**Transcript: Conducting Correlation Analyses in R Commander**

In this video, we're going over how to test correlations between pairs of continuous, or numeric, variables. First, we can look at our data set, which is called “Freedman”. This data set contains information about cities in the US: their population, their population density, and crime rate. In our first column, we have the city's population in thousands. This “nonwhite” variable is the percentage of the city's population that is not White. “Density” refers to the number of people per square mile, and “crime” is the number of crimes per 100,000 individuals.

One thing we might want to test is whether density is related to crime rate. To do this, we can conduct a correlation analysis. We will navigate to “Statistics”, “Summaries”, and “Correlation test”. That will pull up a window where we can select the two variables we want to test the correlation between. We will select “density” and “crime”. Similar to the last video, you can select two variables by holding down the shift key on your keyboard.

We have here some options about how we want to conduct our correlation test. We are going to use the default of “Pearson product moment correlation”. This is the same as Pearson’s *r*. Next, we can see your alternative hypothesis, which has a similar format to other analysis we've gone over. In this case, we don't have a hypothesis about whether density and crime are positively related or negatively related to one another, so we will select a two-sided hypothesis. If we did have a directional hypothesis, however, we could choose one of the two directional alternative hypotheses here.

Once we click “OK”, R Commander will conduct our correlation analysis. In a later video we will go over how to interpret this output.