

ACTIVITY 5

PART A – Wednesday, July 11, 2018

Week 4, Day 3

Due: Thursday, July 19

Instructions: A digital copy of the final version of Activity #5 is due on Thursday, July 19 (Week 5). You will be given the activity in parts, but it is your responsibility to keep track of all questions on one master document for each respective activity.

- (1) Draw a scatterplot with the age of the participant (`info_age`) as the independent variable and the thermometer score for Barack Obama (`score_obama`) as the dependent variable. Is this a positive relationship or a negative relationship? Include the scatterplot on your document.
- (2) Draw a scatterplot with the age of the participant (`info_age`) as the independent variable and the feelings about transgender people (`score_trans`) as the dependent variable. Is this a positive or negative relationship? Include the scatterplot on your document.
- (3) Draw a scatterplot with the age of the participant (`info_age`) as the independent variable and a respondent's need to evaluate situations (`evaluationscore`) as the dependent variable. Is this a positive or negative relationship? Include the scatterplot on your document.

Using the midterm dataset, evaluate the following hypotheses using a Pearson correlation test.

- (4) Evaluate the hypothesis: A respondent's political knowledge score (`knowledgescore`) is **positively** correlated with a respondent's levels of political participation (`actionindex`).
 - (a) Report the Pearson correlation value for this hypothesis.
 - (b) As a respondent's political knowledge score increases, what happens to their white guilt score?
 - (c) Is this a weak, moderate, or strong relationship?
 - (d) What is the probability that this relationship is due to chance?
 - (e) Based on the direction *and* significance, do we accept or reject the hypothesis?
- (5) Evaluate the hypothesis: A respondent's age (`info_age`) is **positively** correlated with a respondent's feelings about police (`score_police`).
 - (a) Report the Pearson correlation value for this hypothesis.
 - (b) As a respondent's age increases, what happens to their feelings about Muslims?
 - (c) Is this a weak, moderate, or strong relationship?
 - (d) What is the probability that this relationship is due to chance?
 - (e) Based on direction and significance, do we accept or reject the hypothesis?

- (6) Evaluate the hypothesis: A respondent's feelings about blacks (score_black) are **negatively** correlated with their feelings about police (score_police).
- Report the Pearson correlation value for this hypothesis.
 - As a respondent's feels more warmly towards blacks, what happens to their feelings about police?
 - Is this a weak, moderate, or strong relationship?
 - What is the probability that this relationship is due to chance?
 - Based on direction and significance, do we accept or reject the hypothesis?
- (7) Evaluate the hypothesis: A respondent's feelings about gays/lesbians (score_gay) are **positively** correlated with feelings about transgender people (score_trans).
- Report the Pearson correlation value for this hypothesis.
 - As a respondent's feels more warmly towards gays/lesbians, what happens to their feelings about transgender people?
 - Is this a weak, moderate, or strong relationship?
 - What is the probability that this relationship is due to chance?
 - Based on direction and significance, do we accept or reject the hypothesis?
- (8) Evaluate the hypothesis: A respondent's animus toward other races (resentmentscore) is **positively** correlated with the likelihood that they would vote in the 2016 presidential election (willvote2016).
- Report the Pearson correlation value for this hypothesis.
 - As a respondent's animus toward other races increases, what happens to their chances of voting in 2016?
 - Is this a weak, moderate, or strong relationship?
 - What is the probability that this relationship is due to chance?
 - Based on direction and significance, do we accept or reject the hypothesis?
- (9) Evaluate the hypothesis: A respondent's age (info_age) is **negatively** correlated with their frequency of political participation (actionindex).
- Report the Pearson correlation value for this hypothesis.
 - As age increases, what happens to their frequency of political participation?
 - Is this a weak, moderate, or strong relationship?
 - What is the probability that this relationship is due to chance?
 - Based on direction and significance, do we accept or reject the hypothesis?
- (10) Evaluate the hypothesis: A respondent's age (info_age) is **negatively** correlated with their feelings toward Donald Trump (score_trump).
- Report the Pearson correlation value for this hypothesis.
 - As a respondent's age increases, what happens to their feelings about Donald Trump?
 - Is this a weak, moderate, or strong relationship?
 - What is the probability that this relationship is due to chance?
 - Based on direction and significance, do we accept or reject the hypothesis?