Who knows what about who?

Assignment 9

Sociology 204 (Social Networks)

Due: 4/26/2017

1) What is one question or issue that you would like to discuss in precept? [5 points]

Breaking Your Bubble

2) How is implementing your bubble-breaking strategy going? Are there any unexpected difficulties you’ve run into? [5 points]

3) Please submit your key measurements on the Google form link we will post later. There are different links for every precept, so please make sure you fill out the right one. Did you fill out the form? [5 points]

Other questions

4) Write one question that could be on the final exam. Please write the answer as well. [4 points]

[Rubric:

Question and answer could be used as is: 4 points

Question and answer could be used with some modification: 2 points

Question and answer could only be used with major modifications: 0 points]

5) Suggest a topic for the final class meeting. Your suggestion should include a title, a short description, and a set of proposed readings. We will anonymize these suggestions, send them to everyone in the class, and discussion them in the next precept. [Extra credit 5 points]

Main Assignment

6) Write down the initials of two other Princeton students, one of whom you consider a strong tie and one of whom you consider a weak tie. [5 points]

 To guide your decision, Granovetter defines tie strength as:

“a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocity of services which characterize the tie.”

7) How did you decide who fit into which category? [5 points]

8) Please ask these two people to fill out the “friend survey” (downloadable from Piazza) about themselves and about you. If you are shy about asking a weak tie to participate, consider asking someone in our class. Collect the surveys and enter the data into Table 1. [10 points]

9) Please fill out “self survey” (downloadable from Piazza). The first part of the survey is about yourself and the second and third part is about the two alters who have or will take your surveys.  Put the data into Table 1. [10 points]

Now, we are going to calculate the accuracy of answers for the different questions.

The questions in the tables are flagged with 3 letters [A], [B] and [C]. The letters represent different question domains:

1. Political (6 questions)
2. Personal (3 questions)
3. Familiarity (4 questions)

We define accuracy as: # of correct answers / # of answers.

For example, if one of your alters answered 3 questions about your political views correctly, then we could calculate the accuracy as 3/6, so the accuracy of the political domain for that alter is 0.5.

Before you calculate the accuracy of the responses, answer the following prediction questions below:

10) Predict which questions and domains will have the **lowest** accuracy scores (for both your answers about your alters and alters answers about you). Explain your thinking.[5 points]

11) Predict which questions and domains will have the **highest** accuracy scores (for both your answers about your alters and alters answers about you). Explain your thinking. [5 points]

In addition to accuracy, Goel, Mason and Watts (2010) distinguish between sensitivity and specificity. They operationalize specificity as correctly guessing even though your friends in reality disagree with you, sensitivity as correctly guessing when your friends in reality agree with them.

For example, let's imagine that there are two kinds of people: people that prefer strawberry ice cream and people that prefer mint chip ice cream.

If you prefer strawberry ice cream, then specificity is the probability that you are aware of your friends that like mint chip.  Say you have 5 friends that like mint chip and you think that 4 of them like mint chip.  Then, the specificity is 0.8.

If you prefer strawberry ice cream, then sensitivity is that you are aware that of your friends that like strawberry ice cream.  Say you have 10 friends that like strawberry ice cream and you think that 9 of them like strawberry.  Then, the sensitivity is 0.9.

12) For your weak tie and strong tie alters separately, calculate sensitivity, specificity and accuracy, overall and for each question domain, and enter the results in the table below: [15 points]

|  |  |  |
| --- | --- | --- |
|  | **Weak tie alter** | **Strong tie alter**  |
|  | sensitivity | specificity | accuracy | sensitivity | specificity | accuracy |
| **Political questions [A]** |  |  |  |  |  |  |
| **Personal questions [B]** |  |  |  |  |  |  |
| **Familiarity questions [C]** |  |  |  |  |  |  |
| **All questions** |  |  |  |  |  |  |

13) How did your predictions of which questions and domains would have the highest and lowest accuracy scores compare to the results? Be specific and cite data. [5 points]

14) Consider the sensitivity, specificity and accuracy of specific questions. Do you see a difference across questions for both your strong tie alter your weak tie alter? Why do you think this is? [5 points]

15) Now, compare the overall mean sensitivity, specificity and accuracy of your weak tie to your strong tie. Do you see a difference in sensitivity, specificity and accuracy between them? Why do you think this is? [5 points]

16) Did this activity change how you think about the accuracy and inaccuracy of our perceptions about the characteristics of others?  If so, how? [5 points]

17) Enter the data from your surveys so that we can aggregate the results.  We will post the link to the google forms on Piazza. [6 points]

