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Drivers' attitudes, awareness and knowledge about driver distractions: Research from two central Sydney communities

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Introduction

The issue of driver distraction is an emerging one. As new technologies become available for use in motor vehicles its importance as a road safety issue, in Australia, will increase. The role of distraction in road crashes is only just beginning to be explored and to date only a small amount of research has been conducted (Young & Regan, this monograph).

Research conducted (Brown, Horberry, Anderson, Regan & Triggs, 2003; Young, Regan & Hammer, 2003) shows there is evidence that in vehicle sources of distraction are capable of degrading driving performance and compromising safety. Driver distraction must be viewed as a legitimate road safety issue and drivers attitudes to distraction need to be further explored and road safety campaigns implemented.

Given the increased risk and high prevalence of crashes associated with distraction demonstrated in overseas studies (Cooper, Zheng, Richard, Vavrik, Heinrichs & Siegmund, 2003; Direct Line Insurance, 2002; Thuilin & Gustafsson, 2004), and given the effects of distraction on driving performance, there is reason to believe that distraction is a significant contributing factor in crashes in Australia.

In the City of Sydney there has been an increase in lane deviation accidents over the last four years. This has occurred as we have seen a reduction in overall accidents and an increase in ownership of mobile phones. Research indicates lane deviation accidents have been directly related to a driver engaging in a distracting behaviour.

Many studies have been conducted (Brown et al. 2003, Young et al., 2003) that show distractions such as making a phone call, conducting a mobile phone conversation, conducting a complex conversation and tuning a radio/ changing a CD all lead to a significant increase in the number of situations in which the person failed to respond appropriately in the road environment in a timely manner.

It is possible there is a lack of awareness among the community of the research literature linking driver distraction with degraded driving performance and the types of distracting behaviour that can impact on driving performance and driver safety.

This paper focuses on the research results obtained from drivers in two central Sydney communities on their attitudes, awareness and knowledge about driver distractions.

Background

Road Safety Officers from the City of Sydney and Marrickville Council engaged a consultant to conduct research to achieve the following objectives:

- To determine the level of awareness of driver distraction in the community;
- To determine driver beliefs and attitudes on the issue of driver distraction, the effects distraction has on driving behaviour and if drivers adjust their behaviour;
- To determine the extent drivers participate in distracting behaviour;
- To collect information to assist in the development of a road safety campaign.

In April 2005, 203 residents in the two council areas participated in a telephone survey (see Table 1). Eligible respondents were licensed drivers who had driven at least 3 times in the last week. The questionnaire was developed in consultation with the consultant.

Table 1: Telephone survey sample

AGE	Survey Sample	
	No.	%
17 to 19	5	2
20 to 24	16	8
25 to 29	19	9
30 to 34	35	17
35 to 39	28	14
40 to 49	39	19
50 to 59	31	15
60 to 64	12	6
65 plus	18	9
GENDER	No.	%
Male	120	59
Female	83	41
COUNCIL	No	%
City of Sydney	132	65
Marrickville	71	35
TOTAL	203	100%

Additionally, two focus groups were held with residents recruited from the telephone survey respondents. One group consisted of drivers age 35 and over and the other group consisted of drivers under the age of 35. The focus group discussion guide was also developed in consultation with the consultant and aimed to discuss the findings from the telephone survey.

Research findings

Awareness and knowledge of driver distractions

Drivers were asked, unaided, to think of things that would distract them while they were driving. A range of responses were given. In order of importance, the factors drivers thought to be most distracting to drivers on the road were mobile phones (59%), pedestrians (24%), the behaviour of other drivers (24%), advertising (22%), radio /CD or music in the car (19%), children in the car (12%) and passengers (11%).

Drivers made no spontaneous distinction between the distraction potential of the different uses of a mobile phone. However, when asked to rate the distraction levels of a list of

activities, it was clear that drivers do distinguish between text messaging, talking on a hand held and talking on a hands free mobile.

The vast majority of drivers (94%) viewed text messaging while driving to be very distracting to drivers. There was a slight trend for younger females to be less likely to give the activity a very distracting rating. Furthermore, talking on a hand held mobile phone was viewed as very distracting by three out of four drivers (75%). However, when looking at the use of hands-free mobile phones while driving, only one out of four drivers (28%) thought this activity was very distracting.

