Driving While Reading Using Google Glass Versus Using a Smartphone: Which is More Distracting to Driving Performance?

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Reading text on a phone while driving leads to impaired driving performance. This impaired performance could possibly arise in part from the visual distraction caused by looking at the phone instead of the road. Wearable devices, such as Google Glass, might also impair driving performance, however to a lesser extent than a smartphone. By displaying information in a more accessible manner, visual and manual distractions are less pronounced. This study compared reading text using Google Glass or a smartphone while completing a simulated naturalistic driving task. When using Google Glass, drivers exhibited less lane variation and fewer lane excursions, but their driving performance was still impaired. The results show that reading text using Google Glass may impair driving performance to a lesser extent than reading text using a smartphone.