



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Stephanie Zgouridi	Project Number J0635
Project Title Colorful Confusion: Human Reactions	
Abstract	
Objectives/Goals To discover how age affects the way or amount a person is affected by stroop effect, and if people are physically or verbally faster.	
Methods/Materials Problem Statement: How much does the level of affection by Stroop Effect differ between age groups, and are people less quick when performing verbal tests than when physically performing it? Hypothesis: My hypothesis was that children will be least affected by Stroop Effect. Since they have less reading skills, they would be more focused on the color. For other part, it#s thought that of the two actions, moving is more automatic. The is because even if we can move and speak on impulse, we tend to move even when we#re not aware of it. Even if we sometimes speak in our sleep, it more common to move around. Materials: A laptop with internet connection for websites www.davd.tam.name.html and www.dcity.org was used, and standard office supplies. A camera was also needed. Procedure: Some major steps I took included testing with both physical and verbal tests, as well as simply testing to see how quick a person could react to a stimulus. The fact that I altered was the age of the subject (i.e. children, teens, and adults). My sample size was about 50 people, and each person took one physical and one verbal test. I took the average congruent time and average incongruent time for both the physical test, or test #1, and the verbal test, or test #2.	
Results Results: The average congruent and incongruent time for test #1 in the beginner group was 1.9289 seconds and 2.247 seconds. For intermediate, their congruent and incongruent time was 1.236 and 1.5113 seconds. The adult group had a congruent time and and incongruent time of 1.777 seconds and 2.157 seconds. For test #2, the beginners got a congruent and incongruent time of 8.584 and 35.257 seconds. For intermediate, the average for congruent and incongruent words was 7.411 and 21.595 seconds. Lastly, the adults received a congruent and incongruent time of 14.311 and 23.072 seconds.	
Conclusions/Discussion Conclusion: For the first part, the group least affected by Stroop Effect were the intermediates, those averagely affected were the adults, and the most affected were the beginners. The first part of the hypothesis was incorrect. Still, it appears that people were quicker physically than verbally. The average times physically only went up to about 3 seconds, but the verbal tests had times like 20 or 30 seconds.	
Summary Statement This project was about discovering more about human reactions, so that this knowledge may be applied to things in life more important than simply Stroop Effect.	
Help Received Mother drove to all testing locations.	