## 3 pt Evolutionary Trend

Team 12: Szeyeung Luk Brian Vera

## Background

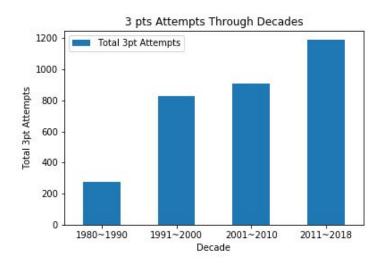
- Players used to attempt field goals closer to the rim to ensure higher accuracy
- It's been confirmed by sports analysts that players are taking more 3 pointers nowadays

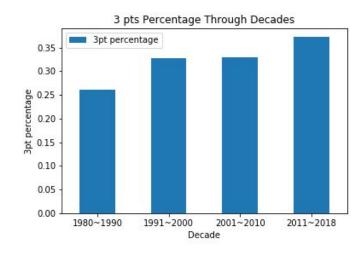
## Questions

- How have team attempts and percentages changed throughout the decades since the 3pt implementation?
- What's the relationship between the 3 ptr and championship caliber teams?
- How have player roles changed throughout the years due to the 3 ptr?

#### Three Points Change In Decades

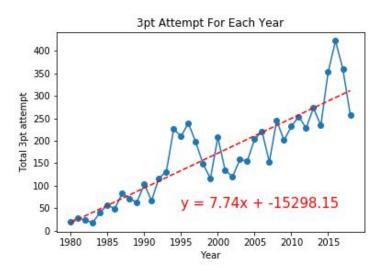
Both three points attempts and percentage increases through the four decades

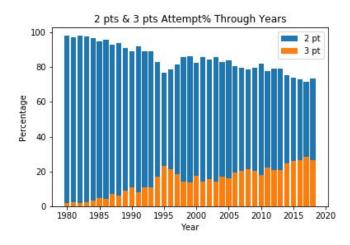




## Three Points Attempt Change

• Three points attempts increase each year





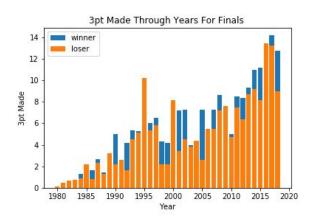
- Three points becomes more popular
- Only uses finals data, need to take a look at regular and playoff stats for more accuracy results

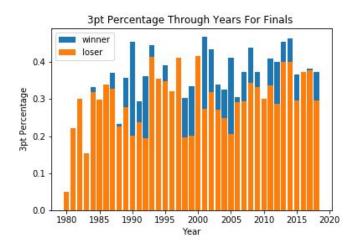
#### Motivation

- Use data of NBA finals from 1980 to 2018
- As three points becomes more popular, is there any relationship between championship and 3pt?

#### Relationship Between 3pt and Championship

• On average, the championship team have higher 3pt made and 3pt percentage than runner-up team





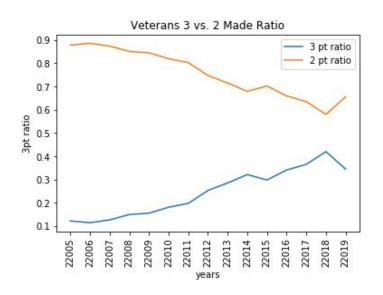
- Three points is one important factor that determines the championship
- Three point is not the sole factor that determines the championship

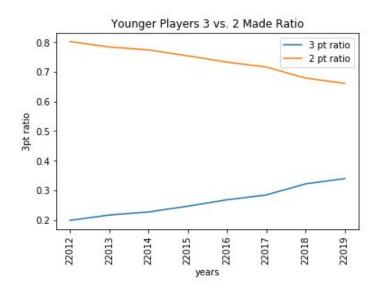
#### Motivation

How has this skill evolved a seasoned veterans game vs a young player?

## Players 3 and 2 pt. Ratio

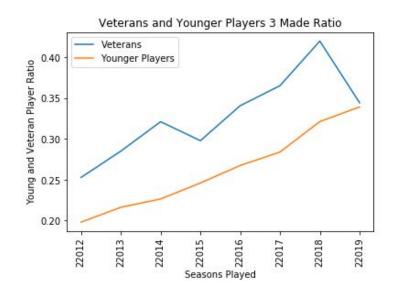
Veteran's 3pt ratio peak at .41 while Younger players peak at .33

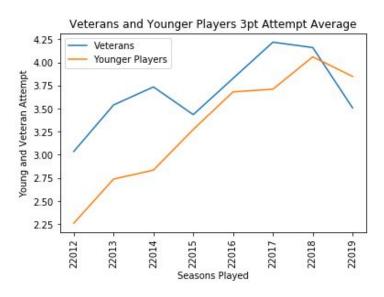




## Veteran vs. Younger Players

Veteran's are averaging more attempts and hitting shots at a high percentage

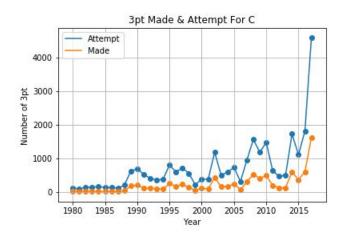


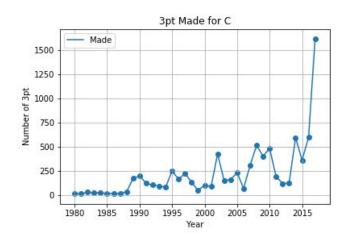


 Veterans are focusing attention on this specific skill set and could relate to the longevity of their careers.

## Player Role Change

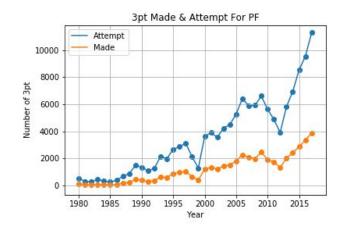
- Centers used to only stay around rim, but are often now being pulled out to the perimeter.
- Centers being an offense threat at the 3 gives coaches a more versatile playbook.

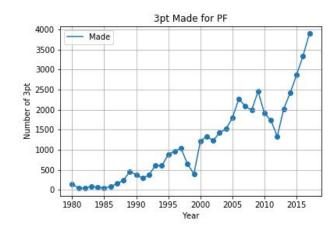




## Player Role Change

- Power Forwards used to only stay around rim, more and more Power Forwards shoot 3 pt nowadays
- More 3 pt gives teams more tactics options





- 3 pt has become an important role on offense, if not the most important play.
- Has become the most used skill across all players and roles.

#### Reference

- NBA data csv file from Kaggle
- NBA-API

# Thank you

## Questions?