

Does mixed reality influence texting while walking among younger and older adults?

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ABSTRACT

Young and older adults have difficulties in performance of an additional task while walking (dual task). This feasibility study investigates the dual task costs of texting on a mobile phone and walking among young and older adults, as well as the potential of a mixed reality app, which projects the real world onto the background of the mobile display, to modify these costs. Seven young (age 26.4±4.5 years) and 7 older (age 69.9±3.9 years) adults were asked to walk while texting on a custom-written mobile android app (with and without mixed reality display), as well as to perform each task (walking, texting) separately. Preliminary results show that dual task interference of both tasks is similar in both groups. Using a mixed reality display does not modify these costs, but does affect the subjective experience of the groups differently. This may be due to different levels of familiarity with mobile phone use in the two groups. Additional data is currently being collected.

Full papers will be published in the Conference Proceedings and will be freely available to delegates at the conference and online on September 20, 2016.