

Psychology 100 Lab: The Stroop Effect

The Stroop Effect was discovered in 1935 by a researcher named J. R. Stroop. It is a fascinating phenomenon in which the way we automatically process the meaning of words interferes with our ability to identify colors. In this lab, you will experience the Stroop Effect by performing a color identification task under two different experimental conditions: Identifying the color that a word is printed in when the word has the same name as the color (congruent condition) versus when the word has a different name than the color it is printed in.

Instructions for Collecting Data:

- 1) Go to the following web address:
http://www.pytoolkit.org/lessons/experiment_stroop.html
- 2) Click on the button at the bottom of the page and read the instructions.
- 3) When you are comfortable that you understand the instructions, press the “space bar” to begin the trials.
- 4) Suspend your hands over the keyboard when the trials begin.
- 5) It is OK to start the task over again if you screw up so badly that your data is worthless.
- 6) At the end of the trials, record your speed on the correct trials for the congruent and incongruent color conditions. Enter these numbers on the data sheet provided on the other side of this page.
- 7) When you have finished the tasks and recorded the data, you may log off and you are now ready to write your lab report.

Instructions for Writing the Lab Report:

- 1) Present your data in a bar graph. Be sure to clearly label the axes of your graphs and display the data for the speed of responding on the correct trials. You may draw these graphs by hand or use a graphing program such as Excel.
- 2) Summarize the pattern of your results. In other words, what does your graph tell us?
- 3) Finish your lab report by answering each of the following questions:
 - *What pattern of results would you expect to find if you exhibited the Stroop Effect? Is this what actually happened?
 - *If you did *not* show the typical Stroop pattern, do you have any hypotheses about why you didn't?
 - *Did you find one conditions to be more subjectively difficult than the other? Please elaborate.
 - *Did you notice any trade-off between speed and accuracy? In other words, do you think you did better if you took more time?
- 4) The program did not report how many you got correct in each condition – do you think that there was a difference in your accuracy between the two conditions?
- 5) In a sentence or two, explain why the Stroop Effect occurs.

Stroop Effect Lab Data

CONDITION	SPEED ON CORRECT TRIALS
Congruent Words & Colors	
Incongruent Words & Colors	