CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY

Name(s)
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Project Number
S0304

Project Title
How Do Cell Phones Affect Teens' Reaction Times?

Abstract

Objectives/Goals
The objective of our project was to determine if cell phone usage, while driving, affects teens' reaction times.

Methods/Materials
We randomly selected fifteen boys and fifteen girls from ages fifteen to eighteen with driving experience. We constructed an apparatus which consisted of: an electronic timer, a button placed at foot level, a button placed at hand level, two lights placed in the test subject's peripheral vision, electrical wire and two AA batteries. We recorded the test subject's four initial reaction times and then compared them to their four reaction times while holding and talking on a cell phone.

Results
It takes teenagers, on average, 51%-57% longer to react while talking on a cell phone.

Conclusions/Discussion
Our conclusion is that cell phone usage while driving greatly affects the driver's reaction time, therefore putting themselves and others in danger.

Summary Statement
How do cell phones affect teens' reaction times?

Help Received
Father helped make the apparatus. Cadence's Grandfather helped with the graphs and analysis.