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Hands Free Texting While Driving - Is It Safer than Conventional Texting While Driving?

Motivation: The research aim of this project was to observe any safety benefits that hands free (voice activated) texting may have over manual texting during simulated driving. Background: Many states have instated cell phone use bans; these restrictions generally target specific types of phone use and demographic groups. Currently ten states and Washington D.C. have bans on hand held cell phone use while driving for all adults, yet no state restricts hands free use by the average adult. Methods: Fifty participants (25 friend pairs, ages 18-30) drove in a mid-fidelity simulator where they engaged in a single task (driving only) and two dual tasks (hands free and conventional texting, coupled with driving). Results: When compared to not texting, drivers that used conventional texting methods experienced a significant degradation of driving abilities, demonstrated through their increase in lane deviations, increase in reaction time (0.71 seconds) and 2.8 times more likely to be involved in a crash. The crash likelihood was less when using voice activated texting methods. Conclusion: These findings confirm that texting while driving is distracting. Voice activated texting is not equivalent to driving without texting; however, it did prove to be a safer alternative to conventional texting while driving.