



# Centre for Health Initiatives

Smashed: Drugs and Driving Don't Work

Development of effective advertising materials  
targeted at 18-25 year olds

## FINAL REPORT

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## **Executive Summary**

In Phase One, we conducted a review of the literature on young people's drug driving behaviours, knowledge and attitudes. The available Australian data suggests that drug driving is more prevalent among drug users than drink driving is among alcohol drinkers, and that in some population groups drug driving is a normative behaviour. While the majority of drivers hold negative or unfavourable attitudes towards drug driving, there is consistent evidence that drug users (and particularly young people) underestimate the risks associated with drug driving, and particularly underestimate the effect of drugs on their driving skills.

In Phase Two, we surveyed young people aged 18-25; recruited from ANU, CIT and Road Ready. Overall, our survey of 641 young Territorians found that they had an overall lack of knowledge in relation to drug driving – including the effects of drugs on driving skills (with many believing their driving is improved or unimpaired), the ability of police to test for drugs, and the penalties for driving under the influence. This is concerning given that more than one in five reported being a drug user, and approximately one in ten reported driving after consuming illicit drugs at least once in the previous 12 months.

In Phase Three, we conducted six focus groups with young people aged 18-25 years; again recruited from ANU, CIT and Road Ready. The focus groups revealed that young people did not expect to be tested by police for drugs, and were not aware of the potential penalties. Consistent with the literature review and our survey, participants felt that many young people believed their driving to be improved as a result of marijuana use (causing the driver to travel slowly and more carefully) or speed and ecstasy use (increased alertness or reaction time). The focus groups provided us with specific recommendations for the key factors that need to be addressed in the development of an anti-drug driving campaign and several key considerations for creating an effective message.

In Phase Four, we contracted four groups of 3<sup>rd</sup> year graphic design students to develop a series of drug driving advertisements for posters, billboards and pamphlets, providing them with a design brief based on the formative research. Involving young people in the development of anti-drug driving messages was seen to be an effective way of developing messages that would resonate with the target group, without the high costs of contracting a commercial advertising agency.

In Phase Five, the nine different ads developed by the design teams were focus tested with six groups of young people, with discussions focusing on the credibility, relevance, likability and perceived effectiveness of the advertisements and their components (e.g., tagline, image, format).

In Phase Six, we selected the three highest-rated ads from the focus testing, along with three existing ads (one each from WA, Queensland and the UK), and recruited 459 young people (aged 18-25) to complete a quantitative survey, designed to capture the perceived impact of the advertisement messages on attitudes, knowledge, and intentions regarding drug-driving. Two of our test advertisements (“Drugs plus driving equals all of the above” and “One trip at a time”) clearly outperformed existing campaign messages in terms of being likable and realistic, and evoking the intended emotions. It is interesting to note that those advertisements most liked, and perceived as most realistic, by those in the target audience were those that made the majority feel nervous, scared and shocked – suggesting that perhaps this is an area of social marketing where invoking strong emotional responses may be appropriate. This needs to be carefully done, however, as two of the existing campaigns (“The End” and “The Ecstasy and the Agony”) utilised high-fear ‘shock’ tactics but went too far beyond the target audience’s latitude of acceptance and were rated as not realistic (as well as not liked).

This research underscores the need for careful development and pre-testing of messages targeting behaviour change in the sophisticated young adult target group.

## Project Overview

Driving under the influence of drugs is a major risk factor for road accidents, yet young drivers have minimal knowledge of the dangers of drug-driving. This project used social marketing principles and feedback from student surveys and focus groups to develop appropriate and effective anti-drug driving messages that target university student drivers.

The project aimed to develop high-quality resources to create an awareness, and acceptance, among the target audience - drivers in the 18-25 year old age group - that taking illicit drugs can impair driving ability, and also to reduce participants' intentions to engage in drug-driving.

This project was designed in seven stages, as outlined below:

### *Phase 1. Literature Review*

Examining the literature on previous drug-driving related research, studies and marketing campaigns and their methods, findings and recommendations.

### *Phase 2. Study 1 (Survey)*

Investigating drug-driving knowledge, attitudes and behaviours of target population, to inform development of the advertisements.

### *Phase 3. Study 2 (Focus Groups)*

Qualitative research with target audience members to pre-test messages and executions.

*Phase 4. Preliminary development of messages and executions* (based on analysis of survey and focus group data).

*Phase 5. Pre-testing and modification of messages and executions.*

### *Phase 6. Study 3 (Survey)*

Messages re-tested for appropriateness, credibility, persuasiveness and impact on intentions.

### *Phase 7. Final Report*

## Phase 1. Literature Review

A comprehensive literature search was conducted to identify published research on the prevalence of drug driving in Australia, attitudes and perceptions towards drug driving, and previous efforts to reduce drug-driving rates among young people.

For the purpose of this review, the term “drugs” refers to illicit drugs only and does not include prescription drugs or alcohol unless specified otherwise.

The following databases were searched for articles published from 1998 onwards: Proquest, Australian Public Affairs, CINAHL, Cochrane Database of Systematic Reviews, Medline, PsychInfo, Expanded Academic Index and Science Direct). The search terms and operations used were:

- (drug AND driv\*) AND (risk perception OR attitudes OR awareness)
- (drug AND driv\*) AND (health promotion OR social marketing OR marketing)

The reference lists of relevant articles were also examined (using the same criteria) for any articles or reports not located in the initial searches.

Furthermore, relevant national data was also sought from the appropriate organisations. A total of 55 articles were identified for the review.

This review did not seek to examine the literature pertaining to the effects of illicit drugs on driving skills, as this was outside the scope of the research project.

The relevant authoritative bodies within the ACT have recognised the need for introducing Random Roadside Drug Testing and are committed to introducing legislation which allows for implementing the RRDT program<sup>1</sup>. Currently, RRDT in other Australian states (e.g. Victoria) can identify the presence of Cannabis (THC), Ecstasy (MDMA) and Speed (Methamphetamine), and

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<sup>1</sup> See Media Release (24/06/2008) by Minister for Territory and Municipal Services, John Hargreaves: <http://www.chiefminister.act.gov.au/>

therefore the review focuses on these drug types, with comparisons to alcohol where appropriate.

