Title: Are there Predictors of a Running Back's Success?
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People who analyze football have concentrated in the past on a running back's 40-yard dash, shuffle, broad jump, vertical jump, and bench press measures. My research will test if the following variables can predict a running back's success in the NFL: height, weight, conference, offensive line ranking for their team, the running back's total yards for the season, their average yards for each attempt, the number of times the running back has entered the endzone for a touchdown that season, the running back's time average time behind the line of scrimmage (TLOS), the percentage of times the running back faces eight plus defenders in the box when attempting to run the ball (8+D%), and the number of times the running back attempted a rush. In addition, the running back's efficiency is calculated by taking the total distance a player traveled on rushing plays as a ball carrier, according to Next Gen Stats, per rushing yards gained. The lower the number, the more of a North/South runner. The data is recorded on 48 running backs with at least 48 rushing attempts in the 2019 NFL regular season. The questions considered include the following. Does the categorized offensive line rank predict that the running back will have more rushing yards for the season? Does the higher the 8+D% statistic predict that the running back will have fewer touchdowns? Does the 8+%D predict a running back's efficiency? Does the offensive line rank predict TLOS? Does offensive line rank predict that the running back will have more rushing yards? Does the running back's height predict a higher 8+D%? These questions will be analyzed with parametric statistics with post hoc comparisons as needed. Graphical displays of scatter plots and stratified boxplots will be used to convey the findings.