

Thought Leadership: **Distracted Driving Study Proposes a Promising Way Forward**

Budget Direct

Introduction

In November 2018, Budget Direct undertook a study on distracted driving – titled ‘Distracted Driving Study Proposes a Promising Way Forward’. This NRSPP Thought Leadership document provides a summary of the motives behind this study, the key findings of the study, and the key conclusions of the study, including the plan for a way forward in combating driver distraction. [To view the full study, please follow this link....](#)

Motivations Behind the Study

Mobile phone use while driving is a global epidemic. Crashes and fatalities caused by distracted driving are on the rise, with the World Health Organisation estimating that up to 11% of drivers worldwide are using their phones any given moment.¹ In fact, many major western countries, such as America, Great Britain, Canada, and New Zealand experienced increases in their total road tolls in 2015 and 2016, following years of steady decline.²³⁴⁵ Unfortunately, Australia hasn’t been immune to this trend, with our total road toll also increasing in 2015 and 2016 after years of encouraging downward trend.⁶

Due to dramatic increases in functionality, affordability, and necessity over the past decade, 88% of Australians now own a smartphone.⁷ Further, Australia ranks 7th globally for vehicles per capita, housing 740 vehicles for every 1,000 citizens.⁸ This has proved to be a problematic combination, with distracted driving now causing approximately a quarter of all crashes on Australian roads.⁹ Consequently, distracted driving is one of the top five causes of car crashes in Australia, along with speeding, alcohol consumption, not wearing a seatbelt, and driver fatigue.¹⁰



Although operating a hand-held mobile phone in any capacity while driving is illegal in all Australian states and territories - carrying fines of between \$250 and \$548¹¹ and a loss of up to five demerit points¹² - many drivers have continued to use them anyway. While the nature of the activity makes precise statistics hard to come by, previous research has estimated that anywhere between 61%¹¹ and 77%¹³ of Australians use their phones for any purpose while driving.

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About the Budget Direct Study

With this in mind, a new study commissioned by Budget Direct, with research being undertaken by The Centre for Accident Research and Road Safety - Queensland (CARRS-Q), has provided valuable insight into the nature, extent, and causes of this issue, while also suggesting promising ways to address distracted driving in Australia.

The study, titled 'A Road Safety Intervention To Modify Attitudes and Behaviours Towards Mobile Phone Use While Driving', measured 5 types of mobile phone while driving behaviours. These were: checking your mobile phone for missed calls, answering a phone call in hand-held mode, reading a text message (or another form of communication such as a Facebook message, Snapchat, an email, or a Tweet), answering a text message (or another form of communication such as a Facebook message, Snapchat, an email, or a Tweet), and changing music (using Spotify, iTunes etc.).

Methodology

163 people participated in the study. Prior to the study, participants provided basic information about their age, gender, location, education level, what type of driver's licence they held, what type of vehicle they owned, and what type of roads they mainly drove on.

Participants were then split randomly into two groups: the intervention group and the control group. During the study, participants in the intervention group would be shown images of people using a hand-held mobile phone while driving, followed by images depicting negative consequences of mobile phone use while driving. A pre-study was conducted to determine the most appropriate images to show participants. Negative images depicted physical, social, and financial consequences. Participants in

the control group were only shown images of people using a hand-held mobile phone while driving.

It was hypothesised that participants in the intervention group would experience a greater reduction in their attitudes towards, and intentions to use, a mobile phone while driving compared to the control group.

The study measured five main sets of data: past behaviour, specific subjective norms, pre-task attitudes and intentions (Time 1), immediate post-task attitudes and intentions (Time 2), and a one week follow-up of attitudes and intentions (Time 3).

To do so, the study focussed on five types of mobile phone while driving behaviours: checking your mobile phone for missed calls, answering a phone call in hand-held mode, reading a text message (or another form of communication such as a Facebook message, Snapchat, an email, or a Tweet), answering a text message (or another form of communication such as a Facebook message, Snapchat, an email, or a Tweet), and changing music (using Spotify, iTunes etc.).