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| **Table 1: Alter beliefs about you** |
|  | **Your own attitudes and beliefs** | **Weak** tie alter responses about you  | **Strong** tie alter responses about you |
| Were you born outside of the United States? [B] | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 |
| Do you believe in God? [B] | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 |
| Generally speaking, are you interested in politics? [A] | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 |
| Do you support higher taxes to provide universal healthcare in the United States?[A] | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 |
| Do you support higher taxes to reduce economic inequality in the United States?[A] | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 |
| In order to overcome past discrimination, do you favor or oppose affirmative action programs which give special preferences to qualified blacks, women and other minorities in hiring and education? [A] | * Favor
* Oppose
 | * Favor
* Oppose
 | * Favor
* Oppose
 |
| In terms of political views, would you say you are more conservative or more liberal?[A] | * Conservative
* Liberal
 | * Conservative
* Liberal
 | * Conservative
* Liberal
 |
| Generally speaking, do they usually think of yourself as a Republican or Democrat?[A] | * Republican
* Democrat
 | * Republican
* Democrat
 | * Republican
* Democrat
 |
| Do you prefer Thomas Sweets or Bent Spoon? [C] | * Thomas Sweets
* Bent Spoon
 | * Thomas Sweets
* Bent Spoon
 | * Thomas Sweets
* Bent Spoon
 |
| Are you more of a cat person or a dog person?[C] | * Cat
* Dog
 | * Cat
* Dog
 | * Cat
* Dog
 |
| Do you prefer action movies or romantic comedies?[C] | * Action Movies
* Romantic Comedies
 | * Action Movies
* Romantic Comedies
 | * Action Movies
* Romantic Comedies
 |
| Would you say you spend too much time or not enough time with your family?[B] | * Too much time
* Too little time
 | * Too much time
* Too little time
 | * Too much time
* Too little time
 |

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| **Table 2: Your beliefs about weak tie alter** |
|  | **Weak** tie responses about themselves | **Your** responses about **weak** tie  |
| Were they born outside of the United States? [B] | * Yes
* No
 | * Yes
* No
 |
| Do they believe in God? [B] | * Yes
* No
 | * Yes
* No
 |
| Generally speaking, are they interested in politics? [A] | * Yes
* No
 | * Yes
* No
 |
| Do they support higher taxes to provide universal healthcare in the United States?[A] | * Yes
* No
 | * Yes
* No
 |
| Do they support higher taxes to reduce economic inequality in the United States?[A] | * Yes
* No
 | * Yes
* No
 |
| In order to overcome past discrimination, do they favor or oppose affirmative action programs which give special preferences to qualified blacks, women and other minorities in hiring and education? [A] | * Favor
* Oppose
 | * Favor
* Oppose
 |
| In terms of political views, would you say they are more conservative or more liberal?[A] | * Conservative
* Liberal
 | * Conservative
* Liberal
 |
| Generally speaking, do they usually think of yourself as a Republican or Democrat?[A] | * Republican
* Democrat
 | * Republican
* Democrat
 |
| Do you think they prefer Thomas Sweets or Bent Spoon? [C] | * Thomas Sweets
* Bent Spoon
 | * Thomas Sweets
* Bent Spoon
 |
| Are they more of a cat person or a dog person?[C] | * Cat
* Dog
 | * Cat
* Dog
 |
| Do they prefer action movies or romantic comedies?[C] | * Action Movies
* Romantic Comedies
 | * Action Movies
* Romantic Comedies
 |
| Would you say they spend too much time or not enough time with their family?[B] | * Too much time
* Too little time
 | * Too much time
* Too little time
 |

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| **Table 3: Your beliefs about strong tie alter** |
|  | **Weak** tie responses about themselves | **Your** responses about **weak** tie  |
| Were they born outside of the United States? [B] | * Yes
* No
 | * Yes
* No
 |
| Do they believe in God? [B] | * Yes
* No
 | * Yes
* No
 |
| Generally speaking, are they interested in politics? [A] | * Yes
* No
 | * Yes
* No
 |
| Do they support higher taxes to provide universal healthcare in the United States?[A] | * Yes
* No
 | * Yes
* No
 |
| Do they support higher taxes to reduce economic inequality in the United States?[A] | * Yes
* No
 | * Yes
* No
 |
| In order to overcome past discrimination, do they favor or oppose affirmative action programs which give special preferences to qualified blacks, women and other minorities in hiring and education? [A] | * Favor
* Oppose
 | * Favor
* Oppose
 |
| In terms of political views, would you say they are more conservative or more liberal?[A] | * Conservative
* Liberal
 | * Conservative
* Liberal
 |
| Generally speaking, do they usually think of yourself as a Republican or Democrat?[A] | * Republican
* Democrat
 | * Republican
* Democrat
 |
| Do you think they prefer Thomas Sweets or Bent Spoon? [C] | * Thomas Sweets
* Bent Spoon
 | * Thomas Sweets
* Bent Spoon
 |
| Are they more of a cat person or a dog person?[C] | * Cat
* Dog
 | * Cat
* Dog
 |
| Do they prefer action movies or romantic comedies?[C] | * Action Movies
* Romantic Comedies
 | * Action Movies
* Romantic Comedies
 |
| Would you say they spend too much time or not enough time with their family?[B] | * Too much time
* Too little time
 | * Too much time
* Too little time
 |