Topics addressed in the literature review were:

#### Prevalence of drug driving in Australia

- Measuring the prevalence of drug driving behaviour in Australia
- Drug driving among the general population
- Data from state-based studies and those with specific population groups
- Drug user groups
- Drug using environments
- Motor vehicle accidents
- Young people and drug driving
- Gender and drug driving
- Frequency of drug use
- Reasons for drug driving

#### Attitudes, beliefs and risk perceptions

- Perceptions of danger, risk and accident likelihood
- Perception of risk among non-drug drivers and drug drivers
- Perception of risk by drug type
- Perception of accident risk and influence on behaviour
- Impairment or improvement
- Apprehension risk
- What is the greatest deterrent for drug driving?
- The influence of knowledge and personal experiences
- Campaign efforts to reduce drug driving in Australia
- Anti-drug driving campaigns in Australia
- Implementation and Evaluation

The full text of the literature review is provided as Appendix A

### **Summary of Literature Review Findings**

Overall, while national data suggests that the percentage of recent drug users (used in the previous 12 months) in Australia who reported driving while under the influence has decreased consistently since 2001 (Australian Institute of Health and Welfare 2008), the prevalence remains unacceptably high.

Approximately 5% of the population, and over 20% of those who self-identify

as recent drug users, report driving under the influence of drugs. Drug driving rates in Australia are of particular interest when compared to drink driving, which has seen much more attention in both research and intervention. Results from the NDSHS and other studies of alcohol and other drug users suggest that drug driving is more prevalent among drug users than drink driving is among alcohol drinkers, and illicit drugs are more prevalent than alcohol among fatally injured drivers in Australia (Drummer et al. 2003).

The normative nature of drug driving among drug users is worthy of further research in understanding users' perceptions and attitudes towards this behaviour.

Studies which have examined attitudes towards drugs and driving among the general population have indicated that the majority of drivers hold negative or unfavourable attitudes towards this behaviour. However, there is consistent evidence that drug users (and particularly young people) underestimate the risks associated with drug driving, and particularly underestimate the effect of drugs on their driving skills. Drug driving appears to be more common among younger males, university students, and people who attend raves and nightclubs; with cannabis, ecstasy and methamphetamines the three most commonly used drugs. The available research suggests that cannabis and methamphetamines are likely to be considered less risky for driving than ecstasy, alcohol or other drugs; and there is also evidence that some users believe their drug use improves their driving, particularly for cannabis users. There is some evidence to suggest that increasing perceptions of the risk of apprehension will be equally, if not more, effective than increasing perceptions of accident risk in deterring drug-driving behaviour.

The literature provides various suggestions as to the types of messages that need to be conveyed within campaigns in order to reduce the rates of drug driving. Several studies have reported on participants' opinions towards anti-drug driving campaigns and the messages they should or should not utilise. Some of these provide suggest that drug users do not believe any efforts to

reduce drug driving would be successful (Hawkins et al. 2004; McIntosh et al. 2008b); with reasons including the expectation of drug users to encounter danger (because of their drug use), reliance on individual judgement, and that any government funded or executed campaign would be considered 'untrustworthy' or 'out of touch' (Ingram et al. 2001).

However, Australian and international studies suggest that many drug users support roadside testing and believe that apprehension and penalties would act as a deterrent (Degenhardt et al. 2006; McIntosh et al. 2008b), suggesting that this should be a key message in campaigns targeting (particularly regular) drug drivers). However, 'low risk' drug drivers are more likely to report they would be receptive to an information campaign (Hawkins et al. 2004); and a study with cannabis users reported that 30% felt they would be influenced by a 'good' promotional campaign (Terry and Wright 2005), suggesting that provision of information about the effects of drug use on driving skills should not be excluded. Importantly, while drug drivers can recognize *potential* effects of drugs on driving abilities, many believe they can compensate with extra 'careful' or 'slower' driving. Therefore, it is likely that effective messages will incorporate efforts to reverse the current attitudes surrounding the effects of drug use on driving, and address the perception that drug-driving is safer than drink-driving.

## Phase 2. Study 1 (Survey)

A quantitative survey was designed to collect data on drug taking levels, attitudes, risk perception and avoidance perception. The development of the survey was informed by findings from the literature review and past surveys on related topics.

The survey content included young people's:

- knowledge of drug driving and the associated risks
- attitudes towards drug driving
- behaviours regarding drug use, and specifically drug driving
- perceptions of the comparative risk of drink driving to drug driving

The draft survey was pilot-tested with a convenience sample of young people within the target age group, resulting in minor modifications to the wording of some items and the deletion of several questions to reduce the response burden to less than 10 minutes. Data was collected on variables reported in previous research to be associated with drug driving, such as drug type and gender, and included as covariates in the analyses. We also collected data regarding relevant socio-demographic variables, occupation status, and type of dwelling.

### *Data collection*

In Phase Two, young people (18-25) were recruited to complete the quantitative survey. A variety of methods were utilised to gain a cross-section of participants in the ACT:

- *Universities* –the Australian National University (ANU) was contacted and surveys were handed out in two commerce-based lectures during 2008.
- *Intercept surveys* – were used to further allow for targeted recruitment across university students, TAFE students and Road Ready Students.

- *Internet* – in order to increase the representativeness of our sample, we utilised internet-based recruitment enabling us to reach a broader range of demographic groups and geographic locations.

This survey commenced at the end of September 2008 at CIT and Road Ready, and mid October 2008 at ANU. It was proposed that a target of 500 young people would be recruited across the ACT; using age, gender and student status to meet quotas for each of these variables. This target was exceeded, with a total sample size of 641 respondents; 50.5% were female and the majority (87%) aged between 18 and 21.

### *Data Analysis*

Analysis of the data was undertaken in SPSS and Microsoft Excel and the full results are presented in Appendix B.

### **Summary of Survey Findings**

Over one-third of respondents reported that they had consumed alcohol at least once per week during the previous 12 months, 22.1% cannabis, 11.8% ecstasy, and 7.9% speed. Almost 30% had driven within 3 hours of consuming alcohol at least once in the past 12 months, 6.8% had consumed cannabis and driven, 3.2% alcohol and cannabis combined, and 4.4% had driven after taking ecstasy.

