Texting While Driving Using Google Glass: Promising But Not Distraction-Free

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Texting while driving is risky, yet common. Smartphones are not the only devices though which are capable of texting. Google Glass is an upcoming head-mounted display (HMD) that allows users to text via a voice-based interface. This study investigated the effects of texting with Google Glass on driving performance compared to texting with a smartphone. Participants completed a standard car-following task in a driving simulator. There were three possible texting methods: manual texting with a smartphone, voice-based texting with a smartphone, and voice-based texting with Google Glass. All texting methods impaired driving performance compared to the drive-only condition. Texting with Google Glass, however, was less disruptive to driving performance compared to texting with the smartphone for both manual and voice-based texting. The results suggest that the Google Glass configuration may be beneficial to driving performance. However, Google Glass may still be harmful to driving safety.