

# Frequencies essay

[Experience](#), [Belief](#)



## **Step 1 - Creating variables**

Frequencies

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## **FEAR OF CRIME RELIABILITY ANALYSIS**

Reliability

Scale: ALL VARIABLES

MEASURES OF CENTRAL TENDENCY & DISPERSION – FEAR

EXPLORE

QUESTION 1: What is the alpha level for the FEAR additive scale?

. 95

**QUESTION 2: Does your analysis indicate that the FEAR additive scale is a reliable measure? How did you determine this?**

Yes.

. 95 is larger than . 6

## **PUNITIVE ATTITUDES RELIABILITY ANALYSIS**

Reliability

Scale: ALL VARIABLES

**QUESTION 3: What is the alpha level for the PUNITVE additive scale?**

. 835

## CHECKING NORMALITY STATISTICS

Frequencies

**QUESTION 4: List the variables that have skewness values that indicate non-normality, including those with both moderate and severe problems.**

Find variables with skewness which exceeds  $\pm .50$ .

**Agree that " The Bible is the actual word of God and is to be taken literally."**

Likelihood of being victim of violent crime in next year

Likelihood of being victim of property crime in next year

Concern about crime

Employment dummy

QUESTION 5: List the variables that have kurtosis values that indicate non-normality.

Find variables with kurtosis which exceeds  $\pm 1.01$ .

**Agree that " The Bible is the actual word of God and is to be taken literally."**

Employment dummy

Fear of crime additive scale

Criminology Criminal Justice Major

CHECKING FOR OUTLIERS

Explore

QUESTION 6: Based on the sample size, what is the cut-off point for determining if you have any outliers? List any survey numbers that are outliers for the variables FEAR and PUNITIVE.

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The sample size for this data  $> 80$ , so no outliers for any of these two variables. We determine this because we have no z-scores  $\geq \pm 3.00$ .

## **STEP 4 – CHECKING REPRESENTATIVENESS**

### ONE SAMPLE T-TEST

#### T-TEST

QUESTION 7: Using the test value of 52 for your one-sample t-test, is your sample representative of the population for the variable PUNITIVE? How did you determine this?

p value  $< .05$ , so we would reject the null hypothesis and determine that there is a statistically significant difference between our sample mean and the supposed population mean of 52 that we used.

## **GOODNESS OF FIT CHI-SQUARE TEST**

### NPar Tests

#### Chi-Square Test

#### Frequencies

QUESTION 8: Based on the results of the goodness of fit chi-square test, is the sample representative of the population for the variables q32sex? How did you determine this?

The p-value is  $< .05$ , so we reject the null hypothesis and conclude that the distribution is significantly different from the one we expected.

## **STEP 5 – BIVARIATE ASSOCIATIONS**

### ETA

#### Crosstabs

Punitive Attitudes additive scale \* Male or female?

Punitive Attitudes additive scale \* Criminology Criminal Justice Major

Punitive Attitudes additive scale \* CSU dummy

Punitive Attitudes additive scale \* UW dummy

Punitive Attitudes additive scale \* Agree that " The Bible is the actual word of God and is to be taken literally."

QUESTION 9: What is the Eta value for religious fundamentalism and PUNITIVE? Interpret this value in terms of the strength of the association. Give the PRE interpretation for this value.

Eta = .136 => weak association

$.136 \times .136 = .0185$

1. 85% of the variation in punitive attitude is explained by religious fundamentalism.

## PEARSON'S R CORRELATIONS

Correlations

r-value for q1concern and punitive = .29 => moderate positive association

$.29 \times .29 = .0841$

8. 41% of the variation punitive attitudes additive scale is explained by concern about crime.

## INDEPENDENT SAMPLES T-TEST

T-Test

QUESTION 11: What is the t-value for the independent samples t-test for q36bible and PUNITIVE? Based on these results, are religious fundamentalists (yes on q36bible question) significantly more or less likely to be punitive? How did you determine this?

The Levene's test is significant ( $p < .05$ ), so we use the equal variances not assumed t test results. So  $t = -1.858$ .

Since  $p < .05$ , we reject the null hypothesis and determine that there is a statistically significant difference between religious fundamentalists and non-fundamentalists for punitive attitudes. The mean for religious fundamentalists was 44.34 and the mean for non-fundamentalists was 39.55, indicated that religious fundamentalists are more punitive.

## STEP 6 – MULTIVARIATE ANALYSIS

Regression

QUESTION 12: Based on your first OLS regression results (the model where all variables are included), what is the value of r-square? Interpret this value.

r-square = .39

**39% of the variation in punitive attitudes is explained by the variation in the other variables included.**

QUESTION 13: What is the value of the y-intercept for the full/theoretical model?

43.195

**QUESTION 14: What is the value of the partial slope coefficient for the variable FEAR? Interpret this value.**

0.302 => weak positive association between FEAR and PUNITIVE.

**QUESTION 15: What is the partial slope coefficient for Political Ideology? Interpret this value.**

-3.555 => negative association between political ideology and PUNITIVE.

**QUESTION 16: List the independent variables that are included in the OLS model that is correctly specified statistically.**

QUESTION 17

Based on everything that you ran for this exam, would you conclude that religious fundamentalism is causally related to punitiveness? Why or why not? Be sure to address all 3 of the criteria for causality in answering this question.

We cannot conclude that religious fundamentalism is causally related to punitiveness. The variable was not significant in the theoretical model, so it cannot be causally related to punitiveness in this sample. The data did not mention on time-order and non-spuriousness.

QUESTION 18: If I want to compare across variables in my OLS regression model, what information from my output would I use to do this?

**Beta**

QUESTION 19: One of the assumptions of OLS regression is that all variables are normally distributed. Based on analysis that you have done for this exam, did we meet this assumption? How do you know this?

**No. There are non-normal skewness variables:**

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Likelihood of being victim of violent crime in next year

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Concern about crime

Employment dummy

and

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non-normal kurtosis variables:

Agree that " The Bible is the actual word of God and is to be taken literally."

Employment dummy

Fear of crime additive scale

Criminology Criminal Justice Major

QUESTION 20: One of the assumptions of OLS regression is that you have no outliers in your sample. Based on everything that you ran for this analysis, did you meet this assumption? How do you know?

Only FEAR did not have outliers. We did not check the other variables. So, we have not meet the assumption.