

# CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0628** 

**Project Title** 

Is Stroop Effect Stronger on Right or Left Brained Students?

#### Abstract

# Methods/Materials

First, get a volunteer of proper age. Give that volunteer the right/left brained test and get their results. Once you write down their results, give the volunteer the Stroop Effect worksheet 1 (normal sheet). Tell them to read it as fast as they can when you say go. Time them and write it down. Then give volunteer Stroop Effect worksheet 2 (Stroop Effect sheet). Tell them to read the color of the word when you say go. Time them and write it down.

#### **Results**

The purpose of this experiment is to see whether right brained or left brained students are more effected by the stroop effect. My result of the experiment was the right brained students are more effected. To get this, students from sixth, seventh, and eighth grade took a survey to determine whether they were right or left brained. Once this was determined, they were timed while reading the color of the words from a normal sheet and a stroop effect sheet.

The average reading time for the left brained students from the original sheet was 8.68 seconds compared to 24.89 for the stroop effect sheet. The average reading time for the right brained students from the original sheet was 9.39 seconds compared to 27.45 seconds from the stroop effect sheet. As you can see, it took longer for the right brained students to read both the original and stroop effect sheet. The overall difference time from the original sheet compared to the stroop effect sheet for the right brained students was higher, having 18.06 seconds compared to the left brained students, having only 16.20 seconds.

# **Conclusions/Discussion**

My results indicate that my first hypothesis is incorrect because the left brained students did better than the right. It was surprising to me to see that the left brain students had less interference than the right brained students because my research didn#t lead me to believe this. Since the right brain dominates in creativity and drawing, I thought that the right brained students would be able to pay more attention to the color of the word rather than the meaning easier that the left brained students, who are known for being good at math and being more logical.

# **Summary Statement**

My project is about whether being dominate left or right brain causes an effect on the Stroop Effect.

# Help Received

None