

Data Dictionary

| Variable Name | Type | Description |
|------------------|-----------|---|
| CLOSEST_DEFENDER | Character | The name of the closest defender. |
| LOCATION | Category | Where did the game play. "A" stands for "Away", "H" stands for "Home". |
| SHOT_NUMBER | Numeric | The number of shots the certain player took in this game. Example: 3. (This is the third shot of this player in this game.) |
| PERIOD | Category | Which period was the shot happened in (there are four periods typically, but overtime could happen if the no team win in the end of fourth period). Example: 3. (This shot happened in the third period of the game.) |
| GAME_CLOCK | Character | This variable tells us when did the shot happened in this game. But it is a count down. Example: 1:09. (This shot happened when "1:09" was shown on the count down game time board.) |
| SHOT_CLOCK | Numeric | When did the shot happen in the offensive time limit. There is a 24-second count down with every offense. Each team needs to score a point offense within 24 seconds. Metrics: second Example: 10.8. (This shot was made at 10.8 on the 24- |

| | | |
|----------------|-----------|--|
| | | second count down, which means the shot was made after 13.2 seconds past in this offense round. (24-10.8) before this shot was made). |
| DRIBBLES | Numeric | How many dribbles did the player make before this shot. Example: 3. (This player made 3 dribbles before this shot.) |
| TOUCH_TIME | Numeric | How long has the player held the ball before the shot. Metrics: second Example: 1.9. (This player has held the ball for 1.9 seconds before he made the shot). |
| SHOT_DIST | Numeric | How far did this shot was made from the basket. Metric: feet Example: 7.7. (This shot was made 7.7 feet away from the basket) |
| PTS_TYPE | Category | "2" stands for "2 points", "3" stands for "3 points" |
| SHOT_RESULT | Category | "made" means the shot is successful, "missed" means the shot is missed. |
| CLOSE_DEF_DIST | Numeric | How far was the closest defender away from the player on offense. Metrics: feet Example: 1.3. (The closest defender was 1.3 feet away from the player). |
| Player_name | Character | The name of the player who made this shot. |
| Age | Numeric | The age of this defender |
| Experience | Numeric | Number of years the defender has been in the NBA. |
| Height | Numeric | Height of the defender Metrics: cm |
| Pos | Category | position, the player is in the |

| | | |
|--------|---------|--|
| | | one of five basketball positions: point guard (PG), the shooting guard (SG), the small forward (SF), the power forward (PF), and the center (C) |
| Weight | Numeric | the weight of this defender. Metrics: kg. |
| BMI | Numeric | Body Mass Index (body mass divided by the square of the body height) Metrics: kg/m ² |

Research Questions

What are the factors contributing to the NBA shot results?

How these factors influence the shot results?

How does offenders affects shot results?

How does the defenders affects shot results?