Past behaviour was self-reported, with participants indicating how frequently they engaged in each mobile phone while driving behaviour in the past. Participants' attitudes were measured using a 7-point Semantic Difference Scale where lower scores indicated negative (safer) attitudes to mobile phone while driving behaviours, and higher scores indicated positive (unsafe) attitudes to mobile phone while driving behaviours. Participants' intentions were measured using a 6-point scale, with higher scores indicating a higher intention to participate in the behaviour in the next week. Measuring specific subjective norms required participants to rate how likely their parents, friends, and partners were to approve of them engaging in each mobile phone while driving behaviour.

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Summarised Key Findings

Mobile Phone Use

Of the 163 people who participated in the study (N=163), 62% reported using a mobile phone to change music while driving at least 1-2 times in the past week, making this the most common past behaviour.

Using a mobile phone to change music while driving was also the activity that participants were most likely to do at least once per day with 44%. This was more than double the second most common daily behaviour of reading a text message or other form of communication, which 21.5% of participants reported doing daily.

Answering a call in hand-held mode was the least common past behaviour, with 16.5% of participants saying they had done so at least 1-2 times in the past week. This was also the behaviour that participants were most likely to have 'never' done, with 45%.

There was no behaviour which more than half of participants said they had 'never' done, while each behaviour was done by a minimum of 32% of participants at least 1-2 times per month.

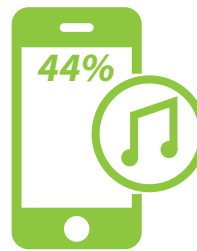
Only 16.6% of participants said they had 'never' read a text message or other form of communication while driving, which was the lowest 'never' response.

79% of participants said road safety was either extremely important or quite important to them, even though many participants had used their phones while driving in some capacity in the past week.

Attitudes and Intentions

From Time 1 (Pre-Task) to Time 2 (Immediate Post-Task), participants' attitudes and intentions decreased (i.e. participants had less favourable attitudes towards these behaviours), regardless of whether they were shown images of people using their mobile phone while driving followed by negative consequence images (the intervention group), or just images of people using their mobile phone while driving (the control group).

Statistics



44%

of participants were likely to change music using their phone while driving.



21.5%

of participants were likely to read a text message while driving.



16.6%

of participants said they have **NEVER** read a text message while driving.



45%

of participants were likely to **NEVER** answer a call in hand-held mode while driving.



79%

of participants said road safety was either extremely important or quite important to them.

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From Time 1 (Pre-Task) to Time 3 (One-week follow-up) participants' had less favourable attitudes and lower intentions to use a mobile phone while driving in the next week to check for missed calls, read or answer a text message, and change music, regardless of whether they were assigned to the intervention or control group.

Participants perceived their parents, friends, and partners as unlikely to approve of any of the mobile phone while driving behaviours, with the only exception being for changing music while driving, where participants 'somewhat agreed' that their friends were likely to approve of the behaviour (a mean score of 4 on a 6-point scale).

Difference in Age Groups

There were no significant statistical differences between younger (17-24 years) or slightly older (25-45 years) drivers for using a hand-held mobile phone while driving in the past week, nor were there any significant statistical differences between genders or automatic and manual drivers for using a hand-held mobile phone while driving in the past week.

The only exception was that younger drivers (17-24 years) were "significantly more likely to report greater intentions to use their mobile phone in the next week to change music" than slightly older drivers (25-45 years).

Effect of Driver License Levels

Open licence holders were 'significantly more likely' to report checking their phone for missed calls in the past week than P1 and P2 licence holders, while P1 and P2 licence holders were 'significantly more likely' to report using their phone to change music in the past week than open licence holders.

Effects of Education

Participants who reported high school as their highest level of completed education were 'significantly more likely' to report using their phone to change music in the past week than participants who had completed undergraduate or postgraduate studies.



Participants perceived their parents, friends, and partners as unlikely to approve of any of the mobile phone while driving.



Open licence holders were 'significantly more likely' to report checking their phone for missed calls in the past week than **P1** and **P2** licence holders.



P1 and **P2** licence holders were 'significantly more likely' to report using their phone to change music in the past week than open licence holders.

