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Professor Anderson
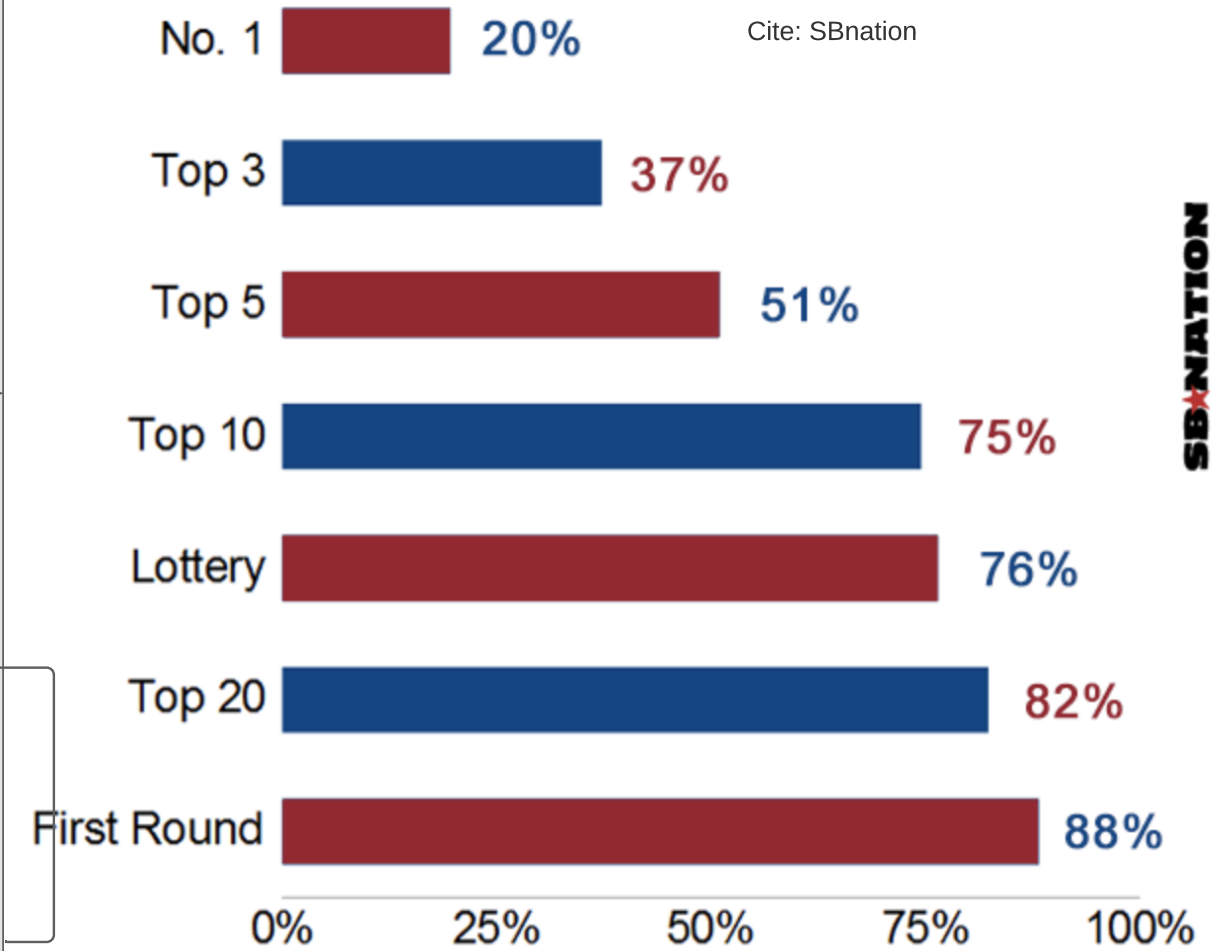Digital Humanities 100
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WHAT NBA SCOUTS SHOULD LOOK FOR IN THE NBA DRAFT

INTRODUCTION

Throughout the years, NBA teams who have had a top-10 pick in the NBA Draft have failed to be consistent in finding "successful" recruits. While the intent of this project does not disregard picks made after the top 10, it is important to point at just this category of individuals because they are considered to have the highest ceilings, or the "most potential." When looking at the graph to the right, we can notice that over the past 10 seasons, only 20% of players picked No.1 overall became All-NBA players. This analysis aims to find ways that increase the total percetanges of each category to the chart on the right by conducting in-depth analysis so that scouts will be provided with better ways to evalute talent.

