The Splash Analysis: A deep dive into Three-point shooting in the NBA
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Introduction: Written overview that introduces a non-expert to your topic. Should be roughly 1/2 page.

Throughout the course of the 2000s, the 3-point shot in basketball has become one of the trendiest shots in the NBA. A 3 point shot is one that is made from beyond the three point line, a designated arc with a radius of approximately 7 meters (in the NBA). It is usually referred to as a splash because of the sound that the ball makes when entering the net from such a distance. As the name suggests, this shot contributes 3 points to the team total compared to the traditional shot that is made closer to the basket, which only contributes 2 points. Wouldn't it logically make sense for teams to center their strategies around the higher value shot? Seeing as this shot contributes more points to a team's score, why has 3 point shooting only picked up steam in recent years? In this project, we will be diving into an analysis of the 3 point shot throughout the course of the NBA's history. We will try to look into what factors influenced the sudden adoption of the 3 point shot into team strategies. Also, we will try to predict and/or classify a player's ability to shoot threes using their current NBA statistics.

Specifics: Discuss the question you are thinking of asking. Describe the variables involved. Are they quantitative or categorical? What are typical values? How were the data collected? What is the relationship between these variables that you are seeking to explore? Should be roughly 1/2 page.

In this project, we will explore 2 main questions. Can numbers explain the sudden increase in total three point shooting in the NBA? And will we be able to predict a player's ability to shoot three pointers using their existing statistics? What stats do the top three point shooters in the league share?

For our first question, the quantitative variables we will look into are the total 3 point attempts made by a team, the average number of points made by 3-point shots, the difference between the 3-point shooting of winning teams vs. that of losing teams, the 3-point shooting numbers of the top (20) players of that season and the 3-point shooting numbers of the teams that managed to make the playoffs. The overall trend that we predict is that teams with winning records and players who rank higher in that season will dictate the number of threes being shot.

For our second question, we will take a look at quantitative variables like the player's height and weight, their 2-point shooting numbers, the number of shots they have attempted, their average points per game, the number of fouls that they receive, their passing numbers, the number of turnovers they have had in the season and the time they spend on the court. We will also look

into categorical variables like which conference they play in, the team they play for, their ranking in the league and the position that they play in. Our prediction is that players who are shorter and lighter will have higher three point shooting statistics. Their lower height and weight would indicate an inability to rush inside the three point arc and score against taller players who guard the basket. This would mean their ratio of three's to two's should be higher compared to other players. Also, since they shoot from far away, this would also mean that the number of times they lose the ball (turnovers) should be higher. Finally, people who shoot threes are predicted to be less likely to receive fouls since their plays depend on isolation from defenders.

All the data that we plan to analyze can be freely found on the internet in basketball websites that record each and every movement of a player in a match. This data is collected by the officials who regulate the match.