**Statistics Report**

**Excel ANOVA Analysis**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SUMMARY |  |  |  |  |
| *Groups* | *Count* | *Sum* | *Average* | *Variance* |
| Asian | 6 | 29 | 4.833333333 | 12.56666667 |
| African American | 95 | 445 | 4.684210526 | 3.963045913 |
| American Indian | 5 | 24 | 4.8 | 4.7 |
| Hispanic | 43 | 196 | 4.558139535 | 2.871539313 |
| Pacific Islander | 1 | 5 | 5 | #DIV/0! |
| White | 70 | 371 | 5.3 | 3.111594203 |
| Mixed | 2 | 6 | 3 | 0 |
| Native American | 1 | 4 | 4 | #DIV/0! |

The average knowledge scores for the ethnic groups are shown above.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ANOVA |  |  |  |  |  |  |
| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
| Between Groups | 28.04242617 | 7 | 4.006060882 | 1.090996881 | 0.370019 | 2.052355 |
| Within Groups | 789.4643003 | 215 | 3.671926978 |  |  |  |
|  |  |  |  |  |  |  |
| Total | 817.5067265 | 222 |  |  |  |  |

A one-way between-subjects ANOVA was conducted to compare the effect of ethnicity on students’ knowledge test results. Based on the ANOVA analysis, there was no significant effect of ethnicity on knowledge test results at the p< .05 level for the eight conditions F (7, 215) =1.09, p=0.37.

Therefore, we can conclude that the average knowledge score is similar in the eight ethnic groups. Accordingly, it is concluded that ethnicity does not influence knowledge scores.