

Discussion Summary Form: <https://forms.gle/64HBnaJHEdLJDW2B8>

Step 1: Each day we (as a class) will pick one of a set of possible discussion points to work with as a group. The specific discussion points for each lecture can be found on the class Github repository.

<https://github.com/CoAxLab/DataSciencePsychNeuro/tree/master/Discussions>

Students who miss a class or are working asynchronously may choose the discussion point they want to engage with on their own.

Step 2: Once assigned into a breakout group (or asynchronous group) the team should immediately pick one member to be the group spokesperson. The spokesperson is responsible for summarizing the group's discussion when we return together as a class (synchronous class only) and for submitting the short summary of the group's discussion on the submission form linked at the top of this sheet (see Step 5 below).

All students must serve as group spokesperson at least twice during the semester and no student can be spokesperson for 2 consecutive classes.


Students who cannot make a class must do the discussion assignment on their own as a group of 1.

Step 3: During the discussion, it is recommended that the group set up a shared document (e.g., Google Doc) that the team can work on collectively. Otherwise, it is up to the spokesperson to take notes during the discussion.

Step 4: Once the discussion period is over (~40-45 minutes), we will converge together as a class. The spokesperson for each group will then present the group's conclusion verbally to the class.

Step 5: After class the spokesperson should clean up the notes of the discussion into a short (~1-2 paragraph) summary. Bulleted points are allowed. This should be submitted by going to the Discussion Summary Form linked at the top of this document and submitting as follows.

- A. Select the discussion topic (Class Topic) via the drop-down menu. This should align with the title of the lecture for that day.



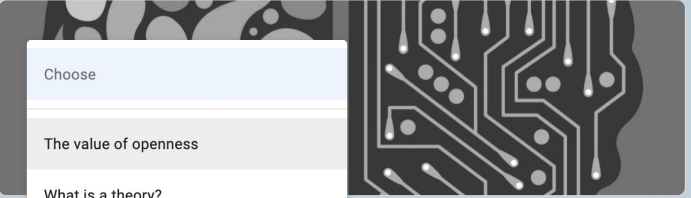
Break out group discussion questions submission

Please use this form to submit the short summary of group discussions in Data Science for Psychology & Neuroscience (CMU 85-432, 85-732).

*** Required**

Class topic *

Choose



Choose

The value of openness

What is a theory?

Constructing a testable hypothesis

Data as objects & architectures

Techniques for data cleansing

Visualization as analysis

The bias-variance tradeoff

Linear models

The ordinary least squares solution

Limits of linear regression

Discussion questions

Please use this form to submit the short summary of group discussions in Data Science for Psychology & Neuroscience (CMU 85-432, 85-732).

- B. Enter in the names of all the group members, starting with the group spokesperson who is submitting the summary. Names should be filled out in the LAST NAME, FIRST NAME format.

Class topic *

The value of openness

Group member #1 (Last name, First name) *

Verstynen, Timothy

Group member #2 (Last name, First name)

Stevens, Patience

Group member #3 (Last name, First name)

Your answer

C. Finally paste the summary of the discussion in the final box and click the “Submit” button.

Discussion summary *

Open science practices allow for pushing scientific reproducibility by fostering communication across researchers. The group noted that this turns science from a task done by a single researcher to a collective unit of teams of researchers. In a sense N-minds are better than 1. Inefficiencies in sharing data, pipelines, and results effectively reduce the efficiency of this group mind.

However, the group noted that this does put a heavier burden on individual researchers to do more work in order to conform to open science practices. Without changes to existing incentive structures, this could further hamper the efforts of individual scientists, particularly early career researchers.

Submit