Don't talk and drive: Examination of nearly 100 prior studies on cell phone use in cars underscores hazards

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In their detailed analysis of dozens of empirical studies on the effects of talking while driving, human factors researchers have provided a comprehensive and credible basis for governments seeking to enact legislation restricting drivers' use of cell phones. The analysis, just published in Human Factors: The Journal of the Human Factors and Ergonomics Society, is titled “Does Talking on a Cell Phone, With a Passenger, or Dialing Affect Driving Performance? An Updated Systematic Review and Meta-Analysis of Experimental Studies.”

Author Jeff Caird, a professor in psychology and community health sciences at the University of Calgary, notes that the number of studies on cell phones and driving has more than tripled since the last meta-analysis was conducted in 2008. He and coauthors Sarah Simmons, Katelyn Wiley, Kate Johnston, and William Horrey aimed to update and extend the reliability and validity of the previous conclusions.

They examined 93 studies that were published between 1991 and 2015 and measured the effects of cell phone use on driving. The overall sample had 4,382 participants, with drivers' ages ranging from 14 to 84 years. The studies measured variables such as drivers' reaction time to hazards or emergency events, stimulus detection, lane positioning, speed, eye movements, and collisions.

Overall, the studies concluded that speaking on both handheld and hands-free phones negatively impacted driving performance, and drivers who engaged in conversation with their passengers experienced similar negative effects. Moreover, dialing, like texting, requires drivers to look away from the road for an extended period and can result in even greater detriments to driving performance than conversation alone.

"Driving is a distraction from everyday distractions such as cell phones," Caird notes. "The technological solution of driverless vehicles will allow us to get back to our preferred distractions. Until then..."


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