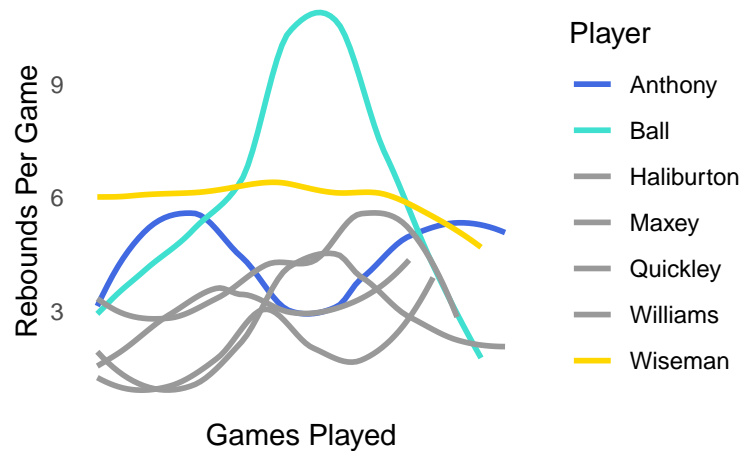


Rebounds Per Game, Line Plot

'geom_smooth()' using method = 'loess' and formula 'y ~ x'

2021 Rookie Rebounds

Ball inconsistent, while Wiseman shows steady produ

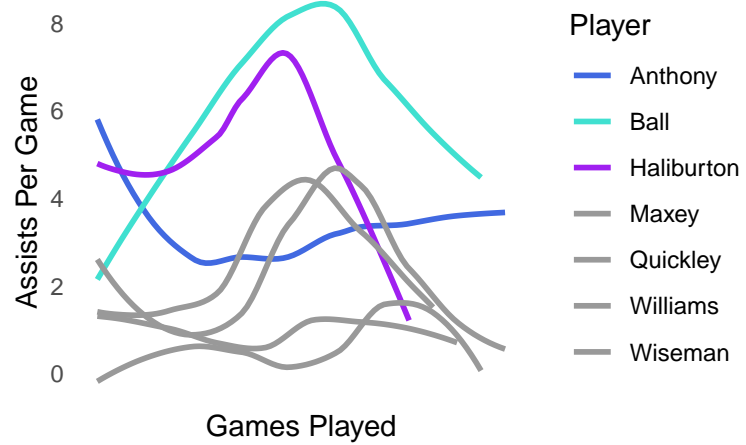


Assists Per Game, Line Plot

'geom_smooth()' using method = 'loess' and formula 'y ~ x'

Assists by Rookie

Ball shows Triple Double Potential



Blocks Per Game, Line Plot

'geom_smooth()' using method = 'loess' and formula 'y ~ x'

Rookie Blocks

Wiseman Shows Defensive Superiority