WHERE ARE ALL-NBA PLAYERS PICKED?
Draft selections of 51 players chosen for All-NBA teams over past 10 seasons.
Cite: SBnation

No. 1	20%
Top 3	37%
Top 5	51%
Top 10	75%
Lottery	76%
Top 20	82%
First Round	88%

SBNATION

TOOLS:

Python with numpy/pandas package:
Used for data manipulation in order to better calculate results, perform linear regressions, make scatterplots, histograms, and much more.

Jupyter Notebook: Used to open datasets and visualize python functions easier.

Terminal: Used to obtain data from basketball-reference.com and turn the data in a csv.

METHODS:

Corrleation: This statistical method will be used to observe the relationship between important factors that allow NBA players to suceed.

Standard Units: Used in order to ensure all units with different metrics are stabalized. By doing so, calculation will be much easier.

REFERENCES:

"Basketball Statistics and History."*Basketball*, www.basketball-reference.com/

Chou, Andrew. "NBA Draft Combine Measurements - Dataset by Achou."*Data.world*, 2 May2018,data.world/achou/nba-draft-combine-measurements/workspace/file?filename=nba_raft_combine_all_years.csv.

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Ziller, Tom. "Here's Where NBA Stars Are Most Likely to Be Drafted."*SBNation.com*,SBNation.com, 25 June 2014, www.sbnation.com/nba/2014/6/25/5831860/nba-draft-picks-2014-superstars-chart.

WORKFLOW

1. Collect Datasets (primarily .csv and .tsv files) with accurate data.

2. Save into Google Drive.

3. Export files into Jupyter Notebook.

4. Utilize Python's numpy package in order to maniupulate data.

5. Find answers to support my claim.

DATA SETS AND DESCRIPTION:

1) NBA_Draft_1980_2017.tsv:
This dataset consists of every NBA player drafted from 1980-2017, along with much relevant information such as their pick number, the college they played for, etc.

2) nba_draft_combine_all_years.csv:
This second dataset is a .csv file that contains information about any specific player during their draft combine (Years 2009 and above). For instance, some of the information includes: Height, Wingspan, Vertical, etc.

3) 2009ppg.csv:
Provides career points per game for every player drafted in 2009.

4) 2012ppg.csv:
Provides career points per game for every player drafted in 2012.

