10.9 Template and APA-Style Write-Up

Finally we conclude the chapter with a template and an APA-style paragraph detailing the results from an example dataset.

**Pearson Correlation Test**

As you may recall, our graduate research assistant, Marie, was working with the marketing director of the local animal shelter, Matthew. Marie's task was to assist Matthew in generating the test of inference to answer his research question, "Is there a relationship between the number of children in a family and the number of pets"? A Pearson correlation was the test of inference suggested by Marie. A template for writing a research question for a correlation (regardless of which type of correlation coefficient is computed) is presented in the following:

**Is There a Correlation Between [Variable 1] and [Variable 2]?**

It may be helpful to include in the results information on the extent to which the assumptions were met (recall there are two assumptions: independence and linearity). This assists the reader in understanding that you were thorough in data screening prior to conducting the test of inference. Recall that the assumption of independence is met when the cases in our sample have been randomly selected from the population. One or two sentences are usually sufficient to indicate if the assumptions are met. It is also important to address effect size in the write-up. Correlations are unique in that they are already effect size measures, so computing an effect size in addition to the correlation value is not needed. However, it is desirable to interpret the correlation value as an effect size. Effect size is easily interpreted from the correlation coefficient value utilizing Cohen's (1988) subjective standards previously described. Here is an APA-style example paragraph of results for the correlation between number of children and number of pets.

A Pearson correlation coefficient was computed to determine if there is a relationship between the number of children in a family and the number of pets in the family. The test was conducted using an alpha of .05. The null hypothesis was that the relationship would be 0. The assumption of independence was met via random selection. The assumption of linearity was reasonable given a review of a scatterplot of the variables.

The Pearson correlation between children and pets is .90, which is positive, is interpreted as a large effect size (Cohen, 1988), and is statistically different from 0 ($r = .90, n = 5, p = .037$). Thus, the null hypothesis that the correlation is 0 was rejected at the .05 level of significance. There is a strong, positive correlation between the number of children in a family and the number of pets in the family.