**Replication of Stroop Experiment**

RoseMarie V. Bermudez

Department of Psychology and Brain Sciences

University of California, Santa Barbara

PSY 117L: Lab of Memory and Cognition

Dr. Mary Hegarty

April 29,2023**Abstract**

**Introduction**

**Method**

**Participants**

Participants were 16 undergraduate psychology students (5 male, 10 female, and 1 nonbinary) ranging in age from 19-23 who participated for course credit at the University of California, Santa Barbara.

**Design**

The study is a 2x1 within-subjects design. The independent variable was the type of test given to the participants- naming the color of the font of words or naming the color of the rectangles. The dependent variable was how long it took for participants to say aloud the 50 colors.

**Materials**

A macbook laptop was used to view the different stimuli presented to participants. A slideshow presented the tests. The word test was 5 rows of 10 words (purple, brown, blue, red, or green) printed in purple, brown, blue, red, or green font that was different than the word stimuli. The rectangle stimuli was 5 rows of 10 purple, brown, green, blue or red rectangles. A timer was used to time the subjects’ response times.

**Procedure**

The participants entered the cubicle and took a seat in front of the laptop where the test was shown. They were asked for their ID, gender, and age. Then participants were told to read the instructions for the test and encouraged to ask clarifying questions, if they had any. The instructions were to name the color of the stimuli as quickly as they could. They were told the time would begin once they pressed the spacebar. Once they said aloud the last color, the time stopped and they read the instructions for the test that followed. The timer began once they pressed the space bar and stopped when they finished the test. The type of test shown first alternated between each subject. Participants were thanked for their time and effort and left the cubicle.

**Results**

It was hypothesized that it would take more time to name the colors of 50 words which read a different color than the font it was printed in than naming the colors of 50 rectangles. The mean response time for naming the color of the font was 47 seconds with a standard error of 1.91 while the mean response time for naming the color of the rectangles was 33.31 seconds and a standard error of 1.97. There was a significant difference in response times, t(15)= -7.83, p < 0.001. The results were consistent with the hypothesis.

**Discussion**

This study found a significant effect on stimuli presented with response times.

**References**

Stroop, J., 1935. Studies of interference in serial verbal reactions. Journal of Experimental   
 Psychology, 18(6), pp. 643-662.