Drivers argued that not having to hold on to a handset makes talking on hands-free mobiles safer with focus group participants saying not having two hands on the wheel slows reaction times. Focus group participants tended to be quite sceptical of any suggestions that talking on a hands free mobile is just as distracting as hands held.

Young males (17-34 years) were the least likely (41%) to identify mobile phone usage as a distraction to drivers, while older males (35+) were the most likely to identify this as a distraction.

Female drivers (35+) were most likely (38%) to identify the behaviour of other drivers (e.g. not indicating, speeding, and tailgating) as a distraction. In contrast, younger female drivers (17-34 years) were the least likely (10%) to identify this factor as a distraction.

Focus group participants identified the same types of distractions as survey respondents. When asked what they found distracting about various items they identified bus stop advertising as blocking a driver's view. Pedestrians were viewed as distracting because of their unpredictable nature.

Most dangerous driver behaviours

Drivers were given a range of distractions and asked to identify what they thought were the most dangerous and second most dangerous activity to participate in when driving.

Text messaging (sending or reading) was identified as overall the most dangerous (73%) followed by talking on a hand held mobile phone (67%), however only 4% of drivers gave talking on a hands free mobile a similar rating. It is interesting to note that the larger proportion of drivers (38% out of 67%) who nominated talking on hand held mobile phone as a dangerous driver distraction only considered it to be the second most dangerous driver distraction. This may suggest that while drivers consider this as very distracting they perceive it not to be dangerous when they do it.

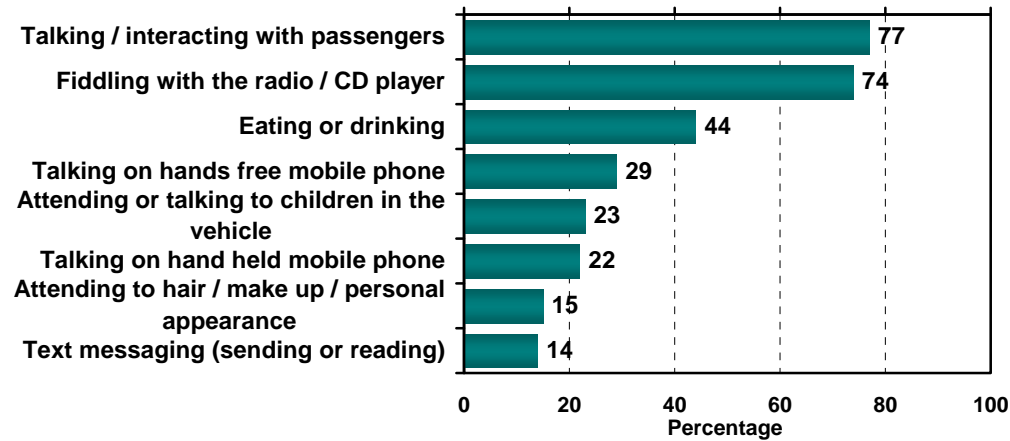
Driver's own behaviour

Drivers were asked to report whether they had personally engaged in various distracting activities while driving in the past week (see Table 2). The activities most frequently engaged in were talking or interacting with another passenger while driving (77%), fiddling with the radio or CD player while driving (74%) and eating or drinking while driving (44%).

One out of four drivers (29%) reported that they had talked on a hands-free mobile phone, 23% had attended or talked to children, 22% had talked on a hand-held mobile phone and 15% had attended to their personal appearance.

Only 14% of drivers admitted to text-messaging while driving. Younger drivers were more likely to have engaged in this behaviour with 20% of younger males and 26% of younger females admitting to this behaviour compared to only 7% of older males and 12% of older females.

Table 2: Drivers reported own behaviour last week



Australian research¹ has suggested that around one-third of mobile phone users regularly use hand held phones while driving and one in six send text messages while driving which is consistent with the results of this study.

How driving changes when engaging in distracting behaviour

Two of the activities drivers had admitted to engaging in during the past week were selected at random. Drivers were then asked if they had adjusted or changed their driving behaviour in any way when they were engaging in those activities.

