

Smartphone texting linked to compromised pedestrian safety

3 February 2020



Credit: CC0 Public Domain

Smartphone texting is linked to compromised pedestrian safety, with higher rates of 'near misses' and failure to look left and right before crossing a road than either listening to music or talking on the phone, indicates a pooled analysis of the available evidence, published online in the journal *Injury* Prevention.

But much of the data is experimental and beset by quality issues, making it difficult to draw firm conclusions, caution the researchers, who call for a moderately increased rates of collisions and close more thorough approach to exploring the impact of distracted pedestrian behaviours on crash risk.

Worldwide, around 270,000 pedestrians die every year, accounting for around a fifth of all road traffic deaths.

'Pedestrian distraction' has become a recognised safety issue as more and more people use their smartphones or hand held devices while walking on the pavement and crossing roads.

To try and gauge the potential impact on road safety of hand-held/hands-free device activities, including talking on the phone, text messaging, browsing and listening to music, the researchers looked for published evidence.

From among 33 relevant studies, they pooled the data from 14 (involving 872 people) and systematically reviewed the data from another eight.

They looked specifically at: time taken to start walking or begin crossing the road; missed opportunities to cross safely; time taken to cross the road; looking left and right before or during crossing; and collisions and close calls with other pedestrians and vehicles.

The pooled data analysis showed that listening to music wasn't associated with any heightened risk of potentially harmful pedestrian behaviours.

Talking on the phone was associated with a small increase in the time taken to start crossing the road and slightly more missed opportunities to cross the road safely.

Text messaging emerged as the potentially most harmful behaviour. It was associated with significantly lower rates of looking left and right right before and/or while crossing the road, and with calls with other pedestrians or vehicles.

It also affected the time taken to cross a road and missed opportunities to cross safely, but to a lesser extent.

The review of the eight observational studies revealed that the percentage of pedestrians who were distracted ranged from 12 to 45%, and that behaviours were influenced by several factors. including gender, time of day, solo or group crossing, and walking speed.

The researchers acknowledge "a variety of study



quality issues" which limit the generalisability of the findings.

Nevertheless, they point out: "Given the ubiquity of smartphones, social media, apps, digital video and streaming music, which has infiltrated most aspects of daily life, distracted walking and street cross will be a road safety issue for the foreseeable future."

And as signage and public awareness campaigns don't seem to alter pedestrian behaviour, "Establishing the relationship between distracted walking behaviour and crash risk is an essential research need," they conclude.

More information: Systematic review: Plight of the distracted pedestrian: a research synthesis and meta-analysis of mobile phone use on crossing behaviour, *Injury Prevention* (2020). DOI: 10.1136/injuryprev-2019-043426

Provided by British Medical Journal

APA citation: Smartphone texting linked to compromised pedestrian safety (2020, February 3) retrieved 17 August 2022 from https://medicalxpress.com/news/2020-02-smartphone-texting-linked-compromised-pedestrian.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.