

# CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0404** 

**Project Title** 

**Color Thoughts: Word Color Association, Part 2** 

#### Abstract

## **Objectives/Goals**

The purpose of my project was to determine if there were trends in how people, based on race and ethnicity, associated certain colors with positive and/or negative words.

#### Methods/Materials

I designed the survey. Based on my previous research, I decided to use Cluster Sampling again to select which group of students to survey. I randomly drew nine teachers' names. I completed the Certification of Compliance for Research Involving Human Subjects. I submitted my research plan. I got approval from my project advisor, principal and teachers to distribute surveys to students in selected homeroom classes. I distributed the surveys. I collected the surveys and tallied the results. I reviewed and compared the results from both cohorts to see if there were any correlations with how people viewed colors. MATERIALS: Pencils, Letters Requesting Approval; Surveys, Tally Sheets

#### **Results**

I collected 150 surveys from the 2014-15 cohort (10.5% of the school's student population) and 249 completed student surveys from the 2013-14 (17.4% of the student population). Red received the highest number of votes related to negative words. Black received the second highest number associated with negative words. Both years, black received the lowest number of votes associated with positive words. Blue received the highest number of positive votes with green and purple also scoring high.

## **Conclusions/Discussion**

The experimental results partially supported my hypothesis that when people are presented with a list of descriptive words and choices of colors, they will frequently associate positive words with blue or white and negative words with black or brown. In order to determine if there were trends in people#s association of words with certain colors, I developed a survey with a combination of positive and negative words and color choices. When controlling for race, I thought black would have the highest association with negative words. Instead, it had the second highest number of responses overall compared to red. These finds were consistent with what the findings were based on gender. I also thought that more people would associate positive words more often with blue or white. While blue received the highest number overall for positive responses, the next color most frequently associated with positive words was green and purple.

## **Summary Statement**

This project uses cluster sampling to survey a random group of students to determine if people's association with certain words to colors is influenced by popular social norms and cultural perceptions.

### Help Received

Mother helped type report; Teachers distributed surveys; Mother's co-worker showed how to do pie charts in Excel