It was concerning to note that of the 102 respondents who reported that they had driven after taking drugs other than alcohol, while 47.2% reported this had impaired their driving ability, almost one-third (32.4%) recalled that their driving ability was the same as, or better than, usual. Over half of the respondents (54.0%) reported being a passenger in a car where the driver had consumed alcohol in the past 3 hours at least once in the past 12 months; 13.5% had been a passenger where the driver had taken cannabis, 8.2% ecstasy, and 8.5% alcohol and cannabis combined.

As with the focus groups participants, survey respondents reported that they drove more cautiously while under the influence of drugs and thus were 'safe' drivers. It is interesting to note that when asked about the effects of drugs on other people's drug use, far fewer respondents stated that driving skills improved than when asked about the effects of drugs on *their own* driving skills, suggesting a degree of defensive optimism in the earlier responses (a pattern which is common in this age group when considering risk behaviours).

When asked how long a person should wait after 'feeling the effects' of specific drugs before driving, almost a third (31.7%) stated that it was acceptable to drive within two hours, and an additional 20.2% two to four hours after feeling the effects of alcohol; and almost one in five (17.0%) thought that a person should wait less than two hours after feeling the effects of cannabis, with an additional 15.3% suggesting a wait of two to four hours. In relation to other illicit substances, there was some variation in perceptions of the amount of time an individual would have to wait before driving, reflecting a lack of knowledge of the effects of different drugs on driving skills.

Most participants (88.8%) felt that it was likely that a person would be caught by police for drink-driving, ranging from 65.3% (cocaine) to 69.3% (cannabis). This presents a somewhat different picture to that noted in the literature review and expressed by our focus group participants, although this is likely to be explained, in part, by the difference in perceived risk of 'a person' getting caught compared to they *themselves* being caught. Across all of the illicit substances, participants thought that a driver would have to wait slightly longer after feeling the effects to avoid the risk of being caught by the police than to be able to drive competently; this was most evident for cannabis, with a mean recommended wait time of 13.3 hours to drive effectively but 17.1 hours to avoid being caught by police.

The vast majority of respondents (98%) knew that police could conduct roadside tests for alcohol. However, only 50.3% of respondents correctly identified that cannabis can be tested by police in a roadside test; and 60.4% and 61.8% incorrectly stated that speed and ecstasy (respectively) could not

be tested by police in a roadside test. Similarly, nearly all participants knew that there are fines and potential imprisonment for drivers who drink-drive; but were less consistent in their responses regarding illicit substances, with approximately one-fifth stating that they didn't know if there were penalties for drivers who tested positive for illicit drugs.

Overall, our survey of 641 young Territorians found that they had an overall lack of knowledge in relation to drug driving – including the effects of drugs on driving skills, the ability of police to test for drugs, and the penalties for driving under the influence. This is concerning given that more than one in five reported being a drug user, and approximately one in ten reported driving after consuming illicit drugs at least once in the previous 12 months.

## **Phase 3. Study 2 (Focus Groups)**

Phase 3 consisted of six focus groups with young people aged 18-25 years, conducted in Canberra in late November 2008; two groups each with students from Road Ready, Australian National University and Canberra Institute of Technology (a male-only and a female-only group in each location). The study protocol was approved by the University of Wollongong Human Research Ethics Committee.

### *Recruitment*

Participants were recruited via three locations, via

1. classes of the ACT Road Ready Driving School (with the assistance of Simon Abbott)
2. posters displayed at the Canberra Institute of Technology and using a contact in the administration building (with the assistance of Elaine Walls)
3. posters displayed at the campus of Australian National University and using a contact in the Student Services Centre (with the assistance of Jamila Rizvi)

All participants received a \$50 cash payment as compensation for their time. Group sizes ranged from five to seven participants (a total of 18 females and 17 males across the six groups).

### *Procedure*

A discussion guide was developed for the focus groups, guided by key findings from the literature review (see Attachment C1 to Appendix C). The facilitator began each focus group with a general activity about the topic, brainstorming of words related to the term 'drug driving,' in order to allow participants to get to know one another and become comfortable in speaking in the group. Following this activity, the following key topics were introduced and discussed:

1. Participant views on the prevalence of drug driving within the ACT and Canberra specifically;
2. Participants' knowledge and perception of risk regarding police testing for illicit drugs, and apprehension or legal consequences for drug driving;
3. Participants' knowledge and perception of risk regarding the effects of illicit drugs on driving skills;
4. Participants' knowledge and perception of risk regarding the likelihood of an accident while driving under the influence of illicit drugs; and
5. Participants' views on previous campaign messages used to deter drug driving among young people (e.g. message, image, tag line, information).

Scanned images and tag lines from previous Drug Driving advertisements (campaigns from Queensland, Western Australia and the United Kingdom) were utilised in the focus group discussions to explore the participants' perceptions regarding the relevance and impact of these campaigns, and to explore what messages would be most influential regarding drug driving.

Projective techniques were used within the focus groups to help facilitate honest responses from participants regarding both their attitudes to drug driving practices and their responses to communication materials.

### *Data Analysis*

The focus group discussions were recorded and the audio files were transcribed in full. Transcripts were analysed with the objective of understanding young peoples attitudes and perceptions towards drug driving and to review previous drug driving campaigns to understand what messages are effective in engaging young people. The analysis also identified key themes in attitude and behavioural responses, including analyses of differences by gender.

The full report of the focus group findings is provided as Appendix C

## **Summary of Focus Group Findings**

The focus groups revealed that young people did not expect to be tested by police for drugs, and were not aware of the potential penalties. The participants felt that many young people believed their driving to be improved as a result of marijuana use (causing the driver to travel slowly and more carefully) or speed and ecstasy use (increased alertness or reaction time). Furthermore, they felt that there was no information available on how drugs impair driving skills, and thus personal experience played a large role in forming their current beliefs. Given their limited knowledge of the drug testing procedures and consequences, it appears that the most effective deterrent may simply be to let drivers know that testing is occurring, it is random, and if caught, they could lose their licence. In the event that drug testing is not implemented, or as an adjunct to the focus on apprehension and punishment, educational messages are needed to increase young people's awareness of the effects of drug use on driving skills and accident risk.

