

Study: Hands-free doesn't equate to risk-free

By Larry Copeland, USA Today

The increasingly popular voice-activated, in-car technologies that allow drivers to text, talk on the phone or even use Facebook while driving still allow for dangerous mental distraction, according to a study.

In the most comprehensive study of its kind to look at drivers' mental distraction, the AAA Foundation for Traffic Safety found that as mental workload and distractions increase, reaction time slows, brain function is compromised, and drivers scan the road less and miss visual clues, researchers say. This could potentially result in drivers being unable to see items right in front of them, such as stop signs or pedestrians.

The study sought to measure the impact of cognitive or mental distraction on driving. The other two types of driver distraction, visual and manual, which involve the eyes and the hands doing something like looking at a cellphone while sending a text have been studied much more extensively.

"There's a sort of arms race (among auto manufacturers) over what's going into the car these days," said David Strayer, a University of Utah cognitive distraction expert who co-authored the new report. "Any function that can be put in the car is being put in the car without a full examination of whether it should go in the car."

The foundation's research, which involved 150 drivers, follows a smaller study by the Texas Transportation Institute released in April, which found that texting while driving using a voice-to-text application was just as dangerous as texting manually.

Drivers in the AAA Foundation study were analyzed while engaging in eight different distracting activities as they “drove” on a sophisticated driving simulator and in an instrumented vehicle on residential streets in Salt Lake City.

Researchers measured brain waves, eye movement and other metrics to assess what happens as drivers listened to an audio book, talked on the phone or responded to voice-activated emails while driving. They found that, as drivers’ mental workload increased, their reaction time slowed, their field of vision narrowed and they missed visual cues.

“This is a reminder to the general public that distracted driving is real,” said Peter Kissinger, president and CEO of AAA Foundation for Traffic Safety. “Three out of four drivers believe that hands-free is better than handheld. But hands-free is not risk-free, and we now have new evidence that clearly demonstrates that.”

Kissinger said the foundation “is calling upon auto manufacturers and the electronics industry to work with us so we can learn as much as possible. Before any more wholesale installation of new technology, let’s step back and measure how the technology affects mental distraction.”

The group is also urging the National Highway Traffic Safety Administration to broaden its driver distraction guidelines to include the kind of mental distraction associated with voice-activated calling.

In March, ABI Research, a market intelligence company specializing in global technology markets, projected that infotainment systems in new vehicles would jump from 9 million in 2013 to 62 million in 2018.