Table 2

*ANOVA of Dependent Variable by Independent Variable*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Mean | Standard Deviation | Sum of Squares | Mean of Squares | F-Value | P-value\* |
| 0-10 minutes spent on Sugar Writing Activity | 9.333333 | 1.211060 | 0.851 | 0.8508 | 0.2151 | 0.6456 |
| 11-20 minutes spent on Sugar Writing Activity  | 8.666667 | 1.556998 |  |  |  |  |
| 21-30 minutes spent on Sugar Writing Activity | 7.60 | 2.412928 |  |  |  |  |
| Longer than 30 minutes spent on Sugar Writing Activity | 9 | 2.160247 |  |  |  |  |

Note: This is an example created using Rstudio; p<.05\*, p<.01\*\*, p<.001\*\*\*

This is the information someone needs in order to complete an ANOVA test. An ANOVA test is an analysis of variance used to determine if there is a significant difference between three or more groups. The most important information from an ANOVA test are the means of each group, standard deviations of each group, sum of squares, mean of squares, the F-value, and the P-value. The F-value is extremely important especially when completing an ANOVA by hand because the calculated F-value must be compared to the critical F-value. However, when using RStudio the P-value is given. If the P-value is greater than .05 there is no significant difference between the means. In this table the P-value is 0.6456 which is greater than .05. This means there is no significant difference of involvement of the family in the sugar writing activity between 0-10 minutes, 11-20 minutes, 21-30 minutes, or longer than 30 minutes when completing the Sugar Writing Activity.