In summary, the focus group analysis revealed that the following key factors need to be addressed in the development of an anti-drug driving campaign that aims to deter young people from drug driving:

- young people do not believe they will be tested or caught for drug driving, and are unaware of the potential consequences of being caught;
- young people do not understand the impairing effects of drugs on driving ability, and may also believe their driving is improved by drug use; and
- young people are less concerned about having an accident, but accident-related messages may be effective if they focus on the potential to injure their friends or someone else (not themselves).

In relation to specific message factors, the focus groups discussions and participants' evaluations of previous anti-drug driving messages and posters provided several key considerations for creating an effective message:

- messages need to be simple and complete, that is, the reader should not be expected to finish the story or require time to discover the 'cleverness' of the advertisement;
- there is a great need for informative messages that address the target group's limited knowledge base regarding drug driving and its consequences without being text-heavy and unappealing; and
- images in the messages must be eye-catching but also realistic and relevant to the target audience (for example, they need to be able to relate to characters shown in the advertisements).

## **Phase 4. Preliminary development of messages and executions**

The aim of the current study was to involve young people in the development of anti-drug driving messages and compare the perceived effectiveness of the different messages. Following the extensive formative research conducted to develop an understanding of the messages that would resonate with young drivers (see above), a series of messages were developed and tested with the target audience.

Four groups of 3<sup>rd</sup> year graphic design students were given a design brief based on the formative research and asked to develop a series of drug driving advertisements for posters, billboards and pamphlets. The use of graphic design students, rather than a commercial advertising agency, served two purposes. First, it was substantially cheaper and enabled the development and testing of a range of message concepts (rather than one, as would have been provided by an agency). Second, it meant that the messages were developed by people within the target group for the campaign.

A formal briefing was held with the four design teams. They were provided with an overview of the issue and the findings of the formative research. The briefing emphasised the three main themes the formative research suggested should be incorporated in the advertisements:

1. Initiate/increase awareness of roadside drug testing, and emphasise the threat of loss of licence if caught;
2. Communicate the effectiveness of testing and the drugs targeted; and
3. Communicate the dangers of drug driving – address attitudes that drug driving is not dangerous and/or is safer than drink driving.

The four design teams presented their draft advertisements to the research team and were given feedback for improvement. Nine advertisements were chosen to be focus-tested (three advertisements per theme). Advertisement selection was based on the overall look of the ad, the message presented

(based on the design brief from CHI) and its likely appeal to young people aged 18-25 years. These nine advertisements were then tested with six focus groups (three female-only and three male-only groups). Focus group participants provided feedback on all aspects of the advertisements (in poster form) – including credibility, clarity, appeal, and perceived effectiveness.

Copies of the nine messages tested are provided as Appendix D.

## **Phase 5. Pre-testing of messages and executions.**

### **Method**

Six focus groups were conducted on the University of Wollongong campus<sup>2</sup> (with between six and eight participants per group). The groups were split by gender (i.e., three male-only groups and three female-only groups).

Participants reviewed each of the nine advertisements and discussed the images, taglines, information presented and clarity of messages. Participants were also asked to compare the ads in each of the three themes and rank them based on their overall appeal.

### **Results**

#### *Ad 1: Drive with drugs- your license will go up in smoke*

The female participants generally disliked this ad, thought the message was unclear, and expressed concerns about the potential for it to be confused with seatbelt advertising; and males felt the pun was 'lame,' and were unsure about the effectiveness/realism of the deterrent message.

#### *Ad 2: Drive high-say goodbye to your license and hello to police officer*

The female participants felt that this ad was overly cluttered, with too much going on, but liked the use of the 'testing stick' graphic as it made drug testing seem more 'real'. Similarly, males liked the visual of the testing unit, but thought the ad was too cluttered and contained too much text. Both genders disliked the tag line 'say hello to a police office' and thought the ad was a little 'try hard'.

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<sup>2</sup> Note that as this phase was funded internally by CHI, the groups were conducted in Wollongong rather than Canberra. This also eliminated the potential for contamination in the survey data that could have arisen if the focus-testing and final testing utilised the same participants.

*Ad 3: 'It's ok, there's no way they can test it'*

This ad was well received in all groups, with participants particularly liking the tag line and the emphasis on the risk to friends of driving under the influence of drugs. Male and female participants commented that this would be appropriate for magazine advertising, and described the ad as 'subtle' and 'catchy'. Some suggestions were made regarding the need to make the drugs look more realistic.

*Ad 4: 'Drug driving- not a safe trip- cocaine road lines'*

This ad did not appeal to the majority of participants, with the main concern being that many found the message difficult to interpret. Participants felt that people shouldn't have to work to understand the message, and that it wouldn't be effective in reaching the target group. There were also concerns about the focus on cocaine, which was not seen to be a common drug among young people.

*Ad 5: 'Drug driving- not a safe trip- distorted dashboard'*

This ad was not well received in most of the groups. While a number of participants liked the tag line and the emphasis on the risk to friends of driving under the influence of drugs, the image was seen as ineffective and ambiguous. Male and female participants also commented that the drugs did not look realistic and the implied effect of drugs (via the distorted visuals) was not relevant to many of the drugs used by the target group.

*Ad 6: 'Drugs alter reality'*

This ad received mixed reactions from the participants, with some feeling that it was clever and conveyed the consequences of drug driving, but others perceiving it as unrealistic. Importantly, participants in several of the groups, particularly the female groups, felt that the ad actually encouraged drug use as the tagline and imagery seemed to be promoting drug use as enjoyable.

*Ad 7: 'Drive high- say goodbye to a mate'*

This ad was not well received by the female participants, with the tagline seem as childish and not a strong enough message, and the male participants felt that the ad was not professional enough and the message too extreme. Both male and female participants felt that the images were ambiguous, with the drugs not appearing realistic and the other imagery difficult to interpret.

