Quantitative Findings

For the quantitative findings, the following variables were examined using three methods of statistical analysis: a chi squared test, an independent samples t-test, and an analysis of variance (ANOVA). These methods of statistical analysis were utilized to investigate the research question "Does the highest completed level of education in a household affect parental involvement with their child?" Highest degree of education can be used as an indicator for socioeconomic status, which will be taken into consideration in the concluded findings.

The independent variable is the highest degree of education completed by the respondents. Of the 11 responses, two reported competing high school, four reported completing some college, and five reported completing a college degree or higher. No respondents reported they had only completed less than high school, and no respondents reported that they would prefer not to answer.

The dependent variable for this study was the level of parental involvement with the child. The respondents gauged their level of involvement during the activity with their child on a scale from zero to 10 with zero being the least and 10 being the most. In the case of the Chi Squared test, a different dependent variable was used to represent parental involvement, which was, "How often do you attend head start programs?" The responses to this question were re-coded into two groups, those who had attended head start programs, and those who had not. Of the 11 responses, (multiplied to create a larger data set, as seen below), one respondent reported not attending any head start programs, and 10 reported they had.

Table 1.

Cross Tabulation and Chi -Square Test

Highest Level of Education Completed	Has Attended Head Start Programs	Has Not Attended Head Start Programs	Pearson Chi-Square

High School Or Less	9	9	44.550***
Some College or More	81	0	
Total	90	9	

Note. p<.o5, p<.01*, p<.001****

The above table demonstrates the crosstabulation of two nominal ordinal variables and Chi-Square test ran with those variables. The variables were operationalized using the following survey questions: “What is the highest degree of education anyone in your household has completed?,” and “How often do you attend programs at Head Start?” Frequency of program attendance at Head Start was selected as a variable for analysis because it is another indicator of parental involvement. The attributes for the household education survey question were, “Less than High School,” “High School,” “Some College,” “College degree or higher,” and “Prefer Not to Answer.” The results of this question were re-coded into two groups, “High School or Less,” and “Some College or More.” The attributes for the frequency of attendance to Head Start programs questions were, “Often,” “Sometimes,” “Rarely,” and “Never.” The results of this survey question were re-coded into two groups, “Has Attended Head Start Programs,” “Has Not Attended Head Start Programs.” The results of the crosstabulation of these variables were as follows: of the 90 respondents who reported they had attended Head Start Programs, 9 had completed High School or less, and 81 had completed Some College or More, and of the 9 respondents who reported not attending Head Start Programs, 9 had completed high school or less, and 0 had completed some college. The Chi-Square test on these variables resulted in a value of 45.550. The asymptotic significance value was <.001, which indicates a high level of significance.

Table 2.

Independent Samples T-Test

Highest Level of Education Completed	Mean level of Parental Involvement	T-Statistic
High School or Less	4.5	-4.862***
More than High School	8.25	

Note. p<.o5, p<.01*, p<.001****

An independent samples T test was run to compare the mean level of parental involvement between two populations of Head Start Program Attendees. The dependent variable for this test was the level of parental involvement with the child, which was determined by asking survey respondents "What was your level of involvement with the child during the Family Fun Time activity," on a 0 to 10 scale, with 0 being not at all, and 10 being a great amount. The independent variable in this test asked respondents their highest completed degree of education, the responses to which were re-coded into two groups: "High School or Less," and "More than High School." The findings of the T-Test show the difference between the means are significant at the .001 level, which indicates the null high hypothesis is rejected.

Table 3.

ANOVA

Highest Completed Level of Education	Mean Level of Involvement	F-Value
High School	4.50	27.307***
Some College	8.25	
College Degree or Higher	8.60	

Note. p<.o5, p<.01*, p<.001****

The dependent variable for this ANOVA was level of parental involvement with the child. This was asked on a 0-10 scale. The independent variable for this ANOVA was the highest degree of education completed. Respondents chose either, “High School”, “Some College”, or “College degree or higher”. The mean involvement for high school educated parents was 4.50 out of 10. The mean involvement for some college educated parents was 8.25 out of 10. The mean involvement for college degree or higher educated parents was 8.60 out of 10. According to the ANOVA results (F=27.307) there is a highly significant difference between these means. Therefore, highest degree of education completed does influence parental involvement with the child.

Key Findings

The aim of these tests was to determine if the data as it related to the research question, “Does the highest level of education completed in a household affect the parental involvement with the child,” demonstrated findings that suggest a relationship between the variables. Given that, the chi squared test resulted in a high level of significance, the t-test demonstrated the difference in the means to be significant, and the analysis of variance resulted in a high level of significance between the means, all of this at the .001 level, we are therefore able to draw a reasonable conclusion from the results to answer our research question. Based on these tests, we are able to conclude that a higher level of education completed in a given household, positively affected the amount of reported parental involvement with their child. The same can be concluded about a lower completed level of education, in that the data indicates a lower level of completed education has a negative influence on the amount of reported parental involvement with their child. Additionally, given that highest degree of education is a common indicator for socioeconomic status, it can also be reasonably concluded that socioeconomic status has the same influence on parental involvement with their child that highest degree of education does.