

# CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

Sara N. Hubl

**Project Number** 

**J0618** 

**Project Title** 

Do You See What I See?

#### Abstract

# **Objectives/Goals**

The purpose of this project was to determine if the presentation of color words will have an affect on the subjects ability to respond correctly when asked to specify word or font color. I hypothesized that when presented with color words congruent and incongruent to their semantic meaning, the group Female Adults (ages 19-39) would have the highest percentage of correct answers.

#### Methods/Materials

In my study, I tested a total of fifty subjects consisting of 25 male and 25 female. These subjects were equally broken into the following age groups: Children, ages 5-11, Adolescent, ages 12-18, Adult, ages 19-39, Middle Age Adult, ages 40-59, and Seniors, ages 60+. Prior to testing, I explained to the subjects that they will be viewing a series of four tests formatted into a PowerPoint presentation, and each containing ten slides. The slides will consist of color words printed in congruent and incongruent font colors, but this will not be revealed to the subject. As the subject went through the testing process, I recorded their exact responses. Following the tests, I analyzed the data collected.

### **Results**

After reviewing the data I collected, this is a basic overview.

- 1. Female Adults, ages 19-39, performed the best out of all age groups with 99.5% of their answers being correct.
- 2. My research indicated that female brains pay more attention to detail and color, and as a result should likely score higher on the tests. On the contrary, however, my male subjects, scored higher than females in three out of the five age groups.
- 3. Male and female Children, female Middle Age Adults, and female Seniors performed the poorest.

#### **Conclusions/Discussion**

I concluded that my testing did support my hypothesis. The group Female Adults (ages 19-39) had the best outcome with respect to correct answers.

### **Summary Statement**

This project determined the ability of male and female subjects, in several age ranges, to respond correctly when asked to specify word or font color.

## Help Received

My father advised the project.