



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Nicholas J. Kelly	Project Number J0314
Project Title Middle School Decision-Making: When Not Thinking Makes More Sense	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals This Middle School Decision Making Project investigates the following hypothesis: in situations where decision-makers must consider large amounts of information in drawing conclusions, it is best if they rely upon their unconscious analysis (gut instincts). However, when decision-makers must consider a limited number of factors, conscious analysis is a superior thought process.</p> <p>Methods/Materials I prepared two tests: a simple test containing four attributes of four houses and a complex test containing twelve attributes of four houses. On each test, one house was superior, with 75% of its attributes being positive. Other houses had fewer positive attributes. I administered the tests to 62 middle school students, whom I divided into four groups: conscious analysis thinkers taking a simple test; conscious analysis thinkers taking a complex test; unconscious analysis thinkers taking a simple test; and unconscious analysis thinkers taking a complex test. Conscious analysis groups had four minutes to select the best house, while unconscious groups were distracted for four minutes and then asked to choose the best house in a few seconds using their instincts.</p> <p>Results My data analysis revealed that gut instinct is a better thought process in both complex and simple situations. The unconscious analysis students chose the best house 44% of the time on the simple test and 67% of the time on the complex test. The conscious groups scored correctly 40% of the time on the simple test and 50% of the time on the complex test.</p> <p>Conclusions/Discussion My hypothesis was correct in that students using unconscious analysis scored considerably better than those using conscious analysis when making complex decisions. My hypothesis was only partly correct. The slightly higher scores of students using unconscious analysis on the simple test suggest that this may be the superior thought process for simple decisions as well.</p>	
Summary Statement Project examines how middle school students use conscious analysis and gut instinct to make decisions.	
Help Received Mother helped type/mount; Prof. Ap Dijksterhuis answered questions by e-mail about his prior research.	