

Evaluation of Driver Distraction: Text Messaging versus Talking on a Cell Phone

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Abstract. In the United States, 35 states have passed legislation banning texting while driving. By comparison, no state bans hands free cellular phone use by adults while driving. The concern regarding texting reflects an underlying assumption that it poses a greater risk than talking on a cellular phone. However, there have been few published studies directly comparing these two tasks and their effects on driving performance. The purpose of this experiment was to compare the effects of texting and talking on a cellular phone on simulated driving performance while equating task duration. The results show that even after controlling for time on task, texting has a pervasive negative effect on driving relative to talking on a cellular phone. The visuo-motor demands associated with text entry including the need to look away from the roadway to enter and confirm the text reply may account for the deleterious effects of texting on driving performance.