CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY

Name(s)
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Project Number
J1316

Project Title
Now You See It, Now You Don't! Does Age Affect the Size of a Person's Blind Spot?

Abstract

Objectives/Goals
My objective was to determine if age affects the size of a person's blind spot. I predicted that as age increased, the size of a person's blind spot would increase.

Methods/Materials
Fifteen male test subjects, five from each age group (5-15 years old, 25-40 years old, and over 50 years old), were given blind spot tests to determine the size of their blind spots on paper. This was done by having each test subject stand across from a piece of paper, close his right eye, and focus his left eye on a dot on the right hand side of the paper. As I slid a pencil from left to right across the paper, the test subject told me when the tip of the pencil disappeared and reappeared. I marked these points and then measured the distance between them. The size of the test subject's blind spot on paper, and the distance between the test subject's eyes and the paper, were entered into a computer spreadsheet. A calculation was then performed to determine the diameter of the test subject's actual blind spot on his retina. An average blind spot size for each age group was then calculated.

Results
The results of my testing showed that the 25-40 age group actually had the largest average blind spot of 1.201mm, while the oldest age group, 50 and over, had the smallest average blind spot of 0.999mm. The 5-15 age group had an average blind spot of 1.092 mm.

Conclusions/Discussion
I predicted that the size of a person's blind spot would increase with age. However, my experiment did not prove my hypothesis to be true. The oldest age group actually had the smallest average blind spot size.

Summary Statement
My project is about whether age affects the size of a person's blind spot.

Help Received
My mother helped me proof read my final report and helped me arrange my display board.