CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

Name(s)
Jeannie J. Lee

Project Number
S1008

Project Title
You Can't Believe What You See: A Blind Spot

Abstract

Objectives/Goals
My project is to determine if age affects the size of the human blind spot. I believe that as people grow older, the size of their blind spots will increase.

Methods/Materials
For this project, 100 test subjects based on 5 different age groups (20 test subjects per group) were tested by using my blind spot testing device. I measured the size of each test subject's blind spot by finding the difference between the points of disappearance and reappearance of a specific dot marked on the device. Each test subject was tested three times, and the average of the three differences represented that individual. The final average of an age group was represented by the average of the 20 test subjects' differences.

Results
For Group 1 (ages 6 to 12), the average difference was 6.4. For Group 2 (ages 13 to 18), the average difference was 8.6. For Group 3 (ages 19 to 40), the average difference was 9.9. For Group 4 (ages 41 to 64), the average difference was 11.0. For Group 5 (ages 65 and above), the average difference was 11.4.

Conclusions/Discussion
The results of this experiment show that as people age, the size of their blind spots increase. Along with other parts of the body, the human eye goes through physical changes that affect the proportions of the eye. As the blind spot grows, it narrows the spectrum of what one can see, affecting the overall vision of the individual.

Summary Statement
My experiment proves that as people age, the size of the human blind spot enlarges.

Help Received
Science teacher, Mrs. Olivares, helped me create the test subject categories;