

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 word and color identification tasks under three different experimental conditions: Identifying colors, identifying the names of colors, and identifying the color of the ink that a color word is printed in. You will perform ten trials in each of the conditions described above, and you will have three practice trials in each condition before you begin.

Instructions for Collecting Data:

- 1) Go to the following web address:
<http://www.pbs.org/wgbh/nova/everest/exposure/stroopintro.html>
- 2) Click on the small box on the right side of the screen that says “Go to the Stroop Test.”
- 3) Position your fingers on the “left” and “right” arrows of the keyboard and follow instructions. You will have three practice trials before you begin each of the blocks of ten trials in the three experimental conditions.
- 4) At the end of each block of trials, record the number of trials that you got correct and the time that it took to complete the ten trials. Enter these numbers on the data sheet provided with this lab.
- 5) When you have finished the three different 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 either a bar graph or a line graph. Be sure to clearly label the axes of your graph and display the data for the number correct and the time required on the same graph. You may draw this graph by hand or use a graphing program like Excel or SPSS.
- 2) Summarize the pattern of your results in a paragraph. 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 some conditions to be more subjectively difficult than others? Please elaborate.
 - *Did you notice any trade-off between speed and accuracy? In other words, did you do better if you took more time?
- 4) Write a few sentences explaining why the Stroop Effect occurs.

Reference:

MacLeod, C. M. (1991). Half a century of research on the Stroop Effect: An integrative review. *Psychological Bulletin*, 109, 163-203.

Stroop Effect Lab Data

CONDITION	NUMBER CORRECT	TIME REQUIRED
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**Block 1:
Identifying Colors**

**Block 2:
Identifying Words**

**Block 3:
Identifying the
Color of ink the
Color word was
Printed in**
