

Effect of Text Messaging and Cellphone Use on a Multi-sensory Tracking Task

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ABSTRACT

This experiment studied subjects' performance on a continuous multisensory tracking task. Different theories suggest that there is a decrease in performance due to attentional capacity; furthermore, talking or texting on a mobile phone will negatively affect task performance. Twenty-four college-age students were recruited to be tested on the Biodex Balance System SD with the texting condition, talking on a mobile phone condition, and control condition. Results showed that text messaging while performing a continuous multisensory tracking task negatively affected performance. There was no significant difference, however, between the control condition and talking on a mobile phone while completing the task. Results suggest that talking on a mobile phone has become second-nature to this sub-set of the population, thus not exceeding the resource capacity. However, the text messaging condition proved to be a more challenging secondary task, causing the amount of attention needed for this task to be increased. Attention was diverted from the primary task, causing a decrease in performance. It can be concluded that texting while performing a multi-sensory tracking task can have deleterious effects on attention. These findings have a direct application to texting while driving; it is not possible to safely communicate via text message while operating a motor vehicle.