More than half the drivers queried (61%; n=17) did not change their driving behaviour when talking on a hands free mobile phone. The majority of drivers queried (35%; 7 out of 20) reported slowing down when talking on a hand held mobile phone while driving. However, 4 out of 20 (20%) did not change their driving behaviour at all.

One in three drivers queried (33%; 4 out of 12) slow down when sending or reading text messages while driving, however one out of four (25%; 3 out of 12) do not make any changes to their driving behaviour. Of the other activities undertaken while driving such as fiddling with the radio / CD player, eating or drinking, attending to personal appearance and children, more than half the drivers did not adjust their behaviour to compensate.

Drivers generally had difficulty describing how they changed their behaviour when engaging in one of these activities. In terms of mobile phone calls, there was a tendency for younger drivers to say they did not answer them. However on further discussion they admitted to checking their phone to see who was calling and only answering 'important' calls. There does appear to be some reluctance to admit to talking on mobile phones when driving, indicating either some social unacceptability or recognition of the illegality.

¹Telstra 2003

Table 3: How driving changes when engaging in distracting behaviour

	Hands free mobile phone	Hand held mobile phone	Text messaging	Radio / CD player	Children in the vehicle	Eating or drinking	Personal appearance	Passengers
	%	%	%	%	%	%	%	%
Do not change behaviour	61	20	25	56	65	50	46	76
Slow down	18	35	33	20	8	17	--	7
More cautious	7	25	--	7	12	11	--	4
Drive more recklessly	4	--	8	2	--	--	--	5
Pull over	--	25	17	--	--	--	--	--
Look out for police	--	10	--	--	--	--	--	--
Do it while stationary at lights	--	--	25	13	--	11	31	--
Take eyes off road	--	--	25	3	15	--	--	4
Hold wheel with one hand	--	--	8	4	--	11	--	--
Only do it when safe	--	--	--	--	--	--	--	--
Keep eyes on road	--	--	--	--	--	4	--	4
Move to the left lane	--	--	--	--	--	4	--	--
Other	14	10	8	4	12	6	31	7
Base:	28	20	12	99	26	54	13	99

Focus groups participants who said they slow down when doing something distracting had difficulty actually saying how much they slowed down. Participants discussed if drivers can become more careful or aware of their surroundings to compensate for engaging in distracting behaviour. Older drivers tended to think that driving ability depended on the driver and some drivers can ‘multi task’ or do two things at once while others can not. Younger drivers could also see this point of view, but some said it was physically impossible to compensate totally.

We note that many simulator based studies show drivers do not engage in as much precautionary behaviour as perceived by the driver which confirms the focus group participants feeling that drivers can not actually compensate for the distraction.²

Observed behaviour

Drivers were asked how often, as a driver, passenger or pedestrian, they saw a range of distracting activities being conducted while driving. The behaviours observed very often or every day by drivers included talking on a hand held mobile phone (49%), talking on a hands free mobile phone (35%) and talking / interacting with passengers (51%).

The behaviours that were less frequently observed included attending or talking to children in the vehicle (37% saw very often or every day), eating or drinking (47%) and attending to hair / make up / personal appearance (44%).

The behaviours respondents hardly ever saw were drivers’ text messaging (27%) or fiddling with the radio / CD player while on the road (22%).

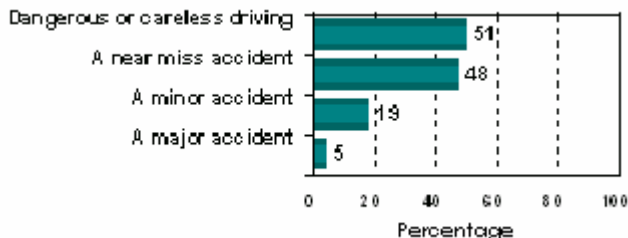
These findings confirm what is well known about mobile phone usage whilst driving.

² Brown, J., Horberry, T., Anderson, J., Regan, M., Triggs, T., (2003). Investigation of the Effects of Driver Distraction. National Roads and Motorist Association Limited Sydney.

Drivers experiencing or witnessing distraction related incidents

Drivers were asked to report whether they had personally experienced or witnessed distraction related incidents in the last year.

