



**Project ID: 111**  
**Senior Division**  
**Behavioral and Social Sciences**

**Luke Ceasar**  
**Central Union High School**  
**Gr. 10**



*Loss Aversion on a High School Level*

**AWARDS:**

***San Diego Psychological Association - Honorable Mention***

Abstract: Prospect theory has been the leading theory for decision-making since 1979 when it was invented. The theory has been used to explain the behavior of a wide variety of demographics and situations, whether that is the reaction of buyers to the price of eggs or the loss of aversiveness of capuchin monkeys. Its primary component, "Loss Aversion," is one of the main reasons it is used so widely and by so many people. This also details the "Utility Theory," the theory that was made obsolete by the Prospect Theory. The hypothesis "If the loss averseness of someone is related to age the younger they are the less loss averse they are."



**Project ID: 112**  
**Senior Division**  
**Behavioral and Social Sciences**

**Spencer Foss**  
**San Diego Jewish Academy**  
**Gr. 11**



*Testing Priming and Framing with the Ellsberg Paradox*

**AWARDS:**

***San Diego Psychological Association - Honorable Mention***

In order to investigate previous priming projects' inconsistencies with "negative-priming," the relationship between priming and framing phenomenon was assessed with a form of the Ellsberg Paradox.

It was hypothesized that there would be a 15-20% increase in the choice of certainty between the groups with exclusively framing, and those with both framing and priming.

The positively framed groups started out with zero candies and were given the certain choice of gaining five candies, or taking a risky choice and gaining zero to ten candies. The negatively framed groups started out with ten candies and were given the certain choice of losing five candies, or taking a risky choice and losing zero to ten candies. The priming was introduced in separate test groups through both visual and auditory means.

It was found that negative framing and priming were statistically different from exclusively using negative framing and that priming decreased the choice of certainty by 22.8%. This outcome does not align with the initial hypothesis, but affirms that the framing of the situation affects the power of priming.



**Project ID: 113**  
**Senior Division**  
**Behavioral and Social Sciences**

**Izel Garcia**  
**Central Union High School**  
**Gr. 10**



*Clothing's Effect on Perceived Professionalism*

**AWARDS:**

***San Diego Psychological Association - Honorable Mention***

Ashley Donell proved that how conservative someone dresses can greatly impact how professional and reliable others see them as; along with any hair dyed an unnatural color. Adrian Furnman Pui Shuen Chan, and Emma Wilson concluded that patients almost always preferred a lawyer or dentist wearing formal attire. Kristin Lee Sotak, Andra Serban, Barry A. Friedman, and Michael Polanski found that people perceived someone dressed in a more traditionally professional manner to be more responsible and reliable. Kristina M. Chapple and Pamela W. Goslar observed that patients trusted medical students who wore suits more than those who wore scrubs. Alyse Kalish demonstrated how what you wear can affect how you act in a workplace, and that intention will affect how you are perceived. Matthew Hudson and Tory Rodriguez researched how clothing can affect how you think and negotiate, and can impact your hormone levels and heartbeat. Faculty at Oswego school of business showed how attire can change how ethical people believe you to be. This study was conducted to prove whether or not formal attire was as important as it has been made out to be. The study used data collected from high school students using a survey. Data was compared and used to create charts to decide the outcome of the study.



**Project ID: 114**  
**Senior Division**  
**Behavioral and Social Sciences**

**Kavya Gopinath**  
**Del Norte High School**  
**Gr. 9**



*How Positive Words Bring an Impact Scientifically*

**AWARDS:**

***San Diego Psychological Association - Honorable Mention***

This Project was inspired to benefit all students, they get stressed out due to overwhelming workload. The initial idea was to include a survey with the students' responses towards positive affirmations being repeated throughout a span of 24 days. Our hypothesis is that subconscious thoughts enforce a positive mindset.

The students were asked to repeat the phrase "Healthy Life for all, Happy Life for all, Peaceful Life for all, Successful Life for all, Safe for all, Wisdom for all", and gradually increase the repetitions. The survey consisted of questions requiring responses in a Likert scale to monitor students' mental health. Qualities such as quality of life, positive mindset, academic/sports performances, attitude, anxiety levels, and stress were assessed each week.

P1: Starting out stressed, P1 practiced the daily affirmations regularly and experienced a growth from (3-8). P1 responded that she noticed being more happy in her attitude (2-8) and also gained a positive mindset. (3-9)

P2: Managed to practice the affirmations, but wasn't super consistent with the count increments. This led to P2 maintaining a score of 7 in "Better Quality of Life"

P3: Starting out moderate in positivity, the regular practice of daily affirmations helped this participant gradually increase their score from 6 to 8.

