

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

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Project Number

J0306

Project Title

How Fast Can You React?

Abstract

Objectives/Goals

My experiment was chosen to find out if people react to sound faster with a blindfold or without a blindfold.

Methods/Materials

On the computer I tested people's reaction times. They were asked to react as fast as they could to a beep on the computer. I tested 22 convenient people between age 9 and 45 and discarded 1 person's results. I tested each of my subjects 22 times with the blindfold and 22 times without the blindfold, and then I recorded how fast they reacted. The computer measured how fast it took them to react in milliseconds. I averaged all results and threw out the high and low times.

Results

The average reaction time with the blindfold on was .328 seconds and without the blindfold it was .308 seconds. Therefore, my subjects reacted faster without the blindfold on. Also I noticed that overall, adults did better than kids.

Conclusions/Discussion

I concluded that my hypothesis (people can react faster with the blindfold) was incorrect, and my subjects reacted faster without the blindfold on. I think that happened because with the blindfold on, they might have forgotten what they were doing and got distracted, achieving a slower reaction time. Now I realize that having a blindfold on or off affects your reaction time to sound. In the real world people could use this information while swimming competitively to know whether or not they should start with their eyes open or closed to get a better start after they hear the starting horn. If they open their eyes, they will get a faster start

Summary Statement

My project is about testing people's reaction time to sound to see if they react faster with or without a blindfold.

Help Received

My dad helped me type my report. My dad's friend developed the computer program to measure reaction times. My mom helped me glue things on my backboard.