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What dataset are you working with:

1.comma\_survey

List 3 questions that you can ask with your dataset.

Q1: Are women more likely to use the oxford comma than men?

Q2: Do more female avengers die a first death than male avengers?

Q3:

List the associated null hypothesis for each question:

Q1: Women are no more likely than men to use the oxford comma.

Q2: Female avengers do not die a first death more than male avengers.

Q3:

What statistical test(s) will you use to answer each of the questions:

Q1: chi-squared–categorical IV (gender) and categorical DV (choose oxford comma sentence of non-oxford comma sentence as grammatically correct)

Q2: chi-squares– categorical IV (gender) and DV (death 1 = True/False)

Q3:

Make a visual plot showing the relationship that you will analyze statistically (e.g. boxplot for t-test or ANOVA; scatterplot for regression; table for chi-square).

Q1:

|  |  |  |
| --- | --- | --- |
| Sentence | Female | Male |
| It's important for a person to be honest, kind and loyal. | 234 | 209 |
| It's important for a person to be honest, kind, and loyal. | 314 | 280 |

Q2:

FALSE TRUE

FEMALE 37 21

MALE 67 48

|  |  |  |
| --- | --- | --- |
| Gender | False | True |
| Female | 37 | 21 |
| Male | 67 | 48 |

Q3:

Do your data meet the assumptions required for the statistical test you want to run? Please state the assumptions you examined and whether or not your data meet those assumptions:

Q1: Chi-squared assumptions = data randomly selected, observations independent, observations in each cell of contingency table

I tested that there were observations in each cell of my contingency table, as can be seen in the above question.

Q2: Chi-squared assumptions = data randomly selected, observations independent, observations in each cell of contingency table

I tested that there were observations in each cell of my contingency table, as can be seen in the above question.

Q3:

Run the statistical test! Put your results here:

Q1:

Pearson's Chi-squared test with Yates' continuity correction

data: comma\_table

X-squared = 0, df = 1, p-value = 1

Q2:

Pearson's Chi-squared test with Yates' continuity correction

data: avengers\_table

X-squared = 0.28845, df = 1, p-value = 0.5912

Q3:

Interpret your results!

Q1: These results show that I should accept my null hypothesis, which is that women are no more likely than men to use the oxford comma. This is because the p-value is 1, which means there is a 100 percent chance that I will make a type 1 error.

Q2: These results suggest I should accept my null hypothesis as the p-value is far greater than 0.05.

Q3: