**Regression Results and Analysis of the 2017 NBA Statistics**

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| --- | --- | --- | --- | --- | --- |
| SUMMARY OUTPUT |  |  |  |  |  |
|  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |
| Multiple R | 0.908187 |  |  |  |  |
| R Square | 0.824803 |  |  |  |  |
| Adjusted R Square | 0.823914 |  |  |  |  |
| Standard Error | 197.2791 |  |  |  |  |
| Observations | 595 |  |  |  |  |
|  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |
| Regression | 3 | 1.08E+08 | 36095434 | 927.4494 | 5.1126E-223 |
| Residual | 591 | 23001148 | 38919.03 |  |  |
| Total | 594 | 1.31E+08 |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* |
| Intercept | 8.44834 | 51.25751 | 0.164822 | 0.869141 |
| GS | 2.211228 | 0.535277 | 4.130996 | 4.13E-05 |
| Age | -2.7762 | 1.906364 | -1.45628 | 0.145847 |
| Minutes Played | 0.449854 | 0.017617 | 25.53535 | 1.73E-97 |
|  |  |  |  |  |

Overall Analysis

Based on the multiple R -value and R-squared value which are both relatively close to 1, it would seem that the variables chosen are a good predictor of the points scored. The respective coefficients can be used to create an equation to predict the dependent variable (in this case pts) given the value of the GS, Age and Minutes Played. To predict the pts value, one would simply multiply the respective values (Age, GS, Minutes Played) by their respective corresponding coefficient values listed in the table above, add them together then add the result to the intercept coefficient value.

Finally, the significance from the ANOVA table indicates that the overall regression is statistically significant based on the low value of the F significance value. When the p value of the respective independent variables are examined, they are all pretty low with the exception of age which suggests that GS and minutes played possibly better explain the variation in points scored rather than age. However, overall the regression is still a reasonably good predictor based on the multiple R, R-squared and adjusted R-squared values in the regression summary table.