*Ad 8: 'Drugs + driving = all of the above'*

This ad was very well received in all of the groups, with the message seen as clear, succinct and realistic. The use of the multiple choice format was seen as appealing, as it was a communication style they were familiar with, and the tone was seen as appropriate for the target audience.

*Ad 9: 'One trip at a time'*

While there were some negative responses to this ad, overall it was very well received – with participants expressing a sense of emotional connection with the character in the ad (and several suggesting that this could be developed into a series of ads with people with different drug-driving injuries). The participants particularly liked the style, quality and 'professionalism' of this ad. As with Ad 6, a number of participants felt that this ad could be interpreted as condoning drug use – although in this case this was seen as a, perhaps appropriate, harm minimisation message rather than a 'pro-drug' message.

## **Summary of Findings**

Across all of the groups, the three ads that stood as being perceived as the most effective, realistic and relevant to the target group were Ad 3 ('It's ok, there's no way they can test it'), Ad 8 ('Drugs + driving = all of the above') and Ad 9 ('One trip at a time'). The design teams were asked to make minor modifications to the ads in response to the focus group feedback (such as font size, colours, etc) and these three ads were then tested in Phase 6 (Evaluation Survey).

## **Phase 6. Study 3 (Survey)**

The evaluation survey aimed to capture the perceived impact of the advertisement messages on attitudes, knowledge, and intentions regarding drug-driving. The three advertisements assessed most favourably in the focus groups were tested in a survey of ACT university students, TAFE students and Road Ready driving school students.

### *Survey*

The survey collected some basic demographic information, as well as previous experience and attitudes towards drug driving. Respondents then viewed and respond to six advertisements (three from this study and three existing campaign advertisements from Queensland and Western Australia) in terms of overall impact, likeability, and emotional responses. It comprised of a mixture of categorical and open-ended questions and included (for each advertisement):

- initial reaction to the advertisement
- emotions evoked after viewing the advertisement
- likeability and realism

For a full copy of the survey see Appendix E, Attachment E1.

A talk aloud session was carried out with CHI researchers to identify questions in the survey that were confusing or hard to understand. Each question was reviewed for clarity, layout, the measurement scale and readability.

### *Data collection*

In Phase Four, young people (aged 18-25) were recruited to complete the quantitative survey, with a variety of methods utilised to gain a cross-section of participants in the ACT:

- *Universities* – on campus residences were contacted at ANU and each residence (Bruce Hall, Ursula Hall, John XXIII College and Burgmann College) provided participants for the survey. Surveys were distributed by student residents and collected at a central point.
- *Intercept surveys* – were used to further allow for targeted recruitment across TAFE students and Road Ready Students. Respondents were recruited via Canberra institute of Technology (Bruce and Reid Campus) and Road Ready Driving School.

It was proposed that a target of 600 would be recruited across the ACT; using age, gender and student status to meet quotas for each of these variables. This quota was not met and 459 surveys were returned analysed in this survey. This was due largely to time limitations at Road Ready driving school and poor weather while undertaking the intercept survey at Reid Campus at CIT. In spite of the reduced numbers, this sample size is sufficient for analysis and provides a unique insight in to how young people in the ACT view anti-drug driving messages.

Of the 459 respondents, 54.9% were female and nearly 75% were less than 22 years old. Just over half of participants (51.0%) had their provisional license, 29.2% had a full license, and 12.4% had a learner's permit (12.4%).

### *Data Analysis*

Analysis of the data was undertaken in SPSS and Excel.

The full report of the evaluation survey findings is provided as Appendix E

### **Summary of Survey Findings**

The majority of respondents were concerned about the consequences of drug driving, with over 90% reporting that they would be worried about being charged or causing serious injury to someone. Similar to the focus groups

results, the majority of people thought taking drugs would negatively influence their driving ability, however there was still a large proportion that stated that driving would be improved. There may have been some confusion in participants' understanding of the questions, however these results are consistent with the literature reported in Phase One of the research project.

For each advertisement, participants were asked to identify the main message and what they thought each advertisement was about. It was clear that participants were able to identify the correct main messages for each advertisement, however there was considerable variation in overall likeability, perceived realism, and emotional responses across the advertisements tested.

Two of our test advertisements ("Drugs plus driving equals all of the above" and "One trip at a time") clearly outperformed existing campaign messages in terms of being likable and realistic, and evoking the intended emotions. The third test advertisement ("It's OK, there's no way they can test it") was not well received, as the message was unclear and the images used perceived as unrealistic; again emphasising the need for the message to strike the right note of authenticity.

It is interesting to note that those advertisements most liked, and perceived as most realistic, by those in the target audience were those that made the majority feel nervous, scared and shocked – suggesting that perhaps this is an area of social marketing where invoking strong emotional responses may be appropriate. This needs to be carefully done, however, as two of the existing campaigns ("The End" and "The Agony and the Ecstasy") utilised high-fear 'shock' tactics but went too far beyond the target audience's latitude of acceptance and were rated as not realistic (as well as not liked). These findings are consistent with cognitive dissonance theory (Cooper and Fazio, 1984; Festinger, 1957) and earlier research into the acceptability of anti-drug messages. For example, a study of extreme warnings about cannabis found that while they are perceived as believable by never-users they are rejected by current users (the primary target audience of many anti-drug campaigns);

and the only messages perceived as believable are those they have experienced or seen others experience, such as loss of motivation and dependency (Jones and Rossiter, 2004). It is very difficult to strike a balance between being edgy and creative in order to evoke emotions without trying too hard and desensitising young people. This research underscores the need for careful development and pre-testing of messages targeting behaviour change in the sophisticated young adult target group.

## Certification

I certify that all details in this report are true and complete and that this is an accurate Final Report for the project.

Signature

A handwritten signature in purple ink, appearing to read 'S Jones', is centered within a light blue rectangular box.

Date 14 July 2010

Professor Sandra Jones



# Smashed: Drugs and Driving Don't Work

## Appendix A: Literature Review

Sandra Jones & Liz Wiese



# Background and Methodology

## Purpose

The purpose of this research project is to develop and test effective and appropriate messages which can be utilised as part of a social marketing program, with the aim of deterring 18-25 year olds in the ACT from driving under the influence of illicit drugs. This literature review was conducted in order to guide the formative research process and message development.

