



Group 15:

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Assignment #1

*Do Great NBA Players
Make Their
Teammates Better?*

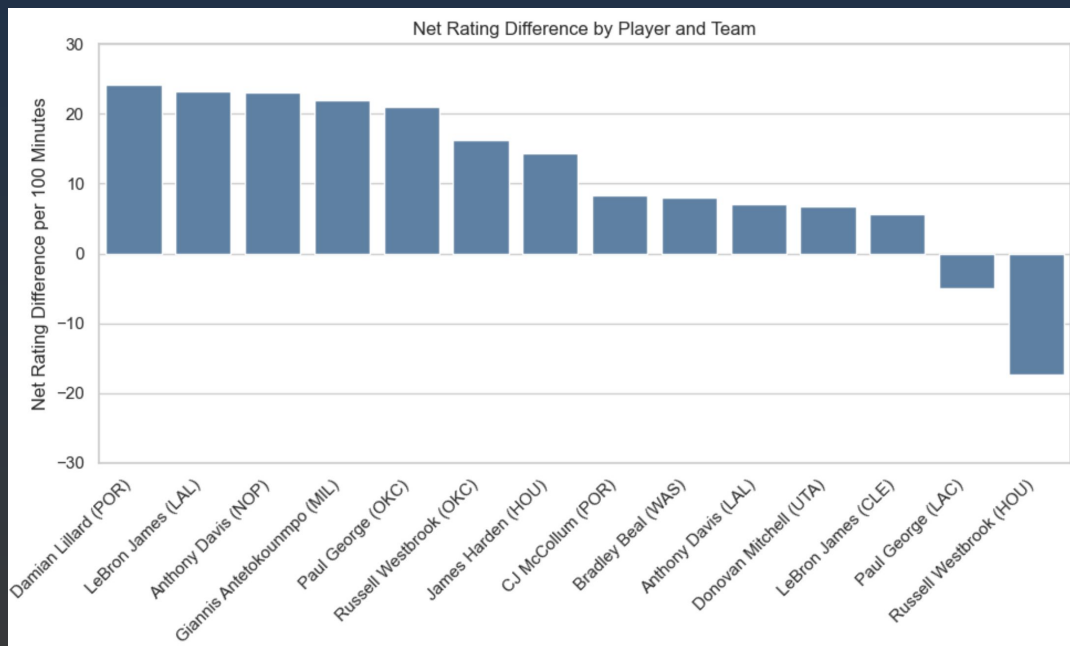
Who Are The Top Players?

	player	points
1	James Harden	8533
2	LeBron James	6782
3	Giannis Antetokounmpo	6668
4	Damian Lillard	6639
5	Anthony Davis	6033
6	Bradley Beal	5837
7	Donovan Mitchell	5729
8	Russell Westbrook	5689
9	Paul George	5480
10	CJ McCollum	5397

