



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

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Project Title The Effect of Suggestion on Human Memory	
Abstract Objectives/Goals The objective was to determine if suggestion can distort a person's memory of a picture (called the suggestibility effect), if source-monitoring tests can reduce that effect, and if gender plays a role in how much a person is affected. The suggestion in this case was written misleading information given to the subject about what he or she had seen. Methods/Materials Informed consent was obtained from 52 randomly selected 7th grade girls and 52 randomly selected 7th grade boys. Each subject was given 20 seconds to view a picture taken from an Ikea catalog. Within each gender group, half the subjects then read a narrative describing the picture that included objects not present in the picture. The other half read a control narrative that was a straight description of the picture. Within each experimental and control subgroup, half the subjects were then given a basic yes/no response memory test while the other half were given a special source-monitoring memory test. Tests were analyzed using Microsoft Excel to determine how likely subjects were to think they remembered objects not present in the picture they viewed. Results Overall, subjects that were misled that took the yes/no test were more likely to mistakenly remember objects that weren't present in the picture ($p < 0.03$) than control subjects that took the same test. Girls were more likely to be misled than boys. The source-monitoring test sharply reduced the suggestibility effect overall ($p < 0.3$), to the point where the control boys appeared to be more easily misled than the experimental ones. Results were analyzed using a t-test. Conclusions/Discussion The results generally supported my hypothesis that suggestion does affect the memory of humans. They also supported the case for source-monitoring tests, which reduce the effect of suggestion. In addition, it appears that girls are more susceptible to the suggestibility effect than boys, which may be because females remember differently than males. This experiment raises questions about how questioning eyewitnesses during a trial can possibly adversely affect their memory of what they saw.	
Summary Statement This project tests whether there is a suggestibility effect, whether source-monitoring reduces that effect, and whether the effect differs between the genders.	
Help Received None	