1. Your consulting agency has just hired two researchers named Johnson and Crews. They have completed a research project related to “Rate My Professor.com.” They were supposed to be here today to present their findings related to correlations, but air traffic was clogged up and they are still in the airport in Birmingham AL. As the President/CEO (fill in your title) of your agency, you have to present their findings at today’s conference. This is a very important presentation as university representatives from all over the nation are eager to hear of the findings.

For your presentation, be sure to identify what the research question is, why it is important and where the data came from. Be sure also to offer some descriptive statistics (table 1). You’ll need to understand how those variables were coded to properly describe them (this is found in the methodology section). What are some important relationships found in in the correlation matrix that our guests should be aware of? Be sure to explain to our guests what the correlation coefficients mean and what they don’t mean (e.g., direction, strength, causation versus correlation). Our guests, though highly skilled have no idea what correlations are so be sure to provide insight in English vs. statistics-ese. What are your policy recommendations for the guests at the panel?

As with all presentations, first welcome your audience, tell them what you’ll do, why it’s important, the test you’ll use and why it’s the right one, the findings (beginning with descriptives), and finally conclude with policy recommendations. Be sure to remember that our panel guests don’t know correlations so you must describe to them precisely what you find in English.

1. The State of Colorado Courts has approached you to find out if there is a relationship between the use of mediation and satisfaction with the resolution of a court case. They are also interested in understanding if the experience of the mediator is related to satisfaction. To study this, they have provided you with data on the number of hours each respondent spent in mediation, each mediators experience in years, and the respondents rating of satisfaction concerning the ultimate outcome of the case. The satisfaction score comes from a scale that ranges from 0 (not satisfied) to 10 (very satisfied). The data are as follows:

Respondent Hours Satisfaction Scale Mediator Experience

A 3 5 9

B 15 9 3

C 1 3 12

D 11 7 4

E 10 9 7

F 13 7 15

G 27 9 20

H 14 8 2

Using the appropriate statistical test, with an alpha of .05, you need these important research questions about whether there is a significant relationship between satisfaction and the other variables.

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Be sure to explain to our guests what the correlation coefficients mean and what they don’t mean (e.g., direction, strength, causation versus correlation). Our guests, though highly skilled have no idea what correlations are so be sure to provide insight in English vs. statistics-ese.Be sure to remember that our panel guests don’t know correlations so you must describe to them precisely what you find in English.

What are your policy recommendations for the guests at the panel?

1. A researcher from the State of Colorado Courts is interested in examining the relationship between birth order position and personality. They feel that by using this in the hiring process, they can better select suitable candidates for their positions. Some positions include high interface with the public and others do not. Understanding personality may lead to better placement of new hires and ultimately happier employees and public. They have gathered data that are coded as such:

Birth Order: 1st or only child is coded as 0; later born child is coded as 1.

Personality: Introverts are coded as 0 and extroverts are coded as 1.

Birth Order Personality

1st Introvert

3rd Extrovert

Only Extrovert

2nd Extrovert

4th Extrovert

2nd Introvert

Only Introvert

3rd Extrovert

Only Extrovert

2nd Introvert

Using the appropriate statistical test, with an alpha of .05, you need these important research questions about whether there is a significant relationship between birth order and personality.

As with all presentations, first welcome your audience, tell them what you’ll do, why it’s important, the test you’ll use and why it’s the right one, the findings (beginning with descriptives), and finally conclude with policy recommendations.

Be sure to explain to our guests what the correlation coefficients mean and what they don’t mean (e.g., direction, strength, causation versus correlation). Our guests, though highly skilled have no idea what correlations are so be sure to provide insight in English vs. statistics-ese. Be sure to remember that our panel guests don’t know correlations so you must describe to them precisely what you find in English.

What are your policy recommendations for the guests at the panel?

1. A local school district has hired your awesome agency to determine the relationship between weight and income for female professors. The literature suggests there may be a relationship and you have recently come into possession of new data allowing you to add to this discussion.

Following are data you have to test. Weight is measured in pounds and income is measured in dollars per year.

Weight Income

 110 125000

 130 78000

 270 49000

 200 63000

 310 35000

 137 84000

292 38000

190 51000

107 93000

265 44000

Using the appropriate statistical test, with an alpha of .05, you need these important research questions about whether there is a significant relationship between weight and income.

As with all presentations, first welcome your audience, tell them what you’ll do, why it’s important, the test you’ll use and why it’s the right one, the findings (beginning with descriptives), and finally conclude with policy recommendations.

Be sure to explain to our guests what the correlation coefficients mean and what they don’t mean (e.g., direction, strength, causation versus correlation). Our guests, though highly skilled have no idea what correlations are so be sure to provide insight in English vs. statistics-ese. Be sure to remember that our panel guests don’t know correlations so you must describe to them precisely what you find in English.

What are your policy recommendations for the guests at the panel? Is there a problem that needs to be corrected? How can it be corrected?

1. The Courts have been hired to conduct research on court cases. Given the Courts have so many excellent UCD students and graduates, they are seeing a rapid increase in the number of contracts they are being awarded. The topic of this research is to understand if there is a relationship between were awarded this contract although it focuses on serious crime, amount spent on crime prevention and town size.

Your task is to identify if there is a relationship between the number of court cases, the amount of money spent on crime prevention and town size. The money spent is coded in dollars per year, town size is in population (head count).

No. Cases Amt $ Prevention Population Size

37 60000 100100

49 75000 110120

65 32000 132000

74 43020 99500

89 112000 220000

96 125030 213200

112 87000 235000

129 992000 267000

134 169010 450000

149 175400 395000

161 134000 410115

173 149931 400000

Using the appropriate statistical test, with an alpha of .05, you need these important research questions about whether there is a significant relationship between the number of court cases, money spent and population size.

As with all presentations, first welcome your audience, tell them what you’ll do, why it’s important, the test you’ll use and why it’s the right one, the findings (beginning with descriptives), and finally conclude with policy recommendations.

Be sure to explain to our guests what the correlation coefficients mean and what they don’t mean (e.g., direction, strength, causation versus correlation). Our guests, though highly skilled have no idea what correlations are so be sure to provide insight in English vs. statistics-ese. Be sure to remember that our panel guests don’t know correlations so you must describe to them precisely what you find in English.

What are your policy recommendations for the guests at the panel? What can they do to ensure the courts are function well?