Mobile phone distraction survey

2019

Mobile phones can help keep us connected, organised and informed, however they are also a significant source of distraction for drivers. The number of people killed or seriously injured on WA roads in crashes where driver inattention was a factor is increasing¹. Understanding the prevalence of, and purposes behind using a mobile phone while driving will inform future initiatives to make WA's road environment safer for everyone.

Driving is a complex task and requires the driver to pay attention to multiple aspects of a dynamic road environment. As such, undertaking a secondary activity is likely to result in mistakes², and regardless of whether hands-free functions are used, the risk of being in a serious crash is four times greater if a driver is interacting with their mobile phone³.

In July 2018, RAC commissioned Painted Dog Research to undertake an online

survey to better understand the behaviour and perceptions of Western Australians in relation to the use of mobile phones while driving. The survey was completed by 840 respondents aged over 17 years from both the Perth Metropolitan Area (79 per cent) and regional WA (21 per cent). Age, gender and location sampling quotas were applied, and the data were post-weighted to be representative of the WA population6.

Sadly, in WA in 2018, 29 people were killed in traffic crashes related to mistakes made due to driver inattention4, bringing the five-year total of those unnecessarily killed in inattention related crashes to 120 people⁵.

Visual distractions cause the driver to

Manual distractions involve the driver

Auditory distractions are sounds

Cognitive distractions relate to the additional mental workload associated



Road Safety Commission (2018). Annual preliminary fatal and critical injures on WA roads, 2013 - 2017.

² Smucny, J. Rojas, D. C., Eichman, L.C., & Tregellas, J.R. (2013). Neuronal effects of auditory distraction on visual attention. Brain and Cognition, 81(2), pp 263-270.

³ McEvoy, S., Stevenson, M., McCartt, A., Woodward, M., Haworth, C., Palamara, P., & Cercarelli, R. (2005). Role of mobile phones in motor vehicle crashes resulting in hospital attendance: a case crossover study. BMJ, 331, pp 428-430.

f Inattention-related crashes include those crashes where police suspected inattention as the primary crash factor. Inattention includes distractions, such as eating, using in-vehicle devices, using mobile phones, etc

⁵ Road Safety Commission (2019). Annual preliminary fatal and critical injures on WA roads, 2014 - 2018.

The margin of error at the total WA population level is \$338 per cent.

7 McEvoy, S., Stevenson, M., McCartt, A., Woodward, M., Haworth, C., Palamara, P., & Cercarelli, R. (2005). Role of mobile phones in motor vehicle crashes resulting in hospital attendance: a case crossover study. BMJ. 331, pp 428-430.

⁸ National Transport Commission (2018). Developing technology-neutral road rules for driver distraction. https://www.ntc.gov.au/Media/Reports/(E3823D53-A6E8-C4B0-4C48-B557ABAD995A).pdf.

Current driving behaviours

Almost all respondents admitted to using their mobile phones whilst driving. Although the majority said they were far less likely to do so in circumstances they perceived to be risky, most did not use any strategies to stop themselves from interacting with their phones behind the wheel.

A large majority (81 per cent) of respondents reported using their mobile phone while in control of a vehicle at least some of the time and 37 per cent admitted to doing so regularly. As shown in Figure 1, self-reported frequency⁹ of phone use while driving was highest when following directions from GPS navigation (33 per cent) and answering and making phone calls (34 per cent and 28 per cent respectively). This was followed by reading a text message (23 per cent), illegally touching their phone to select or change a song while driving (21 per cent) and responding to a message (19 per cent).

Most drivers using their phones illegally while driving (73 per cent) identified themselves as 'High' or 'Medium-High Involvement Users'10; and when it came to their reasons for doing so, 'habit', feeling they need to be contactable at all times

and feeling they are able to multi-task while driving were common responses.

Figure 2 demonstrates that the way drivers perceive their environment can affect the likelihood of them using their phones while driving. Most respondents reported they were unlikely to do so when they perceived the road environment to be particularly complex or risky such as when driving in poor weather (71 per cent); low visibility conditions (64 per cent); or at speeds of 80km/h or more (61 per cent). Respondents also reported being more cautious about using their mobile phones when responsible for the safety of passengers, with most saying they were less likely to if they had friends, parents or children in the car, compared to when driving alone.

Two in five (42 per cent) respondents reported having attempted strategies to prevent themselves from using their phones while driving and unprompted, 26 per cent of which said they had tried leaving it in their bag and 19 per cent had tried simply ignoring it. Few reported switching it off (8 per cent) or disabling notifications (6 per cent). When prompted with a list of the features or applications available to assist drivers with avoiding distractions related to mobile phone use. flight mode was the most frequently used by drivers (24 per cent), followed by voice-command functions (12 per cent for Apple and 9 per cent for Android operating systems) and 'do not disturb' functions (12 per cent for Android and 6 per cent for Apple operating systems). Applications designed to prevent mobile phone use while driving altogether, such as Drive Safe, Safe Drive or One Tap, were the least well-known or utilised.

Figure 1 » Self-reported frequency of mobile phone use while driving¹¹

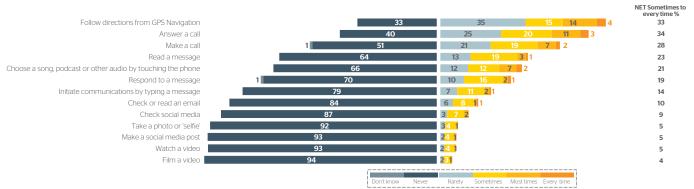
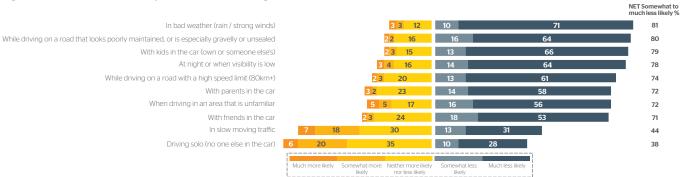


Figure 2 » Likelihood of mobile phone use while driving11



The figures reported in this paragraph relate to those phone behaviours that were reported by respondents to be undertaken at least sometimes.