The objectives of the literature review were to:

- summarise the available data on the prevalence of drug driving (mainly cannabis, ecstasy and speed) among young people in Australia, and where possible specifically the ACT;
- summarise the literature on young Australians' knowledge, attitudes and beliefs regarding drug driving;
- review the available literature on previous drug driving campaigns.

## Methodology and Scope

A comprehensive literature search was conducted to identify published research on the prevalence of drug driving in Australia, attitudes and perceptions towards drug driving, and previous efforts to reduce drug driving rates among young people. The following databases were searched for articles published from 1998 onwards: Proquest, Australian Public Affairs, CINAHL, Cochrane Database of Systematic Reviews, Medline, PsychInfo, Expanded Academic Index and Science Direct). The search terms and operations used were:

- (drug AND driv\*) AND (risk perception OR attitudes OR awareness)
- (drug AND driv\*) AND (health promotion OR social marketing OR marketing)

For the number of articles identified in each database, see the Attachment to this Appendix.

The reference lists of relevant articles were also examined (using the same criteria) for any articles or reports not located in the initial searches. Furthermore, relevant national data was also sought from the appropriate organisations. A total of 55 articles were identified for the review.

This review did not seek to examine the literature pertaining to the effects of illicit drugs on driving skills, as this was outside the scope of the research project. The relevant authoritative bodies within the ACT have recognised the need for introducing Random Roadside Drug Testing and are committed to introducing legislation which allows for implementing the RRDT program<sup>1</sup>. Currently, RRDT in other Australian states (e.g. Victoria) can identify the presence of Cannabis (THC), Ecstasy (MDMA) and Speed (Methamphetamine), and therefore the review focuses on these drug types, with comparisons to alcohol where appropriate.

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<sup>1</sup> See Media Release (24/06/2008) by Minister for Territory and Municipal Services, John Hargreaves: <http://www.chiefminister.act.gov.au/>

# Introduction

## *What is drug driving?*

There is considerable variation in the way that researchers have measured/defined drug driving, predominantly in terms of the time between drug ingestion and driving (ranging from driving immediately after drug use to up to six hours after use; or less specifically, as driving while feeling the effects of drugs). Thus, to ensure that all relevant research was included in this review, the term ‘drug driving’ is used in its broader sense.

## **Prevalence of drug driving in Australia**

### *Measuring the prevalence of drug driving behaviour in Australia*

Similarly, a range of methods have been used to measure the prevalence of drug driving behaviours in Australia. The studies identified in this review are predominately retrospective, and utilise surveys, interviews (including online, face-to-face and telephone) and roadside or hospital-based testing. We take as the starting point the only national data available (the National Drug Strategy Household Survey), and then review the research that has been conducted with specific population groups.

### *Drug driving among the general population*

The 2007 National Drug Strategy Household Survey (NDSHS) revealed that over 13% of Australians aged 14 years and over have recently used an illicit drug (i.e., used in the last 12 months); with cannabis, ecstasy and meth/amphetamine the most commonly reported. Of those who reported using illicit drugs, 20.9% reported that they drove a vehicle while under the influence of drugs (25.6% of males and 14.4% of females). In comparison, only 14.3% of recent drinkers reported driving a vehicle while under the influence of alcohol. Encouragingly, however, comparisons with previous NDSHS results show an overall decrease in the proportion of drug drivers among recent illicit drug users since 2001 (Table 1). Self-reported drug driving among males decreased from 30.6% in 2001 to 25.6% in 2007; and among females decreased from 16.8% to 14.4%. The estimated total number of persons who reported drug driving in 2007 was 525,800.

**Table 1: Trends in drug driving among recent drug users since 2001, as reported by the NDSHS surveys**

	<b>2001</b>	<b>2004</b>	<b>2007</b>
<b>Males</b>	30.6	27.7	25.6
<b>Females</b>	16.8	16.7	14.4
<b>Persons</b>	24.8 (n= 680 100)	23.1 (n= 581 100)	20.9 (n=525 800)

Source: Australian Institute of Health and Welfare (2002, 2005, 2008)

*Data from state-based studies and those with specific population groups*

Findings from studies with smaller samples of Australian drivers (as opposed to the NDSHS which includes all people aged 14 and over), report rates of drug drivers ranging from 4% to 16% (partly due to differences in methodology and sampling). A 2004 review of the literature on drug driving within Australia concluded that less than 5% of the general population were considered drug drivers (Kelly et al. 2004).

In 1998, a randomly selected sample of Western Australians reported that 6% of current drivers had driven while feeling the effects of cannabis in the last 12 months, 1.3% under the influence of amphetamines and 1% under the influence of ecstasy (McLeod et al. 1998). More recently, in a randomised telephone survey of NSW drivers (over the age of 17 years) 4% reported driving under the influence of drugs (Hawkins et al. 2004).

Studies which have actually tested drivers have found results consistent with the survey data. A Queensland study of 781 drivers using oral fluid sampling and further laboratory confirmation found that less than 5% (n=27) tested positive to an illicit drug: 13 cannabis, 11 amphetamine (including MDMA) and 3 multiple drugs (Davey et al. 2007). The advantage of road-side saliva testing studies, such as the Queensland study (Davey et al. 2007) is that it addresses the bias inherent in self-report studies. However, despite ensured confidentiality, police presence during recruitment in the (Davey et al. 2007) study may have influenced participation rates, with those who *had* taken drugs prior to the trip declining to be tested. Thus, it is likely that such studies which use voluntary testing will underestimate actual levels of drug driving (Mallick et al. 2007; Walsh et al. 2004b).

Other studies with non-random samples – which have produced notably higher proportions of drivers who report drug driving – are equally problematic. For example, a large (non-randomised) internet survey of Australian drivers (n=6,801) revealed that over 16% had reported driving under the influence of an illicit drug within the previous 12 months (Mallick et al. 2007); but it is likely that there was a self-selection bias among those who participated in the survey.

