

## CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Project Number

Mayra Arellano

**S0402** 

## **Project Title**

# Red Pill or Blue Pill? How Age Impacts Confirmation Bias

### **Abstract**

## **Objectives**

The objective of the project is to determine whether age has an impact on confirmation bias.

#### Methods

A random sample of adolescents and adults were given an adapted version of Wason's 2-4-6 task to assess confirmation bias.

### **Results**

The total presence of confirmation bias for each group, measured as the proportion of times a subject tried to prove their hypothesis, was compared to determine whether the data was statistically significant using an independent t-test and standard deviation.

#### **Conclusions**

It was statistically significant at the 95% level that the adult group had lower confirmation bias than the adolescent group. The project provides evidence that age does impact confirmation bias.

# **Summary Statement**

I found evidence that adults have lower confirmation bias than adolescents.

## **Help Received**

I designed and conducted the experiment myself. My teacher, Jeffery Adkins, reviewed my work.