

Cell Phone Study

Students help researchers examine what distracts drivers

Two UL Lafayette psychology majors have gained a greater perspective of the potential consequences of using cell phones while driving.

Lauren Short, a junior, and Stevie Breaux, a senior, are helping Dr. T. Scott Smith with his continuing research on cell phones. An educational and cognitive psychologist, Smith is an assistant professor of psychology at the University. He

has examined the wide-ranging implications of communication technology in vehicles and elsewhere.

Cell phone use behind the wheel is dangerous, safety experts say. The National Safety Council, a nonprofit advocacy group, reported that cell phone use while driving leads to 1.6 million crashes annually. About 3,500 fatalities are “distraction-related.” Texting and driving causes a quarter of all car accidents in the United States, injuring about 330,000 people every year.

Cell phones represent cognitive, visual and physical distractions, according to Smith. Texting while driving adds a consequential complication.

Short is helping Smith road test his “trifecta theory” about the implications of cell phone use behind the wheel. They placed dashboard cameras in the cars of a total of 46 student volunteers. Each camera remained in a volunteer’s vehicle for two days.

The volunteers self-reported their behind-the-wheel activities during those two days. They were asked whether they used their cell phone to listen to music, call others, text or check e-mail or the Internet. Their answers will be compared to the dashboard videos.

By early October, 10 participants’ videos had been reviewed.

Short said those volunteers initially appeared self-conscious and regularly looked over at the cameras. As time passed, they forgot they were being observed. “They would sing. They would text. They would do all the behaviors they normally would do,” she said.

Preliminary results showed that of the 10 participants, 85 percent never touched their phones while driving. About 3 percent talked on the phone, and another 2 percent texted.

Twelve percent checked their phones at some point for texts or missed calls. But nearly 92 percent used their phone to search or play music, countering an oft-cited perception that it’s texting behind the wheel that endangers drivers the most.

The “manipulation of music may represent a primary form of distraction, although Internet, texting and voice communication often



represent the main focus of studies and litigation,” Smith said.

While the results show relatively low incidences of cell phone use, vigilance is still needed, Smith cautions. “It only takes one distracted task to cause an accident.”

The preliminary results are based on visual observations of the recorded videos. Breaux helped Smith and Short find facial-recognition technology that could help detect drivers’ eye

movements in the videos and better gauge how often they engaged in distracting behavior.

Breaux said the distraction research “opened my eyes to how dangerous texting can be. A lot of the studies I looked up had videos that went along with them. It was camera footage of a person texting. It was kind of scary to watch these people. You see how long they are not looking at the road. You look down for a *second* and something could happen.”

When a driver sends or reads a text, his eyes are off the road for five seconds, according to the National Highway Traffic Safety Association. The NHTSA website notes that when a vehicle is traveling at 55 mph, “that’s like driving the length of an entire football field with your eyes closed.”

Smith plans to use the videos of volunteer student drivers in future research that will include other car-based distractions.

He and Dr. Xiaoduan Sun, a UL Lafayette civil engineering professor, have teamed up to examine how technology in today’s vehicles is compounding the problem of driving while inattentive.

Smith said “cell phone distraction” is becoming an antiquated term. “You might put your cell phone down, but in a lot of cars now, everything you can do on your cell phone is on the monitor. It’s the same thing.”

Sun’s previous research focused on the effect of roadway designs on traffic accidents. Her collaboration with Smith is the first time she’s examined psychological factors that might contribute as well.

“We can’t forget human factors. We have to recognize that no one’s perfect – to err is human,” she said. “Drivers, vehicles, infrastructure – it all works together. We have to recognize human factors, what we can and cannot do physically and mentally.”

Smith added: “Cell phones represent technology that, if used improperly at the wrong time, can have serious implications. Research is needed to identify how safety may be improved when incorporating technology into our daily lives.