

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

**Project Number** 

**J0711** 

Name(s)

Diyya Ganju; Kieli Murray

# **Project Title**

# The Effect of Gender on Short-Term Memory Recall

# **Objectives/Goals**

# Abstract

The objective is to determine how gender affects short-term memory recall of pictures, numbers, and words in 11-13 year olds. We predicted that girls would have a higher recall rate due to the more advanced language skills of girls in this age group.

#### Methods/Materials

Created a slideshow with with three slides of seven digit numbers, three slides of seven objects each, and three slides with five words each. Had 163 informed test subjects ranging in age from 11-13 view the slides, then after a ten second period they inputted as much data as they remembered from the slide into a Google Form.

#### Results

Girls slightly outperformed boys on the numbers section (5.18 to 4.86 out of seven) and the words section (2.88 to 2.79 out of seven), but boys slightly outperformed girls on the pictures section (4.18 to 4.13 out of seven). There was only a 1.14% difference between the two genders' overall averages.

#### **Conclusions/Discussion**

After multiple trials spanning 163 test subjects, we have found there is no statistically significant difference between the short term memory recall of females and males. To conclude, gender does not have a significant affect on the short-term memory recall of 11-13 year olds.

#### **Summary Statement**

We devised a memory test and administered it to 11-13 year old males and females, and after analyzing their scores we found that gender does not affect short-term memory recall in this age group.

# **Help Received**

The sixth grade teachers at College Park Elementary generously allowed us to test their students.