### *Drug user groups*

The availability of reliable data on the driving behaviours of drug users (specifically) is limited, as this is not an easily accessible segment of the population. Such samples are usually recruited via selective and convenient methods (such as intercept interviews or convenience advertising) and, for heavy users in particular, via treatment or needle exchange networks. As a result, certain *types* of drug users are likely to be excluded from these studies, particularly those users who do not seek treatment (Walsh et al. 2004b). Nevertheless, due to the nature of drug driving as the by product of drug use, it is important to investigate the behaviours of at-risk groups in order to understand how targeted interventions can be implemented effectively. In Australia, research of this type has been conducted in South Australia, Western Australia, Victoria and NSW.

In comparison to national data on recent drug users, these studies report substantially higher rates of drug driving among these specific population groups. For example, among self-identified drug users in the internet survey described previously (Mallick et al. 2007), over 50% of cannabis and methamphetamine users and 37% of ecstasy users reporting drug driving; whereas only 13.8% of alcohol users reported drink driving, suggesting a higher likelihood among drug users of driving under the influence of drugs than alcohol (Table 2).

**Table 2: Proportion of drug drivers among an internet survey of Australian drivers**

<b>Drug (number of users)</b>	<b>Users reporting driving within 3 hours of consuming drug (%)</b>	<b>Percentage of the full sample (n=6801)</b>
<b>Alcohol (n=6231)</b>	13.8	12.6
<b>Cannabis (n=1635)</b>	51.3	12.3
<b>Methamphetamines (n=895)</b>	52.7	6.9
<b>Ecstasy (n=1057)</b>	37.5%	5.8

Source: (Mallick et al. 2007) p. 26-27

In a survey of 429 illicit drug users in NSW, nearly half the sample (48%) reported drug driving (Hawkins et al. 2004); consistent with the Mallick (2007) findings. Similarly, interviews with regular (monthly) ecstasy users in NSW (n=573), recruited via advertising and snowballing, found that 53% reported driving under the influence of ecstasy, 53% under the influence of cannabis, 49% of methamphetamine (Matthews et al. 2009). Among a smaller South Australian sample of illicit drug users (n=91), nearly all participants reporting driving within 1-2 hours of taking drugs in the last 12 months, with the proportions varying by drug type: 88% of cannabis users, 59% of methamphetamine users and 30% of ecstasy users (Donald et al. 2006).

Two studies have examined driving behaviours specifically among injecting drug users (IDUs) in Australia. Recruitment focused on drug treatment networks such as outreach workers, treatment services and needle exchange centres, as well as word-of-mouth and targeted advertisements (Aitken et al. 2000; Darke et al. 2004). Again, the findings were consistent: of 300 IDUs in Sydney, 88% had driven within two hours of consuming “any” drug (including alcohol) and more specifically, 57% cannabis, 56% heroin and 34% amphetamines, at least once in the last 12 months (Darke et al. 2004); of 84 IDUs in Victoria, driving immediately after injecting was common (up to five times a week) among the majority of participants, while only 33% reported not driving after use at all in the last week.

Driving behaviours of cannabis users are often studied independently due to higher rates of use than any other illicit drug used in Australia (Australian Institute of Health and Welfare 2008). Results have varied across such studies. For example, more than 75% of a non-random sample of cannabis users (total=320) in NSW reported driving within an hour of using cannabis within the past year, and 27% had reported doing so weekly or more often (Jones et al. 2006); whereas only 30% of recent cannabis users surveyed in North Coast NSW reported driving within one hour of consuming the drug (Jones et al. 2003).

International data derived using similar methodologies have produced comparable findings to Australian research. For example, the United States National Survey on Drug Use and Health reported that 4% of the population had drug driven in the past year; and, like Australia, the US has seen a slight decrease in the number of drug drivers since 2002 (Substance Abuse and Mental Health Services Administration 2008).

Similar results have been found in Scotland (Ingram et al. 2001), New Zealand (Fergusson et al. 2008) and Canada (Walsh and Mann 1999). However, a detailed review of the international literature is beyond the scope of this project.

### *Drug using environments*

Certain environments are more conducive to drug taking, and thus drug driving; particularly for ‘party’ related drugs such as ecstasy and amphetamine type substances which are more likely to be consumed at nightclubs or raves (Akram and Forsyth 2000; Donald et al. 2006; Hawkins et al. 2004). The university environment has also been found to have high rates of illicit substance use (Stevenson et al. 2001) and resultant higher rates of drug driving, than the general population. In Australia, the majority of this research has been conducted via face-to-face interviews (except for surveys in the university environment). In all cases, findings have been based on the reports of convenience samples, and therefore results should be interpreted with caution.

Three studies have been conducted with Australian university students (two in Queensland and one in Western Australia). The data from the two Queensland studies suggests that between 5 and 15% of students (from samples of 331 and 274 respectively) currently engage in drug driving (Armstrong et al. 2005; Davey et al. 2005); with lifetime (i.e., ever) drug driving approximately 25% in both studies. Cannabis, speed and ecstasy were the drugs most commonly consumed before driving. The Western Australian study (Stevenson et al. 2001) measured the rate of drug driving specifically among designated drivers (i.e. drivers elected to remain alcohol free in order for friends to travel home safely); and found that 18% of designated drivers indicated they had driven while under the influence of an illicit drug. In combination, these studies provide evidence to suggest that university students engage in higher rates of drug driving than the general population, and possibly higher than their drink driving rates (Davey et al. 2005).

The dance music scene has also been the focus of research due to its association with 'party drug' use such as ecstasy and amphetamine type substances. An earlier review paper (Akram and Forsyth (2000) concluded that very few studies have focused on this environment, and the majority were (at the time of publication) over 10 years old; but those available indicated that amphetamines, ecstasy, LSD and cocaine are the most commonly used drugs in these environments and young male adults were more likely to drug drive. Since the Akram and Forsyth (2000) review, several studies have been conducted in Australia, predominately in regional and metropolitan Victoria. In a combined sample of rave and club attendees (n=455), nearly half of those interviewed reported drug driving at least once in the previous 12 months (Duff and Rowland 2006). Degenhardt, Dillion, Duff and Ross (2006) interviewed 273 patrons entering metropolitan clubs (one dance club and three mixed venues); nearly 20% reported driving under the influence of ecstasy or methamphetamine in the last month and 28% under the influence of cannabis. Further, 11% had indicated that on the night of the interview they were likely to drive or be driven by someone under the influence of cannabis, and 8% methamphetamine. There are a number of methodological and sampling issues that contribute to the different findings between the two studies (such as venue type and location); and studies of this type must again be interpreted with caution as the face-to-face interview method is subject to social response bias, particularly due to the illegal nature of drug taking.