The survey required respondents to identify themselves on a scale related to the level of involvement they have with their mobile phone. For a High Involvement User their phone is essential to their day-to-day life, is with them always and they use it for almost everything. A High to Medium Involvement User uses their phone regularly throughout the day but does not check it every few minutes. Their phone is important to them and they would struggle to live without it for a week. The majority of respondents identified with one of these categories

Percentage values may not add to 100% due to rounding.

Perceptions of risk and social influence

Despite most drivers having admitted to using a mobile phone while driving, they considered this behaviour to be risky and were willing to ask others to stop doing it. Interestingly, the perceived risk associated with mobile phone use varied according to whether hands-free functions were used.

Seven in ten Western Australians consider mobile phone related distraction to be a leading contributor to deaths and serious injuries on WA roads, along with speeding or driving under the influence of drugs.

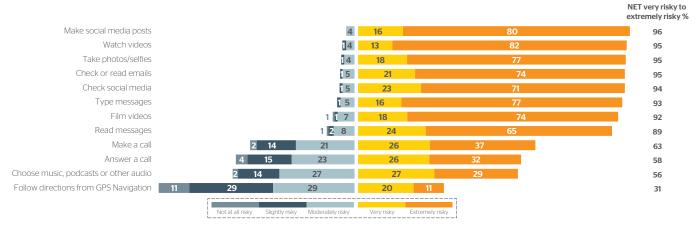
Most respondents (91 per cent) considered holding and using a mobile phone while driving to be either very or extremely risky (ranked second after driving under the influence of drugs, at 94 per cent). In comparison, only one in four (24 per cent) considered hands-free use of a mobile phone, or using a smartwatch connected to a phone (28 per cent), to be either very or extremely risky driving behaviours.

The majority of mobile phone-related tasks performed while driving were considered to be very or extremely risky, particularly those which require drivers to divert their eyes away from the road for a sustained period (Figure 3).

As passengers, 76 per cent of respondents said they would ask the driver of a car they were in to stop using a mobile phone while driving, largely due to the known risks to themselves and other road users. Almost half said they had in fact previously asked a driver(s) to stop doing so, while one in three could not recall being in a situation where they needed to

Males, metropolitan residents, younger generations (particularly Generation Y, those born from 1980 to 1994) and 'High Involvement Users' were most likely to perceive the risks involved with using a mobile phone while driving to be lower and were the least likely to ask a driver to stop using their mobile phone. Of those who said they would not say something to the driver, unprompted, almost a third said this was because they would find it awkward to do so, and a further 29 per cent said it would depend on the circumstances.

Figure 3 » Driver's perceived level of risk by mobile phone activity¹²



¹² Values may not add to 100% due to rounding

Driving by the rules

The survey has identified that a significant proportion of Western Australians interact with their phones whilst driving, and that this behaviour is influenced by their understanding of the road rules and perceptions of the likelihood of being caught.

Qualitative survey responses suggest that the road rules relating to the use of a mobile phone while driving are not well understood. Many respondents appeared not to be aware that it is illegal in WA to use a mobile phone for any purpose while driving except for phone calls or following directions from GPS13. This, and the widely held perception that interacting with a mobile phone while driving is less risky when hands-free or voice-activated functions are used (which has been reinforced by this survey), could be taken to highlight the need for greater public awareness of the laws and risks associated with such driving behaviours¹⁴.

"I understood the use of in-car hands free devices to take and make calls were safe. If they are not safe more awareness is needed in this area".

However, enhanced public education alone is likely to be insufficient¹⁵; even those drivers who had implemented strategies to avoid using their phones while driving, still admitted to doing so at least occasionally.

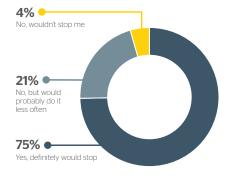
When it comes to enforcement of the road rules, nearly all respondents (96 per cent) felt either the frequency or likelihood of their phone use while driving would be impacted by being caught and penalised.

"The last thing I need is to incur a hefty (or any) fine or loss of demerit points so I will not knowingly break the law for the risk of being caught".

When asked how likely they thought they were to be caught and penalised for using a mobile phone while driving, almost eight in ten (77 per cent) said they believed they were somewhat or extremely likely to be caught and penalised for holding and using a mobile phone.

When asked if being caught and penalised with the current WA penalty of three demerit points and a \$400 fine would make them stop, 75 per cent said that it would. However, a further 21 per cent said that although they would use their phone less often while driving it would not stop them completely (and four per cent said that it would not make any difference).

Figure 5 » Perceived impact of being caught and penalised for mobile phone use





Look Up WA

In October 2018, RAC launched its road safety distraction awareness campaign, "Look Up WA", calling on Western

McCort, A., Woodward, M., Haworth, C., Palamara, P., & Cercarelli, R. (2005). Role of mobile phones in motor vehicle crashes resulting in hospital attendance: a case crossover study, BMJ, 331, pp. 428-430 & Stothart, C., Mitchum, A. & Yehnert, C. (2015). The attentional cost of receiving a cell phone notification. Journal of Experimental Psychology: Human Perception and Performance, 41(4), pp. 893-897.

McKenna, F. P., & Poulter, D. R. (2010). Evaluating the effectiveness of a road safety education intervention for pre-drivers: an application of the theory of planned behaviour. British Journal of Educational Psychology, 80 (2), pp. 163-181.