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Key Conclusions

The study's main purpose was to evaluate differences in attitudes and intentions for participants assigned to the control group (those who were only shown images of people using their mobile phone while driving) vs participants assigned to the intervention group (those who were shown images of people using their mobile phone while driving followed by negative consequence images). It was hypothesised that participants in the intervention group would report safer attitudes and lower intentions to use a hand-held mobile phone while driving than participants in the control group. However, this was not the case. No significant statistical differences were observed between the groups. Indeed, merely participating in the study led to safer attitudes and lower intentions to use a hand-held mobile while driving. As such, the findings suggest that simply seeing images of people using mobile phones while driving was sufficient in influencing positive changes in individuals' attitudes and intentions (i.e. becoming less accepting of using a smartphone while driving).

A Plan for the Future

Notably, at the beginning of the study, 79% of participants said road safety was either extremely important or quite important to them. Yet, many participants had used their phone in some capacity while driving in the past week.

This disparity between intentions and actual behaviour was evident throughout the study. According to the study, "while people do not intend to use a hand-held mobile phone while driving, they still end up using their phones."

Prior research by Gollwitzer¹⁴ has shown the relationship between intentions and behaviour is "modest", accounting for only 20-30% of variances in behaviour.¹⁴ Instead, people's past behaviour is a far more accurate predictor of their future behaviour.¹⁴ Since a majority of participants had used their mobile phones while driving at least 1-2 times in the last week, Gollwitzer would suggest this past behaviour is likely to have a greater impact on participants' future actions than their reported intentions.

Nevertheless, Gollwitzer also claims goal achievement is more likely when framed as "promotion goals (focusing on the presence or absence of positive outcomes)" rather than "prevention goals (focusing on the presence or absence of negative outcomes)."¹⁴ This study endorsed Gollwitzer's findings, stating, "interventions to prevent this behaviour may benefit from encouraging individuals to plan ahead and identify essentially 'if-then' statements as to what actions they may use to prevent their phone use while driving in any given scenario."

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As a result, the study encourages people to utilise 'implementation intentions' to increase the likelihood of following through on their good intentions. Implementation intentions follow the format 'when situation x arises, I will perform response y!' As such, they directly link "anticipated opportunities with goal-directed responses."¹⁴ Implementation intentions are an extension of goal intentions, which follow the format 'I intend to reach x goal!' According to Gollwitzer, the key advantage of implementation intentions is that they "promote the attainment of the goal specified in the goal intention."¹⁴

Essentially, by adding an extra layer of planning to the goal achievement process and focussing on positive rather than negative outcomes, Gollwitzer hoped that people may be able to more closely align their intentions with their actual behaviour.

Advertising the Way Forward

Ultimately, the study concludes that advertising campaigns could play a central role in addressing distracted driving in Australia. They recommend that advertisements could challenge drivers' "favourable attitudes" to mobile phone use while driving by showing people that they're not as safe using a mobile phone while driving as they think they are. Such adverts could demonstrate the dangers of taking your eyes off the road for even a few seconds, and show that reading a text message while driving captures the driver's attention much more than they realise. Further, potential ads could reiterate the heightened crash risk associated with distracted driving.

They also suggest that adverts could target passengers, encouraging them to speak up and point out drivers' dangerous behaviours. By focussing on educational messaging that raises awareness of the problem of smartphone use while driving, rather than negative messaging or scare tactics, it is hoped that drivers will become more aware of their dangerous behaviours and implement positive strategies to rectify them.

Overall, these results provide many valuable insights and significant cause for optimism, proposing several viable recommendations aimed at reducing the toll of distracted driving.

The Research Team

The study, titled 'A Road Safety Intervention To Modify Attitudes and Behaviours Towards Mobile Phone Use While Driving', was published by CARRS-Q in affiliation with Budget Direct, with the research team comprising of Dr Sherrie-Anne Kay, Associate Professor Ioni Lewis, Dr Cassandra Gauld, and Ms Sonali Nandavar.

Between them, the researchers have significant experience and expertise in the fields of road safety, traffic psychology, and driver behaviours, having designed and undertaken qualitative and quantitative research projects involving young drivers, smartphone use while driving, road safety advertising, speeding behaviour, and cognitive functioning. They have an extensive publication history featuring peer-reviewed journal articles, peer-reviewed full papers and abstracts for conferences, as well as reports for government and industry.

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