Overall, we discovered that reinforcing positive thoughts into our subconscious mind repeatedly increases our positive thoughts, enforcing a growth mindset and healthier lifestyle. We noticed that people who remained the most consistent in repeating the affirmations improved at a faster and more successful rate.



**Project ID: 115**  
**Senior Division**  
**Behavioral and Social Sciences**

**Esteban Munoz**  
**Central Union High School**  
**Gr. 10**



*The Relationship Between Confidence and Competition, and Their Effect on Performance*

**AWARDS:**

***San Diego Psychological Association - Honorable Mention***

The purpose of this study is to find the relationship between performance and competition. This is done by collecting the data of each of the subjects' confidence, putting them into a small competition. Competition stresses people out so much that their performance doesn't do well because their confidence is too high or too low. Self-confidence itself almost always has a positive effect on performance. Self-confidence is also important in competitions like sports and is used by many athletes around the world. It is hypothesized that competition can increase the quality of performance and confidence can increase the quality of performance. Three trials of 6 subjects in competition each trying to beat the other in a game of domino toppling were set up. Also a control group of four subjects domino toppling by themselves was set up. Results indicate that the first hypothesis was not supported by the data and the averages of both the competition and control group had a 5.3 second difference in their times to finish domino Toppling. The second hypothesis was supported by the data as the winner group of the competition group had the most confidence level and best times while the loser group had the worst times and lowest confidence levels. This is most likely due to confidence levels being confidence related to motivation in competitions. The more belief you have in your ability the more you will try. If you had a low belief in your ability you most likely wouldn't try as hard.



**Project ID: 116**  
**Senior Division**  
**Behavioral and Social Sciences**

**Aneesh Nudurupati**  
**Mt. Carmel High School**  
**Gr. 11**



*Hypnotizability and the Prevalence of Psychosomatic Conditions in Adolescents*

**AWARDS:**

***San Diego Psychological Association - Senior Division 2nd Place***  
***CSEF Qualified***

Hypnosis has become more popular in recent years. It is a psychological technique used by certain practitioners across the world who are considered clinical hypnotists, who along with modern medicine, use hypnosis to help manage and treat/improve the symptoms of various conditions. Hypnosis is most similar to Cognitive-Behavioral Therapy(CBT) and has similar effects and uses. I hypothesize that as a patient's hypnotizability increases, so will the prevalence of psychosomatic conditions.

Procedure: Create and administer a survey that checks for the susceptibility to hypnosis and prevalence of psychosomatic symptoms in adolescent participants. Analyze the data using a Pearson correlation coefficient, among other tests. The goal was to find a strong correlation between my two variables.

Results: A Pearson correlation coefficient of 0.5194 indicates a strong correlation between my two variables. The associated p-value is 0.0001835, and since it's lower than the commonly used critical value of 0.05, my null hypothesis can be rejected.

Conclusion: I reject the null hypothesis based on my data, meaning that my original hypothesis that the prevalence of psychosomatic symptoms is correlated with hypnotizability scores is true. Therefore, hypnotizability scores can be used as an indicator of the likelihood of developing psychosomatic symptoms and hypnosis may function well in individuals who have a high prevalence of psychosomatic symptoms.



**Project ID: 117**  
**Senior Division**  
**Behavioral and Social Sciences**

**Steve Zhang**  
**Francis Parker School**  
**Gr. 11**



*Eyes on the Page: A Study of Visual Attention During Storytime*

**AWARDS:**

***San Diego Psychological Association - Senior Division 1st Place***  
***CSEF Qualified***

The US faces a critical challenge in young students' reading scores. To address this issue, early reading development becomes crucial. This study investigates how children establish accurate word-object associations during real-time interactions.

The study involved 38 child-parent pairs in a home-like laboratory, where eye-tracking devices monitored children's visual attention toward specific objects and microphones recorded speech while parents read books to their children. Wall-mounted cameras recorded a 360° video of the interaction. The videos were annotated frame-by-frame and compiled into a spreadsheet. Various scripts were developed in MATLAB for data processing and mining.

The data shows that book reading is very fast-paced, and children often struggle to focus on the named object. Analyzing children's eye movements for the 3 seconds after the parents name an object reveals that, 40% of the time, children spend the entire 3 seconds searching for the object. Parents' repetition of object naming increases the children's attention levels on the object. The second repetition increases the chances that the children look at the object by 30%, and at the sixth repetition, the chance is 99%. Additionally, parents pointing to the object improves the average time that children look at the named object by 18.5%, and when children point with their parents, the average time spent looking at the named object improves significantly by 63%.

This study highlights the crucial role played by parental repetition of object names and interactive gestures between parents and children during book reading in the early development of reading skills.