Cognition Online Lab

Lab 5

Part 1

1) Please Create a "Lab 5" folder in the "Cognition Lab" folder on your desktop.
2) From Resources/Labs/Lab 5 on Sakai, download the following files into your own "Lab 5" folder:
   stroopReverse.psyexp
   trialTypesReverse.xlsx
3) Read the slides **Lab5.pptx** (4-10) for some background info on the Reverse Stroop experiment.
4) Analyze the data **on the .csv file** (instruction on **Lab5.pptx** – slides 12-15 – and related video, "ReverseStroopTTEST.mp4", https://tinyurl.com/y5nscs4y)
5) Calculate the p-value for the difference in mean reaction times for the congruent and incongruent cases for 1) the Reverse Stroop study and 2) the regular Stroop study (no need to re-run it – just retrieve the file with the results – remember, the .csv file, not the .xlsx file. The .csv file contains the trial by trial data, and that's what we need to calculate the p-value. The .xlsx file contains summary data.)
6) Look at the p-values: are they similar/different? If they are different, how so? What may the p-values tell you about the relative strength of the Stroop effect versus the Reverse Stroop effect? You will write about this in the Discussion (see part 2)
7) Please upload the spreadsheets (.csv files) on which you conducted the data analysis as "FirstnameLastname_CogLab_Lab5_results."

Part 2

1) Following the instructions on slides 16-27 on **Lab5.pptx**, write a Discussion section belonging to a report about the Reverse Stroop Study (write only the Discussion, not the rest of the report.)
2) To write this Discussion section, imagine you are involved in the debate about which theory (among the theories outlined in slides 4-10) better explains the original Stroop results. To settle this issue, you have decided to run the Reverse Stroop test, and you have obtained the results outlined in Part 1. Now illustrate your findings and their implications. You may consider context of the Stroop test literature by skimming the review paper "Half a Century of Research on the Stroop Effect - an Integrative Review" mentioned on the slides (macleod_1991.pdf on Sakai), **in particular the section "Theoretical Accounts of the Stroop Effect" on pages 187-193.**
3) The discussion should be at least one and half pages double spaced, and should cite at least three papers (one may be the original Stroop paper; another one may be the review mentioned above.) Use **Zotero** to populate the discussion with citations and build the bibliography. Refer to the PDF "Zotero_guide" that you can find on Sakai under Lab 5 and to the video Zotero.mp4, https://tinyurl.com/y23byxos.

When you download and install Zotero, a Word plug-in will automatically be installed. If you don't have Word installed, I recommend that you download and install it. You may *download it for free* from https://software.rutgers.edu/

4) Please upload the discussion section, complete with bibliography at the end, as "FirstnameLastname_CogLab_Lab5_discussion.

5) Please email me with an informal proposal for your final project. Refer to the slides 28-37. The informal proposal should include a summary of your idea, and the reasoning that led you to formulate that particular hypothesis. Keep in mind that the study will be run in class; it should take no longer than 15 minutes to complete it.