**Abstract:**

**Introduction**: The objective is to figure out who the best all round player was in the NBA season of 2018-19 by looking at some important predictors like points, blocks, steals, assist, and free throw percent per game. The dataset can also be used to find the best defender and best shooter of that season. It will also help to prove if or if not, Player Efficiency Rating is useful for the analysis and whether or not it yields appropriate results.

**Methods**: For multivariate analysis, methods like Factor analysis, MANOVA, Cluster analysis will be used, along with various regression analysis. For bivariate analysis methods like correlation, cross-tabulation, chi-square; 2-way contingency table and ANOVA will be used. New variables like player’s height, weight, and age will be taken into consideration and results will be based upon that. Will also be confirming the assertions made by the univariate analysis

**Results**: Depending on the response and independent variables, as explained in introduction, will be looking for all round best player along with some other variables that help in predicting those results

**Discussion**: Questions like whether the variance-covariance matrix values increase or decrease with the additional or substituted variables, whether or not the bivariate correlation matrix values change (significance level of p < .05 considered) with the additional variables, and were some variables eliminated or replaced with the additional variables, to name a few, will be answered.