The data from the ANOVA test used in RStudio was constructed to determine a single overall decision as to weather a significant difference is present among three or more groups. The dependent variable in the test included the question, “*On a scale from 0-10, how much did this activity help to improve you and your child’s/children’s relationship? (0= Not at all, 10= Very much*)”and was compared to the independent question *“How long did it take you and your child/children to complete the activity?”* The four groups used in the ANOVA test is the independent variable that include “0-10 minutes”, “11-20 minutes”, “21-30 minutes”, “30 plus minutes”. The mean was compared to the four different groups and is showed in Table 2. Table 2 also resembles the sum of squares which represents the initial step for measuring the total variation, as well as the variation between and within the four groups, which ended up as 6.708. The mean of squares is used to see the mean between the four groups and the mean within the four groups and was calculated to be 6.7080. The p-value was calculated to .3274 which means that there is no significant difference between how long the activity took to complete compared towards the improvement of parent involvement. Because .3274 is not less than.05 the note described below Table 2 shows that the p-value is greater than .05, .01, and .001.

Table 2:

*ANOVA of Parents Improvement by How Long Parents and Children Took to Complete the Noodle Necklace Activity*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Minutes | Mean | Standard Deviation | Sum of Squares | Mean of Squares | F-value |
| 0-10 | 7.900 | 3.3 |  |  |  |
| 11-20 | 7.727 | 3.07 |  |  |  |
| 21-30 | 8.500 | 1.9 |  |  |  |
| 30+ | 8.818 | 2.1 | 6.708 | 6.7080 | .9832 |

*Note*: *p>.05, p>.01, p>.001*