

3 pt Evolutionary Trend

Team 12: Szeyeung Luk
Brian Vera

Background

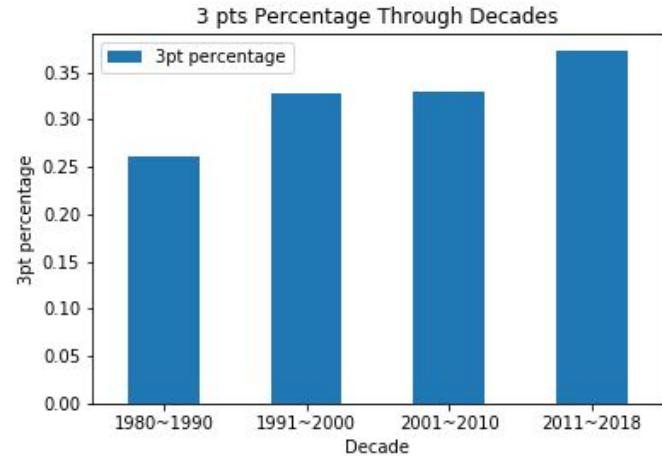
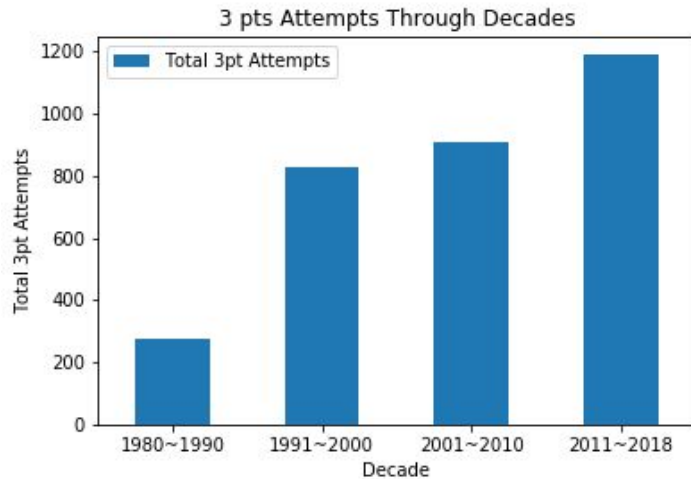
- Players used to attempt field goals closer to the rim to ensure higher accuracy
- It's been confirmed by sports analysts that players are taking more 3 pointers nowadays

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?

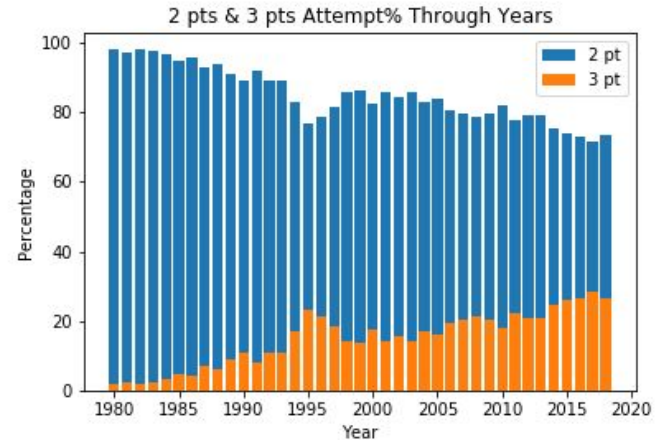
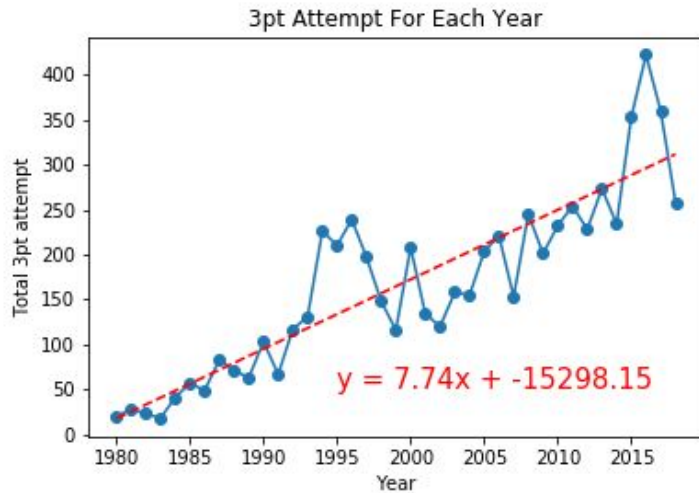
Three Points Change In Decades

