

Drivers engaging in a secondary task may pay more attention to the road

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Although many human factors/ergonomics studies conducted over the past few years indicate that drivers who talk on the phone fail to attend to the road and increase the likelihood of an accident, the monotony of driving may also pose an accident risk. New research by HF/E researchers at the University of Kansas, Lawrence, published in *Human Factors*, suggests that drivers who lose focus on the road because of boredom may actually increase their attention by engaging in a secondary task, particularly during the last leg of their journey.

In a driving simulator, 45 participants drove for 30 minutes while talking on the phone. Researchers Paul Atchley and Mark Chan tested their attentiveness and short-term memory by introducing various obstacles, such as a car suddenly pulling in front of them or a popular fast food restaurant billboard flashing by. Some [drivers](#) were given a secondary task throughout the drive, some performed an additional task at the end of the trip, and some had no concurrent task.

Drivers' level of attention was gauged by their ability to stay in their lane, react in time to avoid an intruder car, avoid radical steering maneuvers to maintain a steady course, and accurately remember the signs that they passed.

Results from the study indicate that drivers who had to perform a concurrent task in the latter portion of the trip were more likely to stay in their lane and were less likely to commit road infractions, compared with drivers who had either a continuous or no additional task. These

findings suggest that as driving becomes monotonous and drivers' minds drift from the road, strategically introducing an additional task, such as a talking on the phone or listening to the radio, might improve driver attention and stability.

The authors caution that "although these results suggest improvements in driving performance, there is still a degree of risk involved" when drivers perform a secondary task.

More information: [hfs.sagepub.com/content/early/...391215.full.pdf+html](https://hfs.sagepub.com/content/early/2011/02/14/hfs.391215.full.pdf+html)

Provided by Human Factors and Ergonomics Society

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