5) 2015ppg.csv:
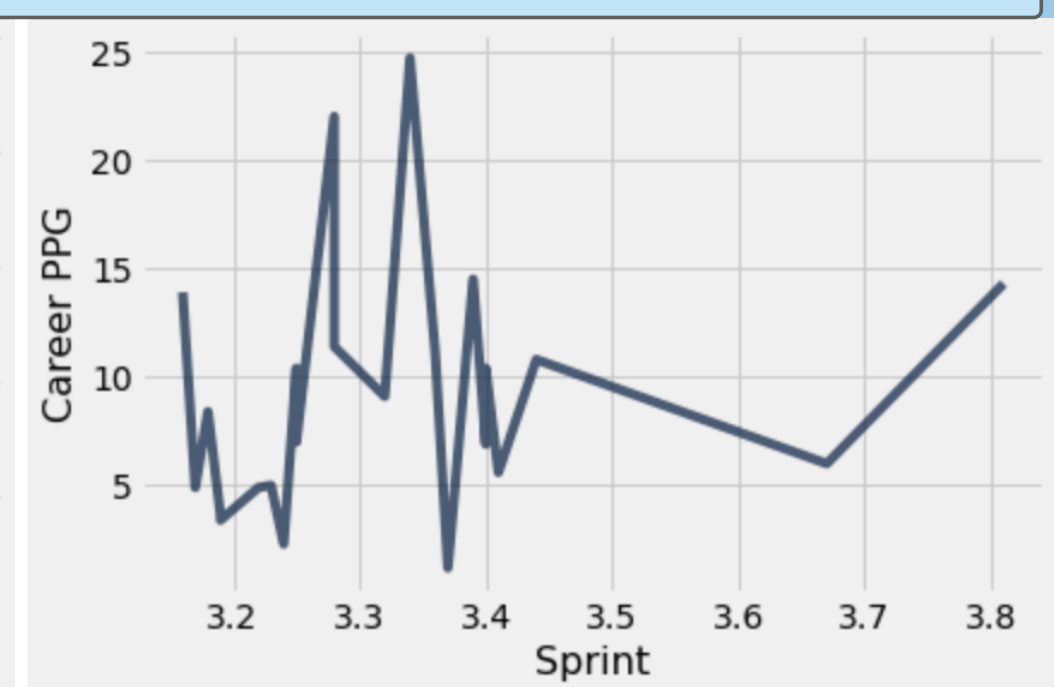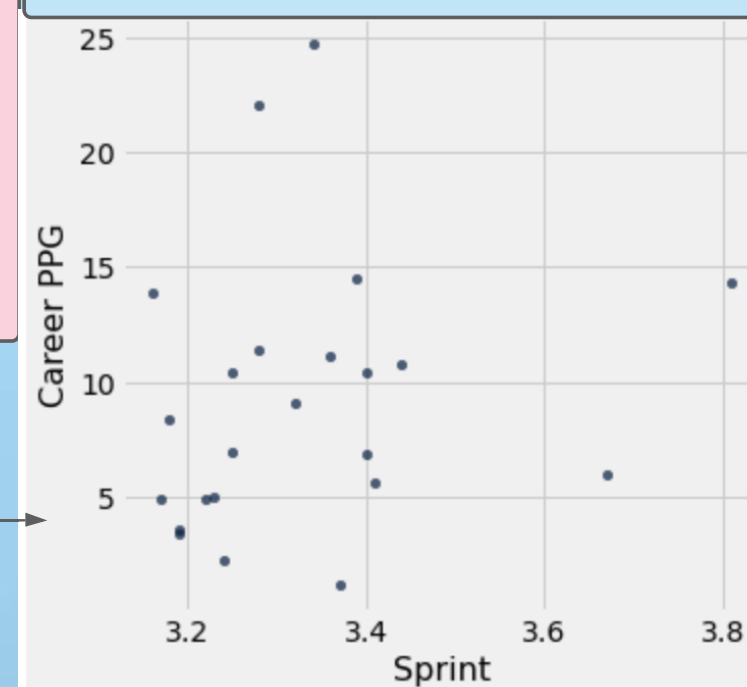Provides career points per game for every player drafted in 2015.

LIMITATIONS:

1) Expectations of players are relative to individual thinking, and for the sake of simplicity, we have defined "bust" as a player who was not an "All-NBA player." However, this definition could change if asked to someone else.

2) The NBA Draft Combine has started to measure new stats on players that they previously did not. This means that some stats measured in 2021 did not exist in the early-2000's and before. Because of this, the analyisis is only limlited to the previous 10 years in order to keep the data consistent.

3) The NBA Draft CombinIe dataset does not include some players, which potentially skew the data.

The graphs below provide evidence about the 2012 NBA Draft Class; CorrleatioIns are provided between sprint times and Career PPG for each player. Additionally, the visulatizations show that with lower sprint times, players tend to have higher Career Point Averages.

Visulaizations