

## Assignment 1 – Solutions

1.
  - (a) This is a field experiment—the treatment group are the officers that were offered a bribe and the control group are the officers that were not offered a bribe.
  - (b) Aggregate data.
  - (c) Lab experiment—the students told to discuss politics are the treatment group and the students told to discuss Game of Thrones are the treatment group.
  - (d) Survey.
  - (e) Survey experiment—the treatment group is the group asked at the beginning and the control group is asked at the end (or the other way around).
  
2.
  - (a) Ask people about their perceptions of the weather and ask people their opinion on global warming. Or ask people to report where they live, find out the recent temperature where they live, and ask people to report their opinion on global warming.
  - (b) Measure temperature for some geographic unit—states, cities, zip codes, etc. Collecting a measure of global warming opinion using aggregate data is more difficult, but some possibilities: results of ballot initiatives using precinct level voting data, aggregating up existing survey data on global warming opinion to the state level, count the number of members of a global warming advocacy group in each state.
  - (c) Very hard, since weather cannot be directly manipulated by researcher in the field.

- (d) Vary the temperature in the lab without informing participants. Ask the participants to report their opinions on global warming. Or have half of the respondents watch a weather report about a recent snowstorm and the other half watch a news program that does not mention the recent weather. Again ask the participants to report their opinion on global warming.
- (e) At the end of the survey, all respondents are asked their opinions on global warming. Only half of the respondents are asked a series of questions about the recent weather, to prime their attention to recent weather. The other half do not receive these question, so serve as a control group.
3. (a) Quantitative, discrete, interval.  
(b) Qualitative, discrete.  
(c) Quantitative, continuous, interval.  
(d) Qualitative, discrete.  
(e) Quantitative, discrete, interval.  
(f) Quantitative, discrete, ordinal.  
(g) Qualitative, discrete.  
(h) Qualitative, discrete.  
(i) Quantitative, discrete , ordinal.
4. (a)

|         |                            | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|----------------------------|-----------|---------|---------------|--------------------|
| Valid   | Agnostic                   | 11        | .9      | 1.2           | 1.2                |
|         | Atheist                    | 10        | .8      | 1.1           | 2.3                |
|         | Baptist                    | 117       | 9.7     | 12.6          | 14.9               |
|         | Catholic/Roman Catholic    | 215       | 17.9    | 23.2          | 38.1               |
|         | Episcopalian               | 8         | .7      | .9            | 39.0               |
|         | Jewish                     | 31        | 2.6     | 3.3           | 42.3               |
|         | Lutheran                   | 33        | 2.7     | 3.6           | 45.9               |
|         | Methodist                  | 56        | 4.7     | 6.0           | 51.9               |
|         | Pentecostal                | 15        | 1.2     | 1.6           | 53.6               |
|         | Presbyterian               | 9         | .7      | 1.0           | 54.5               |
|         | Protestant                 | 117       | 9.7     | 12.6          | 67.2               |
|         | Southern Baptist           | 4         | .3      | .4            | 67.6               |
|         | NONE                       | 98        | 8.1     | 10.6          | 78.2               |
|         | OTHER                      | 1         | .1      | .1            | 78.3               |
|         | Christian (Protestant)     | 97        | 8.1     | 10.5          | 88.8               |
|         | Christian (Non-Protestant) | 64        | 5.3     | 6.9           | 95.7               |
|         | Other Non-Christian        | 18        | 1.5     | 1.9           | 97.6               |
|         | Islam/Muslim               | 1         | .1      | .1            | 97.7               |
|         | Mormon/LDS                 | 13        | 1.1     | 1.4           | 99.1               |
|         | DK/No opinion              | 8         | .7      | .9            | 100.0              |
|         | Total                      | 926       | 76.9    | 100.0         |                    |
| Missing | System                     | 278       | 23.1    |               |                    |
| Total   |                            | 1204      | 100.0   |               |                    |

Catholic / Roman Catholic is the most common religious group in the sample.

(b)

**Q918. RACE \* Q5 NET Bush Approve/Disapprove Crosstabulation**

|            |                          |                     | Q5 NET Bush Approve/Disapprove |                |               | Total       |
|------------|--------------------------|---------------------|--------------------------------|----------------|---------------|-------------|
|            |                          |                     | Approve NET                    | Disapprove NET | DK/No opinion | Approve NET |
| Q918. RACE | White                    | Count               | 534                            | 378            | 29            | 941         |
|            |                          | % within Q918. RACE | 56.7%                          | 40.2%          | 3.1%          | 100.0%      |
|            | Black                    | Count               | 14                             | 73             | 4             | 91          |
|            |                          | % within Q918. RACE | 15.4%                          | 80.2%          | 4.4%          | 100.0%      |
|            | White Hispanic           | Count               | 18                             | 16             | 0             | 34          |
|            |                          | % within Q918. RACE | 52.9%                          | 47.1%          | .0%           | 100.0%      |
|            | Black Hispanic           | Count               | 0                              | 2              | 0             | 2           |
|            |                          | % within Q918. RACE | .0%                            | 100.0%         | .0%           | 100.0%      |
|            | Hispanic (no race given) | Count               | 11                             | 11             | 4             | 26          |
|            |                          | % within Q918. RACE | 42.3%                          | 42.3%          | 15.4%         | 100.0%      |
|            | Asian                    | Count               | 8                              | 7              | 2             | 17          |
|            |                          | % within Q918. RACE | 47.1%                          | 41.2%          | 11.8%         | 100.0%      |
|            | Other Race               | Count               | 15                             | 25             | 1             | 41          |
|            |                          | % within Q918. RACE | 36.6%                          | 61.0%          | 2.4%          | 100.0%      |
|            | DK/No opinion            | Count               | 1                              | 0              | 0             | 1           |
|            |                          | % within Q918. RACE | 100.0%                         | .0%            | .0%           | 100.0%      |
| Total      |                          | Count               | 601                            | 512            | 40            | 1153        |
|            |                          | % within Q918. RACE | 52.1%                          | 44.4%          | 3.5%          | 100.0%      |

Whites are most likely to approve of President Bush (56.7%). Black Hispanics are least likely to approve of President Bush (0%). However, there are only two respondents of this race in the sample, so there is much uncertainty attached to this statistic. Black respondents are least likely to approve of President Bush (15.4%), among those groups that have a substantial number of respondents in the sample.

(c) 6 pts

It does not make sense to talk about the mean racial group in the sample or the median racial group because race is a qualitative, and thus an unordered, variable. A qualitative variable cannot be described numerically using a median or mean.