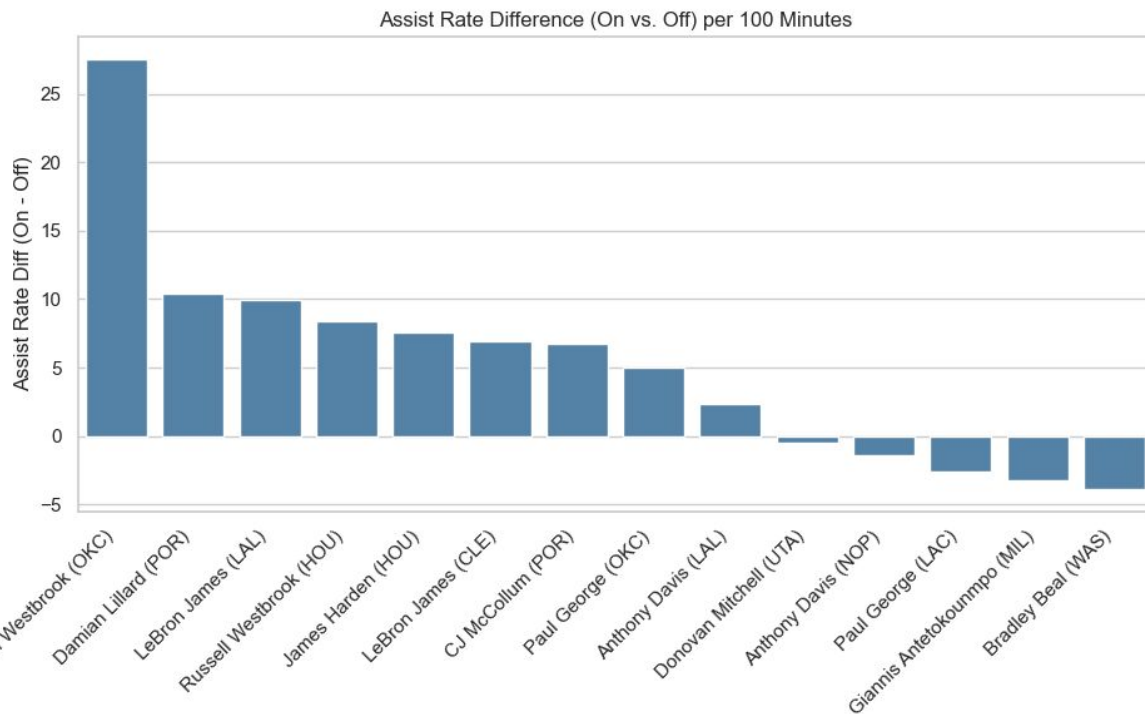
- Use data from 2017-2018, 2018-2019, and 2019-2020 seasons.
- The primary objective of basketball is to score points.
- Therefore, players that score the most points are the top NBA players.
- Top scorers face double team coverage and spend the most time on court.

- We redefine net rating as a team's point differential per 100 minutes of game time.
- Net rating difference is the net rating of the team with the star player on the court minus net rating of the team with the star player off the court.
- Damian Lillard, as the star player on the Trailblazers, attracts a lot of defenders.
 - Therefore, when Dame is not on the court his teammates struggle with the increased pressure.

On/Off Court Net Rating by Minutes



Assist Rate Difference



- Comparing assist rates when a star player is on and off the court can help tell us if they are indeed making their teammates better.
- Russell Westbrook's teammates on the Thunder experienced, on average, 27 more assists than without him per 100 minutes.
- Thus, Westbrook enabled his teammates to take more scoring opportunities, making them better players.

Appendix

GitHub Repo Link: <https://github.com/nhamby/45983-Assignment-1-Team-15>

The screenshot shows a GitHub repository page for '45983-Assignment-1-Team-15'. The repository is public and has 1 branch (main) and 0 tags. The main branch is selected. The repository has 5 commits, with the latest commit by 'nhamby' titled 'assists and shot rate completed' 2 hours ago. The file list includes 'figures', '.gitignore', 'Assignment 1 - Instructions.pdf', 'README.md', 'analysis.ipynb', and 'requirements.txt'. The README file is selected, showing the title 'Setting Up Environment' and a list of instructions: 'Ensure conda is installed', '\$ conda create -n env_name_here python=3.9', '\$ conda activate env_name_here', and '\$ pip install -r requirements.txt'. The right sidebar shows the repository's statistics: 0 stars, 1 watching, and 0 forks. It also includes sections for Releases, Packages, and Languages, with Jupyter Notebook at 100.0%.

45983-Assignment-1-Team-15 Public

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main 1 Branch 0 Tags

Go to file Add file Code

nhamby assists and shot rate completed 677d317 · 2 hours ago 5 Commits

figures	assists and shot rate completed	2 hours ago
.gitignore	initial	yesterday
Assignment 1 - Instructions.pdf	initial	yesterday
README.md	initial	yesterday
analysis.ipynb	assists and shot rate completed	2 hours ago
requirements.txt	initial	yesterday

README

Setting Up Environment

- Ensure conda is installed
- \$ conda create -n env_name_here python=3.9
- \$ conda activate env_name_here
- \$ pip install -r requirements.txt

About

45983 Assignment 1 Team 15

Readme Activity 0 stars 1 watching 0 forks

Releases

No releases published
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Packages

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Languages

Jupyter Notebook 100.0%