

# **Indiana Psychology Awards**

## **Junior Division**

### **Minna Vens**

Hull Rd Eagle Elementary School, Grade 4  
Zionsville IN

Project Title: "Spot It! Do People See Faster in Color or Black and White?"

#### **Abstract:**

The reason I chose to do this project is because my Grandma and I were playing the game Spot It, and she said it was the color that helped her find the match. I decided I wanted to test if this were true. I wanted to find out if people see faster in color or black and white. I also wanted to know how the eye sees color. Another reason is that I have glasses, and I wanted to know more about vision. Also, if I know if people see faster in color or black and white, I could apply that to people's health. For example, if we knew that people saw better in color / black and white, we could apply that knowledge to road signs because the quicker you see the road sign, it is less likely you'll get into an accident. So, I created this experiment to test if people see faster in color or black and white. The experiment uses Spot It game cards that are in color and black and white. I also use a stopwatch to time people. Each subject was tested with 3 sets of color cards and 3 sets of black and white cards. They had to spot the match in each set of cards as quickly as they could.

### **Hetvi Patel**

Christ The King School, Grade 7  
Granger IN

Project Title: "Does Color Affect Memory?"

#### **Abstract:**

Memory is important because it is a huge part of a person's identity and is very important in everyday life. Color therapy is very important to the medical field because it can help with regulating a person's pulse and blood pressure. So how can these two very different ideas be connected? The purpose of my project was to find out whether or not color would influence memory. I hypothesized that photos in color are easier to remember than photos in shades of gray because humans perceive the shape, size, and orientation of objects better when they are seen in color. I investigated the relationship between color and memory by seeing if people remembered photos in black and white or photos in color better. I did this by showing eight participants a slideshow consisting of an even mix of colored and grayscale photos for a specific amount of time. I then showed them the slideshow again with more photos mixed with the others and asked the participants to write down the photos they remembered. My independent variable was which photos were in shades of gray and color, and my dependent variable was the number of gray and colored photos participants remembered. The results were that six out of eight participants remembered more colored photos than grayscale, and the average scores were 4.75/10 colored photos remembered correctly and 4.5/10 grayscale photos remembered correctly. This project can contribute to our scientific knowledge on color therapy and color psychology.

## **Senior Division**

Karina Castaneda  
Frankfort Middle School, Grade 10  
Frankfort IN

Project Title: "Distraction Reaction: The effects of language distractions on bilingual students"

### **Abstract:**

The purpose of my project was to see if bilingual (English/Spanish) students are more susceptible to linguistic distractions than their monolingual (English only) counterparts. I hypothesized that bilingual students would be more susceptible to the linguistic distractions. For most bilingual students, Spanish is their initial language, and they learn English later. When there are language distractions in that original language, their brains are naturally drawn to them. I first made a test of fifteen questions. On the front, I asked three questions in Spanish. These questions classified the student as bilingual or not. I then found recordings of the same story in Russian, English, and Spanish. I gave the test to all of the middle school students in my corporation (under teacher supervision). Once testing started, a timer in the room counted up, and a recording in one of the three languages began. As students finished testing, the elapsed time was recorded. I graded the tests and sorted them into groups based upon the language distraction, and whether participants were bilingual or not. For each group, I recorded each participant's gender, score, and finish time. I then analyzed the data. I found that monolingual students are not affected when it comes to language distractions. However, bilingual students are negatively affected by a language distraction in either of their practiced languages, and the magnitude of this distraction is larger when the distraction is in Spanish. This tells me that bilingual brains are constantly attending to conversations in their practicing languages.

## **Bethany Petry**

Ft. Wayne Area Homeschools, Grade 11  
Huntington, IN

Project Title: "Why You Gotta Be So Rude?"

### **Abstract:**

Rudeness can be defined as insensitivity to the feelings of others. I believe there are two types of rudeness--unintentional and intentional. It's my hypothesis that those with the Myers-Briggs personality type INTP (Introvert, Intuition, Thinking, Perceiving) are more likely to be unintentionally rude. In other words, these individuals won't be able to perceive body language and emotional signals from others. So, when interacting with others, these individuals may come across as being "rude" by apparently disregarding the feelings of others--and yet this is unintentional and unavoidable. On the other hand, I believe that individuals with the Myers-Briggs personality type INTJ (Introvert, Intuition, Thinking, Judging) are more likely to pick up on non-verbal cues, and so can rightly interpret how others feel. Because of this, they can choose to ignore the feelings of others. When they do this, they are intentionally rude.