Table 4: Percentage of drivers experiencing or witnessing distraction related incidents



As shown in Table 4 above, the majority of drivers (51%) had experienced or witnessed dangerous or careless driving as a result of a distraction and 48% had experienced or witnessed a near miss accident. Interestingly, 24% had experienced or witnessed an accident. This shows that driver distraction is an important road safety issue.

If drivers had experienced or witnessed any road incidents, they were then asked what the distraction was that had caused the most serious of those incidents. Talking on a hand held mobile phone was cited as the most common (45%) cause of these road incidents. This was followed by talking or interacting with passengers (13%) and text messaging (7%). Females were more likely (12%) than males (4%) to cite text messaging as the cause of the serious road incident.

Drivers were then asked what the driving error was that had caused the serious incident. The most commonly cited driving errors were:

- drifting into another lane (21%)
- running a red light (21%)
- not stopping in time (20%) and
- changing lanes without looking or indicating (15%).

This is similar to driving behaviour cited in other simulator based studies.

Ideas and options for an education campaign

Drivers in the focus groups were asked to suggest approaches for reducing mobile phone use whilst driving. The suggestions included the need for stricter enforcement of current laws as drivers perceive there is little risk of getting caught or fined and do not know anyone who has been.

Drivers also said they need to be provided with credible evidence of the dangers of using a hands free mobile. Drivers were not easily convinced that using a hands free mobile is just as distracting as using a hand held. This was also evident when focus groups participants were asked to rank the most dangerous distraction and fewer than half nominated mobile phones indicating drivers need to be convinced of the dangers not just be told not to do it.

Increasing the social stigma associated with mobile phone use also needs to be targeted. Drivers felt the practice of talking on a mobile while driving is quite common now and is not seen as dangerous as drink driving or as anti-social. They suggested campaigns with a focus of 'Do the right thing by other drivers' and 'It can wait' would give a message that this behaviour is not so socially acceptable.

In terms of possible media for a campaign, television ads were suggested as the most obvious. Many felt a more positive approach ("Do the right thing") or introducing a social stigma ('Don't be a tosser') would be good approaches. Local papers were not seen as effective, particularly by young people who report only occasionally browsing through the local paper or free hand-out magazines (i.e., Courier or City Weekly). Bus back advertising was seen as an effective medium.

Conclusions

This research shows that there is a lack of awareness among the community of the impact a distracting behaviour can have on driving performance. A number of key issues have emerged from the study that needs to be considered when developing road safety campaigns in an attempt to reduce the incidence of drivers engaging in distracting behaviour.

In terms of the extent of the problem, one in four drivers have witnessed or experienced an accident caused by the driver engaging in distracting behaviour with half of these accidents caused by the driver talking on a hand held mobile. Additionally 48% of drivers have witnessed or experienced a near miss accident and 51% have witnessed or experienced careless driving caused by the driver engaging in distracting behaviour.

The community attitude toward mobile phone use while driving appears to be one of growing inevitability. Even though drivers feel this behaviour is undesirable and somewhat dangerous, many still do it (see National Roads and Motorists Association Limited Sydney, 2002; The Royal Society for the Prevention of Accidents, 2005).). An education campaign needs to shift this social acceptance by emphasising the negative social impact much like the "Do the right thing", "Don't be a tosser" and "Drink drive, bloody idiot" campaigns.

Drivers perceive the risk of being caught and fined for driving while using a hand held mobile phone as low as neither they or anyone they know has been caught. Unlike speed cameras and red light cameras, drivers actually have to be seen by police and the police have to make the effort to stop the vehicle. Drivers believe you have to be very unlucky to be fined. Therefore the law against using a hand held mobile while driving is not a major deterrent. The obvious counter measure is to conspicuously increase enforcement.

It is evident from the research that the use of hands-free mobiles while driving is considered less dangerous than using a hand held mobile. The law allowing use of a hands-free mobile reinforces this belief. Drivers will need sound evidence and a convincing argument to be persuaded otherwise. However, while they see the use of a hands free mobile as less dangerous than a hand held, they still acknowledge that it is distracting to talk on a hands free mobile so there is scope to build on that perception. Talking on a hand held mobile is seen as more dangerous than a hands-free because reaction times are increased due to not physically have two hands on the wheel. Drivers seem to be less aware of the mental aspect of driving and the cognitive distractions also slow reaction times and ability to navigate traffic.

