Social Cognition (Ai Outline)

I. Overview

Sequence of activities in lab 4, with Ai role in bold, and details about Ai role outlined in more detail below.

1. Students will read about the IAT, and participate in a sample experiment
2. Students will analyze their own data
3. **You lead a discussion about the IAT**
4. **Guide students in designing one new experiment together.**
   You implement this experiment in TeLLab
6. Students will participate in the new experiment
7. You will download the data, **open in Excel, add condition information, and send the data file to the class** through Blackboard email.

II. Lead a Discussion about the IAT

Preface: Open the class (or the discussion) with a brief preface, "The topic of today's lab is sensitive. It involves prejudice, and explores the possibility of unconscious biases. The experimental method used — the Implicit Association Test — is well established and produces robust effects, but the interpretation of these results is very controversial. As we discuss these topics, I want to remind everyone to be respectful."

Discussion Prompts

IAT Task Related [From student worksheet]

- What were the pairs of concepts being tested?
- Approximately how many stimuli were used for each concept?
- Why do you think these stimuli were chosen for the experiment?
- Can you think of ways to improve the design?
- Did the test will reveal a bias in your associations?

General Inference

- What is the difference between results and inferences?
- What is a strong inference and what is a weak inference?
- When is each type of inference justified, and what factors constrain inference?

IAT Inference

- If we created a new IAT it it found that people associate the surface of the earth with straight lines instead of slightly curved lines, could we then claim "Psychology discovers people actually believe the world is flat!"?
- Does the IAT reveal more about the people who take it or about their environments?
- When is an implicit association most likely to influence your behavior? [discuss System I and System II, and the contexts+tasks that can influence which system is dominant.]

III. Design a New IAT Experiment

Purpose: The primary goal is to provide students with a guided opportunity to think carefully about how we proceed from a question to an experimental design, and implement the design. How do we choose a question? How do we select stimuli? What choices in experimental design really matter, and what factors are controlled for by the design itself (e.g. counterbalancing)? [Introduce this Purpose to the Class]

Start Discussion: What implicit associations do you think are strongest on Princeton's campus? Are these the same as explicit biases? How would you simply study explicit biases? What unique opportunity does the IAT provide?

Group Exercise

[Break into groups of 3 to discuss, then reconvene to share proposals.]

Group prompt: What potential associations are you most curious about studying in yourself and your classmates? Every group should make 1 or 2 proposals.

[Write Proposals on the board. Provide opportunity for groups to advocate on behalf of their proposal. Then vote on one to pursue as a class.]

List the two pairs of categories on the board 1_____, 2_____, A_____, B_____.
Beneath each category, have students propose 10 word stimuli.
Discuss potential virtues and detractors for each possibility.
Discuss equating stimuli in different categories on various dimensions.
word length, usage frequency in natural language, emotionality
(don't need to control all these, but good to discuss)
Narrow down to (at minimum) 5 words for each category
(more can work, too, but make the # of stimuli equivalent for all categories).

Implement Design in TeLLab

Build the experiment that the class designs on TeLLab.

Note Options: You can let the class go early at this point, if they promise to participate in the experiment from home within 24 hours. Then you would complete the experiment creation process on your own (email them a reminder with the name to find on TeLLab under Experiments —> Implicit Association Test) and do data distribution 24 hours later. Or you can implement the experiment in lab (takes approximately 20 minutes), and let students participate in lab.

Tips

- **After changing anything, click Save (top right).**
- Settings—> Name: Give the experiment a unique and informative name [e.g. Politics & Corruption IAT Princeton 101 Tuesday afternoon]. (then click save on the top right)
- Double check your instructions. If you edit them after creating the experiment, Save.

- To speed up the in-class experiment creation process (save about 4-8 minutes), make a document with template instructions that you can simply find—> “replace all” with your new categories, then paste each instruction set into the editor during the experiment creation process (or afterward, when you are double checking).

- When you are done, Save and then click Publish. Navigate to the general Experiments —> IAT page and see that your experiment is live. Participate yourself to make sure it works.

Download, Add Conditions, & Distribute

After students have participated, you should download the data, open in Excel, create a condition column, delete the birth year and ethnicity columns for privacy, and distribute via Blackboard email. You can complete this step after class, at your relative leisure.

Download Data

MyHome—> Experiments —> Under “Experiments Designed” and next to the name of your lab’s experiment, click the download icon then next to Download All Records choose **Long Format**

Add Condition Info

- Follow steps 5 - 9 in the student worksheet under Analyze Data for adding a condition column. However, you will need to update the function in 6 places. This function is removing the names of stimuli and shortening the labels given to conditions. You will need to look carefully at the data in column L.

- =IF((REPLACE(M2,31,20,”"))="Women/Science-Men/Liberal Arts","FemScience_MaleArt",IF((REPLACE(M2,31,20,""))="Men/Science-Women/Liberal Arts", "MaleScience_FemArt",""))

- (2x) Replace the Condition Information with your Conditions (do not include the names of stimuli). E.g. Condition1/ValueA-Condition2/ValueB-Stimulus becomes Condition1/ ValueA-Condition2/ValueB (no stimulus name included). Do this for both conditions.

- (2x) Pick a shorter name for each of your 2 conditions. E.g. “Women/Science-Men/Liberal Arts” updates to “FemScience_MaleArt” or whatever you want. Do this for both conditions.

- (2x) Count the number of characters before a stimulus is named (in the function in blue above, the value is 31). E.g. Condition1/ValueA-Condition2/ValueB-Stimulus has 35 characters prior to “-Stimulus”. That value, 35, would need to be the middle value in both instances of REPLACE.

Email to Class

Use Blackboard to email this Excel data file to your class.