



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Megan R. Montgomery	Project Number J0627
Project Title Driving while Talking: A Dangerous Diversion?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my experiment is to see if talking on a cell phone while driving impairs the ability of that driver. My hypothesis is that talking on a cell phone while driving a car will increase one's risk of being involved in an accident because it will cause a person to divert his or her attention from the road in order to carry on a phone conversation.</p> <p>Methods/Materials I tested thirty people by having them operate a driving simulator game at an arcade. Each participant drove the game one time without using a cell phone. The results of each participant in the first test was then recorded. Each participant then drove the same course a second time and during the course answered a cell phone call and then carried on a conversation by answering a series of questions designed to make them think. The results of the second test was then recorded and compared to the results of the first test. The materials needed were a driving simulator game at an arcade, a cell phone, a pre-determined set of questions, quarters for the game, and thirty participants.</p> <p>Results The results of my experiment determined that drivers using a cell phone tend to drive faster. The majority of participants in my experiment reported that it was more difficult to safely steer the car while talking on the cell phone. All of the participants in my tests said that they had a hard time concentrating on their driving while talking on the cell phone. The participants that talked on the cell phone while driving also caused more damage to their cars and the cars around them as measured by the simulator.</p> <p>Conclusions/Discussion The affect of a cell phone on a driver's ability to safely operate a motor vehicle is that a cell phone basically forces a person to divert their attention away from the road, their speed, and the cars surrounding them in order to carry on a conversation. Each person I tested on the machine went faster while using the cell phone and also caused more damage to their car and the other cars around them. They also reported feeling distracted and they found it harder to steer the game. This helps prove my hypothesis that using a cell phone while driving increases the risk of being involved in an accident is true because one would be more distracted from the road, their speed and the other cars around them. In conclusion a cell phone is a very dangerous diversion to a driver.</p>	
Summary Statement Talking on a cell phone while driving increases one's risk of being involved in an accident.	
Help Received My mother and father assisted by driving me to the arcade and they helped me recruit participants for my experiment. My father also took pictures of me testing my participants in my study.	