

Student Drivers -- Especially Males -- Think Hands-free Cell Phones are Safer

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(PhysOrg.com) -- Driver education classes should be teaching young drivers that all kinds of mobile phones, both conventional and hands-free, are a dangerous distraction, says a University at Buffalo researcher, who studies driving behaviors.

"Neither type of cell phone -- either a handset or hands-free phone -- is safe, according to transportation research, but unfortunately this message isn't reaching many young [drivers](#)," says Changxu Wu, Ph.D., assistant professor of industrial and systems engineering in the UB School of Engineering and Applied Sciences.

Recent research co-authored by Wu reveals just how unaware some [young drivers](#) are about the dangers of hands-free cell phone use while [driving](#). In a study of 164 student drivers in China, ages 18-35, nearly half said that they intended to use a hands-free [cell phone](#) instead of a handheld phone because they assumed that it was the safer choice.

And because young male drivers (ages 17-24) in the study appeared to be more likely than young female drivers to use hands-free cell phones (male drivers perceived about 20 percent less risk of using hands-free phones than female drivers, according to study results), Wu says it would be appropriate for young males to receive more instruction on this issue than females.

While the study, published in Transportation Research Part F: Traffic Psychology and Behaviour (May, 2009), did not address the issue of

texting and driving, Wu says the results imply that all of these dangerous driving behaviors must be far more thoroughly addressed by driver education than is now being done.

Although the study was conducted on Chinese students attending driver education classes in Beijing, the researchers say that the findings are completely applicable to drivers in general, including those in the U.S.

According to Wu, research has shown that when the brain is called upon to perform two different tasks at once, there is a marked difference in the amplitude of brain wave function; if the brain perceives a high workload, he explains, it will delay the processing of certain messages.

"That's what the brain does to manage the workload," says Wu, "and that's what causes drivers to get distracted from concentrating on the road."

He adds that even dialing a number while driving is causing a higher mental workload.

"So if dialing itself causes a high workload, then driving while texting will produce an even higher - and more distracting - workload," says Wu.

But while student drivers have apparently gotten the message that it is dangerous to use handheld cell phones while driving, they falsely assume that hands-free cell phones are safe.

Wu added that that perception may also be prevalent in the general population.

"Driver education classes must begin to address this discrepancy, by instructing students that even hands-free phones affect driver behavior," says Wu.

Wu notes that it may be easier to address the phone issue in China, where driver education classes are mandatory for all drivers, than in the U.S. where such classes are optional.

Co-authors on the study with Wu are Ronggang Zhou of the Beijing University of Aeronautics and Astronautics and Pei-Luen Patrick Rau and Wei Zhang of Tsinghua University in Beijing.

Provided by University at Buffalo ([news](#) : [web](#))

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