

# CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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**Project Number** 

J1117

**Project Title** 

Motor Mouth vs. Motor Skills

### Abstract

## **Objectives/Goals**

The objective of my project was to inform people of the dangers of talking on a cell phone while driving or performing other potentially harmful activities. I wanted to find out if talking on a cell phone impairs your ability to access other basic motor skills. The goal of my project was to provide the world safer road ways by informing young drivers of the dangers of talking on a cell phone while driving.

#### Methods/Materials

My materials consisted of student consent forms, 3 tennis balls, 2 cell phones, and a scripted conversation. After filling out consent forms, 98 6th, 7th and 8th grade students tried to catch 10 tennis balls with their favored hand. They then had to catch the same number of balls while talking on a cell phone with their other hand.

#### Results

I found that on the average all students caught 10% fewer balls while talking on a cell phone. My two variables were gender and sports players. Girls performed at an average of 20% less than boys, while children who participated in league sports caught 10% better than those who did not. I did not find any correlation between playing an instrument and being able to catch ball.

#### **Conclusions/Discussion**

My project found that talking on a cell phone directly impairs your ability to perform simple motor skills. While males and sports players were able to catch more balls, they were still adversly affected. Current studies show that talking on a cell phone while driving is more dangerous than driving moderately drunk yet cell phone related accidents continue to spiral upwards. In the future I would like to continue my research using a hands free head set, which will be required by law starting July, 2008.

I also think it would be helpful for our school P.E programs to teach more hand eye coordination related skills.

### **Summary Statement**

My project tests middle school students ability to talk on a cell phone while performing basic motor skills.

## **Help Received**

this was an optional project for 7th graders at my school that was conducted under minimal teacher supervision.