

20.13: Stroop Interference

Learning Objectives

- Stroop Interference demonstration

Research conducted by

Statistics Class

Case study prepared by

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Overview

Naming the ink color of color words can be difficult. For example, if asked to name the color of the word "blue" is difficult because the answer (red) conflicts with the word "blue." This interference is called "Stroop Interference" after the researcher who first discovered the phenomenon.

This case study is a classroom demonstration. Students in an introductory statistics class were each given three tasks. In the "words" task, students read the names of 60 color words written in black ink; in the "color" task, students named the colors of 60 rectangles; in the "interference" task, students named the ink color of 60 conflicting color words. The times to read the stimuli were recorded. There were 31 female and 16 male students.

Questions to Answer

Is naming conflicting color names faster or slower than naming color rectangles? Which is faster, naming color rectangles or reading color names? Are there gender differences?

Design Issues

This was not a well-controlled experiment since it was just a classroom demonstration. The order in which the students performed the tasks may not have been counterbalanced or randomized.

Descriptions of Variables

Table 20.13.1: Description of Variables

Variable	Description
Gender	1 for female, 2 for male
Words	Time in seconds to read 60 color words
Colors	Time in seconds to name 60 color rectangles
Interfer	Time in seconds to name colors of conflicting words

Data Files

Stroop.xls

Links

Full text of the above reference.

References

- Stroop, J.R. (1935). Studies of interference in serial verbal reactions. Journal of Experimental Psychology, 28, 643-662.

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