- Both three points attempts and percentage increases through the four decades



Three Points Attempt Change

- Three points attempts increase each year



Conclusion

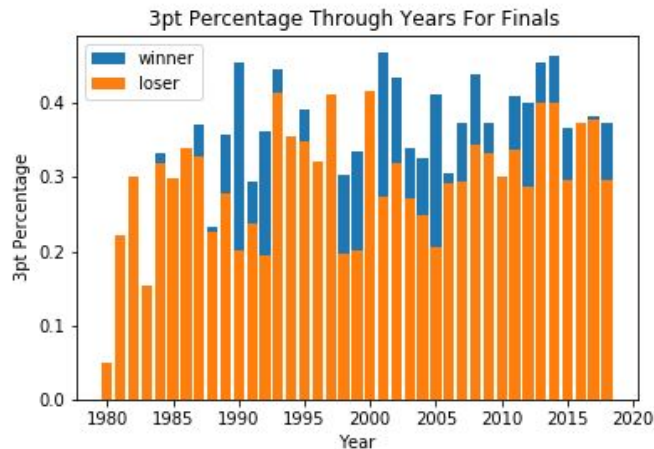
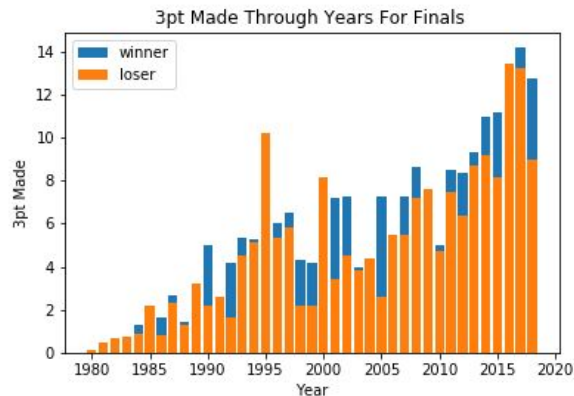
- Three points becomes more popular
- Only uses finals data, need to take a look at regular and playoff stats for more accuracy results

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



Conclusion

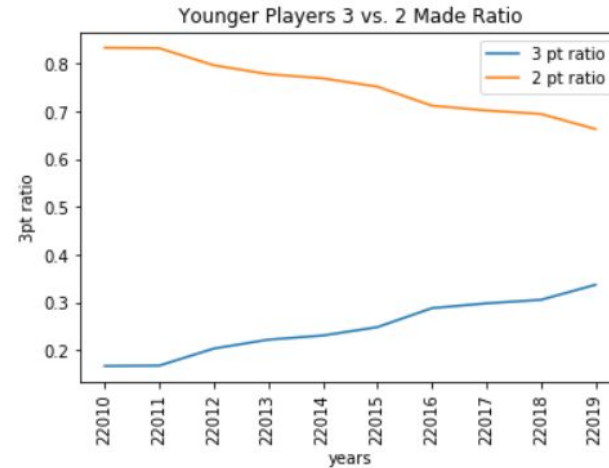
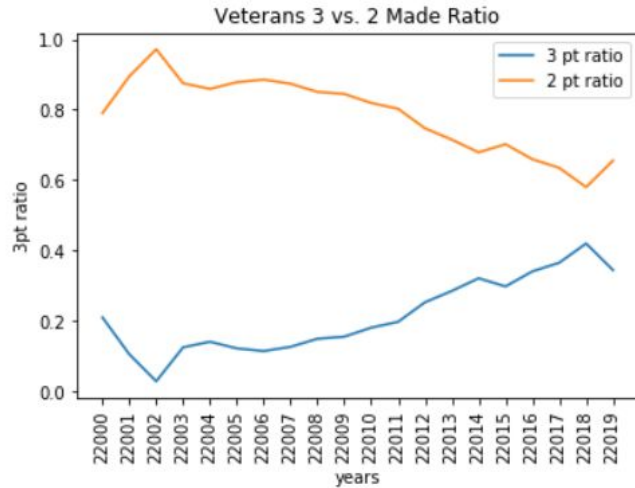
- Three points is one important factor that determines the championship
- Three point is not the sole factor that determines the championship

