CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)

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Project Number

J0709

Project Title

Impact of the Power of Suggestion on Recall

Abstract

Objectives/Goals

I have wondered about the power of suggestion ever since I began hearing about cases in which people were convicted of a crime they did not commit due to #eye witness# testimony. I decided to test students in grades four through eight to see how well they could remember images, and if they might #recall# something they did not see. Based upon my research, I predicted that most test subjects would provide more accurate recall of the visual images on a short-term memory test, since the images would be fresh in their minds. For a long term recall test given 48 hours later, I believed the test subjects would exhibit less accurate recall since the images that were only suggested in the survey might become implanted in their memory. I also hypothesized that female test subjects would exhibit better recall than males and that the older test subjects would perform better than younger subjects.

Methods/Materials

I tested 170 students in grades four through eight. I had the subjects provide their grade, gender, and age. I created a PowerPoint of ten images and loaded it onto the Smartboard at the front of the class of students. Each image was different, with no relation to each other. After viewing the images, the subjects completed a multiple-choice survey which included extraneous items that were not shown in the PowerPoint. 48 hours later I had the same test subjects complete the same survey as the long-term recall test. I analyzed the 340 test results by short term versus long term, grade level, age, and gender.

Results

Of the 170 test subjects, on the short term memory test, 32% of the female test subjects believed they recalled something in the images that was not present, compared to 68% of the male test subjects who recalled items not present in the visuals. For the long-term memory test, 40% of the female test subjects recalled items not present in the images and 60% of the male test subjects recalled items not present in the visuals. I did find during my testing process, that based on my results, age was not correlated to any significant differences.

Conclusions/Discussion

My results showed that males were perhaps less likely to recall the visual images and more open to suggestion. Age did not appear to be a factor in the impact of suggestion against recall.

Summary Statement

I tested students in grades fourth through eighth to see how well they could remember images and if they may "recall" something they did not see.

Help Received