Data:

For this project, I measured the gender of the episode's main character, rating, season, main topic of conversation, and the amount of times the main character appears on the screen. This was taken from every episode of the tv series "Friends" from season 1 episode 1 to season 3 episode 10. I analyzed a total of 30 episodes. Due to the fact that I was measuring a population, there was no specific sampling strategy being used.

I measured two quantitative variables and three qualitative variables. The first variable I observed was the gender of the main character. This was a qualitative variable. I analyzed this variable by looking at the description of the video and seeing who was the main focus of attention. If there were two main focuses, then I would observe who was seen more on the television screen in that episode and that is how I would determine who the main character was. The number 1 represented male and number 2 represented female.

My second variable that I observed was the rating of the episode. This was a quantitative variable for me. I would look up online what the viewers voted to be the average rating of each individual episode and that is how that variable was determined. My third variable was the season that each episode came from. I made this one a qualitative variable. Due to the fact that I watched the episodes in order and from the first three seasons this variable was a pretty consistent one.

My fourth variable was the main topic of conversation, or in other words what the episode was about. This was a qualitative variable. The way I analyzed this one was that I would watch the episode as well as the description and determine which category it fell into. Every episode usually fell into the topic of conflict or intimate relationships. Number 1 represented conflict, while 2 represented intimate relationships. I was going to add a third category, which would have been "other", but no observation fell into that place. It was always one or the other.

My fifth variable was main character appearances. This was a quantitative variable. It represented how many times the main character appeared on the television screen. When I was observing my first variable, which was the gender of the main character, I was also figuring out who the main character was aside from their gender. Once I figured out who the target of the episode was I watched the episode and counted how many times they appeared on the screen.

Method:

A chi squared test is supposed to tell us if two variables are independent of one another. I observed three relationships. First, between the gender of the main character and the season, which showed to be 0.2019. They probably did not have much of a relationship. My second observation was between the gender of the main character and the topic of conversation. The p-value was 1 which means that there probably was relation between the two. My third observation

had the same results as the second one. In this one I observed the relationship between the season and the topic of conversation.

An ANOVA tells us information regarding the relationship between the dependent and independent variables. We have to observe if the null hypothesis is true. I observed the relationship between the gender of the main character and the rating of each individual episode. They appeared to have a relationship.

A correlation analysis calculates the amount of change in a variable due to the change in the other one. I looked into the relationship between the rating of the episode and the number of the main character appearances. The number generated from my code was -0.2631262. Unfortunately this number represents a weak association between the two variables.

Regression analysis estimates the relationship between a dependent variable and one or more independent variables. I observed the relationship between the episode rating and the number of main character appearances. This produced a p-value of 0.1601, which shows pretty low association between the two variables.