

Answering messages behind the wheel is as dangerous as being twice over the limit

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Answering messages behind the wheel is as dangerous as being twice over the limit. Credit: SINC

Scientists from various Australian universities in collaboration with the University of Barcelona have compared the effects of mobile use while driving with the effects of alcohol using a simulation. Their experiment demonstrates that using a handsfree kit or sending text messages is the same as being above the legal alcohol limit.

The Australian universities of Wollongong, Victoria, Swinburne of Technology, the Institute for breathing and sleep and the University of Barcelona have measured the reaction capacity behind the wheel of twelve healthy volunteers who participated in a [driving simulation](#) test lasting two days, each a week apart.

On the one hand, they took the test having consumed alcohol, and on the other, while using the mobile telephone. Habitual drinkers and those who had never consumed alcohol before the test were not allowed to participate.

"We conducted the study in Australia and the participants, who were volunteer students holding a [driving licence](#), had to keep their position in the centre of the left lane on the screen at a speed of between 60 and 80 kilometres per hour, breaking every time a lorry appeared," as explained to SINC by Sumie Leung Shuk Man, co-author of the study published in the '*Traffic Injury Prevention*' journal and researcher at the University of Barcelona.

By comparing the [blood alcohol concentration](#) (BAC) with the effects of [mobile phone usage](#), they saw that when the telephone conversation required high cognitive demand or when answering a text message, the BAC test was above legal limits in Spain (0.5 gram/litre). Headphones and a microphone were used to simulate the handsfree effect.

Handsfree does not pass the test

"When the conversation using the handsfree was simple, the effects were comparable to a BAC level of 0.04 g/l, which is below the legal limit of 0.5 g/l in countries like Spain and Australia. However, when more attention was required, their alcohol level analogue shot up to 0.7 g/l, which is above the legal limit in both countries yet below in other countries, like the USA or the UK where up to 0.8 g/l is allowed. When

answering text messages, the rate stood at 1 g/l, which is illegal in any of all of these countries," states the scientist.

The two different handsfree conversation levels studied are the equivalent to: a natural conversation in which the subject and the scientist speak about an interesting subject but as a way of passing the time; and a dialogue with more specific, cognitively demanding questions, such as "can you describe the car journey from your work to your house?" or "how many of your friends have names that begin with a vowel?".

"Our results suggest that the use of handsfree devices could also put drivers at risk. Although they should be allowed, they require more research to determine how they should be regulated and, of course, the thorough knowledge that national authorities should have regarding their pros and cons," concludes the expert.

More information: Sumie Leung, Rodney J. Croft, Melinda L. Jackson, Mark E. Howard y Raymond J. Mckenzie, "A Comparison of the Effect of Mobile Phone Use and Alcohol Consumption on Driving Simulation Performance", *Traffic Injury Prevention* 13 (6): 566-574, Nov 2012. [DOI: 10.1080/15389588.2012.683118](https://doi.org/10.1080/15389588.2012.683118)

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