Motivation

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

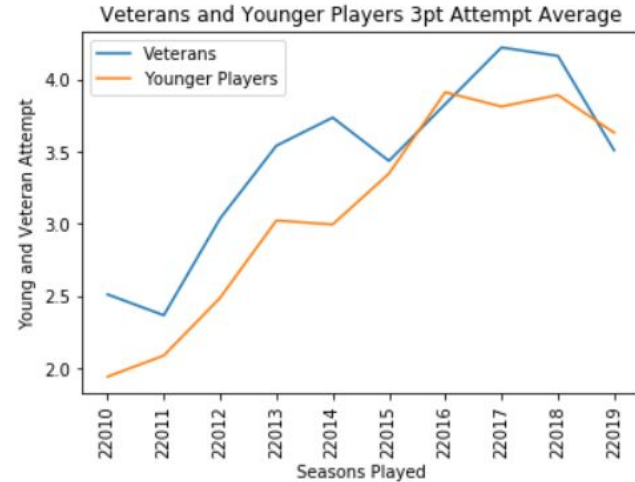
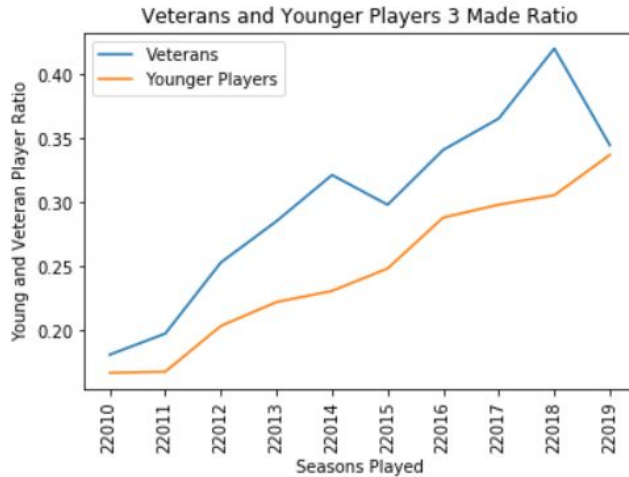
Players 3 and 2 pt. Ratio

- 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

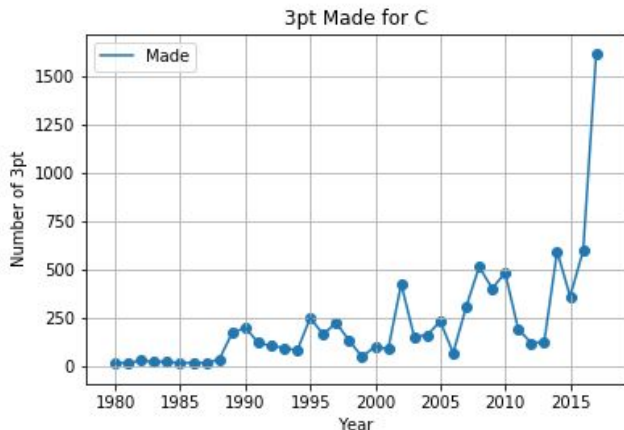
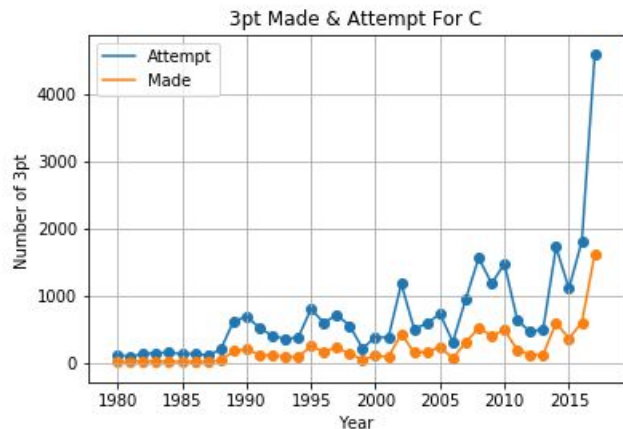


Conclusion

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

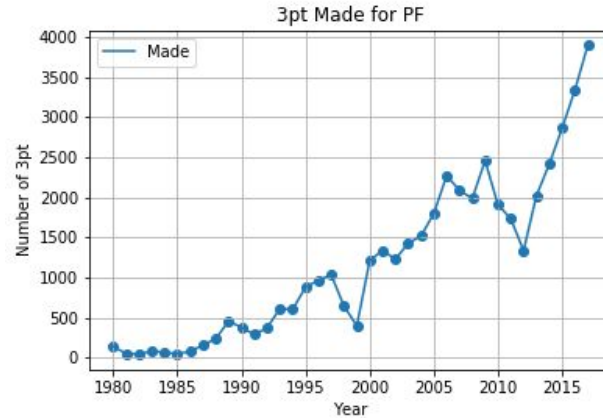
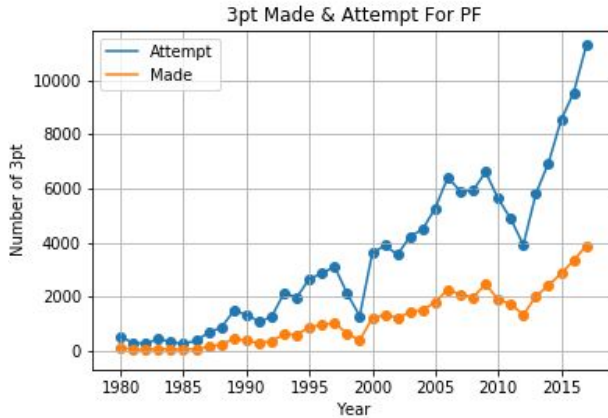
Player Role Change

- 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



Conclusion

- 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 ?