

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

Sara C. Halvorson

Project Number

J0610

Project Title

The Effects of Gender on Short-Term Memory

Abstract

Objectives/Goals

The objective of my science project is to determine if boys or girls have better short-term memory.

Methods/Materials

- 1. Make Observations: I observed through my classes that girls tend to do better at memorizing words and boys are better at memorizing pictures. I went to several libraries to get books, magazines and articles that I could understand. I also used the libraries online documents to help me with my research.
- 2. Form a hypothesis: I used my research and observations to form my hypothesis. My hypothesis is that gender does not affect short-term memory.
- 3. Make a prediction: I predicted that girls would do better at memorizing words and boys would do better at memorizing pictures.
- 4. Perform the experiment: Make a poster of 15 pictures and another with 15 words. Get 10 boys and 10 girls around the same age. Hold up one poster at time for 15 seconds and give them one minute to write answers.
- 5. Analyze the results: Enter all the answers into a spreadsheet and compare
- 6. Draw a conclusion: See if my results match my hypothesis and prediction.

Results

The boys got 59 pictures right out of 140 (42%), while the girls got 56 pictures right out of 140 (40%). The boys identified 48 words out of 150 (32%). The girls identified 55 words out of 150 (37%). Looking at the boys results for both pictures and words shows they got 107 total right out of 290 (36.8%). The girls on the other hand got 111 total right out of 290 (38.2%).

Conclusions/Discussion

My experiment proved my hypothesis right, that gender does not affect short-term memory. My prediction that girls remembered more words also proved to be true, but the results were closer than I expected for the pictures.

Summary Statement

My science project trys to determine if boys or girls have better short-term memory by measuring thier recall of pictures and words.

Help Received

My science teacher helped with the overall direction of my project. My Dad showed me how to use tables and graphs in microsoft excel.