Talking on a hand held mobile and text messaging are seen as the most obvious and dangerous distracting behaviours. However, other activities such as fiddling with the radio or CD player, talking with passengers and attending to children are much more common and not seen as particularly dangerous and drivers rarely change their behaviour when participating in these activities. They are seen as an unavoidable part of driving and socially acceptable.

Research conducted by Brown et al (2003), using a driving simulator, showed that using a car music system had the greatest impact on driving performance. If this is correct this study shows that the community is unaware that many of these socially acceptable distractions, such as using a car stereo, are in fact more dangerous than they realise.

Focus group participants questioned as to why this study was sponsored by the local councils rather than the Roads and Traffic Authority in New South Wales, or the Commonwealth government. This indicates that the community perceives this as a State or national issue rather than a local issue, and that there is scope for a broader campaign.

Recommendations

The recommendations the authors would like to make based on the results of this research include:

- The need to implement a state wide road safety campaign that shifts the social acceptance of using a mobile phone whilst driving
- There is a need to make drivers aware of the effects mobile phone usage has on driving performance and that this must be done in such a way as to convince not tell
- Police need to increase enforcement of this issue to change the perception that it is bad luck if you get caught
- Current legislation that permits the use of hands free phones should be reviewed as it reinforces the current belief that hands free phones are safer
- Text messaging in young drivers, particularly females, is very popular and could become a very serious problem. Drivers must be educated about the dangers.

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PRESENTATION SLIDES

Drivers' Attitudes, Awareness and Knowledge of Driver Distractions: Research from two Central Sydney Communities'

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Outline

- **Introduction**
- **Background**
- **Research Findings**
- **Conclusions**
- **Recommendations**

1. Introduction

- **Driver distraction is an emerging issue**
 - new technologies in motor vehicles
 - the role of distraction in road crashes
- **Evidence that in vehicle sources of distraction degrade driving performance and compromise safety**
 - driver failed to respond appropriately & timely (Brown et al., & Regan et al.)
 - increased risk of crash up to 4 times (Redelmeier & Tibshirani, 1997)

2. Background

Research Objectives:

- To determine the level of awareness of driver distraction in the community
- To determine driver beliefs and attitudes on the issue of driver distraction, the effects distraction has on driving behaviour and if drivers adjust their behaviour
- To determine the extent drivers participate in distracting behaviour
- To collect information to assist in the development of a road safety campaign.

2. Background (Cont'd)

Research Methodology

- **Telephone survey**
 - **203 respondents** (City of Sydney & Marrickville LGA's)
- **Two focus groups** (City of Sydney & Marrickville LGA's)
 - **drivers under the age of 35**
 - **drivers aged 35 and over**

2. Background (Cont'd)

Telephone Survey Sample

AGE	Survey Sample	
	No.	%
17 to 19	5	2
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GENDER	No.	%
Male	120	59
Female	83	41
COUNCIL	No.	%
City of Sydney	132	65
Marrickville	71	35
TOTAL	203	100%

3. Research Findings

3.1 Awareness and Knowledge of driver distractions

- mobile phones (59%)
- pedestrians (24%)
- the behaviour of other drivers (24%)
- advertising (22%)
- radio /CD or music in the car (19%)
- children in the car (12%) and
- passengers (11%)

3. Research Findings (Cont'd)

3.1 Awareness and Knowledge of driver distractions (Cont'd)

- **text messaging** while driving seen as very distracting to drivers (94%)
- using a **hand-held mobile phone** while driving seen as very distracting (75%)
- Using a **hands-free mobile phone** while driving seen as very distracting (28%)

3. Research Findings (Cont'd)

3.1 Awareness and Knowledge of driver distractions (Cont'd)

- Drivers believe talking on a hands-free mobile is safer than hand-held mobile because both hands are on the steering wheel

“... not having two hands on the wheel slows reaction times ...”

3. Research Findings (Cont'd)

3.1 Awareness and Knowledge of driver distractions (Cont'd)

Identify mobile phone usage as a distraction to drivers:

- young male drivers (17-34 yrs) **least** likely
- older male drivers (35+ yrs) **most** likely