### *Motor vehicle accidents*

While, as stated above, a review of the effects of drug driving is beyond the scope of this study, the data on motor vehicle accidents contributes to our understanding of the prevalence of drug driving. Various studies have analysed records of injured or deceased drivers in order to measure drug presence among those involved in motor-vehicle accidents (MVA). These studies usually occur within the hospital setting (testing and surveying patients within the trauma or emergency section) or using coronary results of fatally injured drivers; and indicate an upward trend in the presence of particular drugs in fatally injured drivers in Australia.

Drummer et al. (2003) analysed the coronial results of 3,300 fatally injured drivers in NSW, Western Australia and Victoria between 1990 and 1999; and found an increase of illicit drug presence in drivers from 20% (1990-1993) to 26.7% (1997-1999).

Again, cannabis was the most common drug identified, however the *active* component, THC (indicating recent use) was only present in approximately half of these cases; the lack of confirmation of *recent* cannabis use may overestimate the number of drivers who were driving under the influence. Conversely, as described by (Walsh et al. 2004b), in the situation of coronary or medical records, illicit drug use may not be routinely collected for all drug types and underreporting may exist within this setting.

### **Young people and drug driving**

National data from the NDSHS does not provide age specific rates of driving under the influence of illicit drugs, however there is consistent evidence that young people, particularly males, are more likely engage in drug driving than other age groups.

Young people are also a likely target for intervention due to the higher rates of drug use within this age group, particularly for cannabis, meth/amphetamine type substances and ecstasy (Australian Institute of Health and Welfare 2008).

In their review of drug driving literature, Kelly et al. (2004) concluded that those aged under 35 were found in most studies to be more likely to drug drive. Since that

review, research in Australia has shown mixed results: a small sample (n=27) of Queensland drivers who tested positive for an illicit drug indicated that males aged between 17-30 were more likely to test positive for at least once illicit substance (Davey et al. 2007); among rural sample of NSW drivers, there were no significant differences between 18-24 year olds and 25-29 year olds who reported driving under the influence of cannabis (Jones et al. 2003); and results from a large internet survey (Mallick et al. 2007) indicated that for specific drug groups, proportions of drug driving remains high among most age groups, particularly cannabis users.

Despite evidence that drug driving is also common among older illicit drug users, the under 40s is likely to remain an effective target group due to their overall attitudes towards driving safety, less driving experience and increased likeliness to consume illicit drugs for recreational purposes and within social settings (Armstrong et al. 2005).

### **Gender and drug driving**

The research indicates that males are more likely than females to drug drive; with national data consistently finding higher rates among males (AIHW 2008), as did the large internet survey of Australian drivers (Mallick et al. 2007). In smaller studies higher rates of drug driving have been reported by males among university students (Davey et al. 2005), cannabis users (Armstrong et al. 2005; Begg and Langley 2001; Jones et al. 2007), and regular ecstasy users (Matthews et al. 2009), although gender was not associated with methamphetamine or cannabis related driving in the latter sample.

### **Frequency of drug use**

Research identified in this review presented a number of factors which are likely to influence drug driving behaviours. The most common factor is frequency of drug use, with several studies reporting that high drug use patterns increase the risk of drug driving. For example, IDUs interviews (Darke et al. 2004) indicated that drug dependence and higher frequency of drug use were associated with higher risk of drug driving behaviours; and frequency of drug use was the most significant correlate of

drug driving behaviours for cannabis, methamphetamine and ecstasy (Hawkins et al. 2004).

## **Reasons for drug driving**

Various studies have examined the nature of drug driving trips, and the reasons why drug driving occurred. Two studies have examined respondents' behaviours regarding specific events such as raves and nightclubs. One study indicated that 10% of nightclub attendees would knowingly drive or be driven by someone under the influence of drugs, suggesting that it is not uncommon for drug driving to take place from the nightclub (Degenhardt et al. 2006). These results are supported by the comments from over 80 rave attendees in Western Australia, of which 20 reported that their driver had used drugs before driving to the rave, and 8 drivers notably under the influence (Lenton and Davidson 1999). In interviews with club and rave attendees in Victoria, convenience was the most commonly reported reason for driving after using illicit drugs, followed by no other available transport (Duff and Rowland 2006).

Other studies have asked respondents to describe either the most common place they drive to and from (while under the influence), or the nature of their most previous drug driving experience. Hawkins et al. (2004) found that the most common place to take drugs and drive *from* (out of a sample of 205) was a friend's house (40%) or their own home (35%). However location varied according to drug type: ecstasy, speed, cocaine and LSD were more likely to be taken at a club when compared to cannabis, which was more likely to be consumed at a friend's house. When asked where they were driving to, half the respondents reported 'home', followed by 'to a friend's place' (15%). However destinations did not vary according to drug. Friday, Saturday and Sunday (in that order) were the days on which drug driving was most likely to occur. The most common time period for drug driving was 9pm-3am (37%) followed by 3pm-9pm (34%).

Interviews with heavy illicit drug users in Adelaide (Donald et al. 2006) found that the most common reason for drug driving was usual 'everyday' experiences such as

driving to the shops; and focus groups with amphetamine users also indicated driving under the influence on purpose, as an enjoyment experience (Aitken et al. 2000).

## **Summary**

Overall, while national data suggests that the percentage of recent drug users in Australia who reported driving while under the influence has decreased consistently since 2001 (Australian Institute of Health and Welfare 2008), the prevalence remains unacceptably high. Approximately 5% of the population, and over 20% of those who self-identify as recent drug users, report driving under the influence of drugs. Drug driving rates in Australia are of particular interest when compared to drink driving, which has seen much more attention in both research and intervention. Results from the NDSHS and other studies of alcohol and other drug users suggest that drug driving is more prevalent among drug users than drink driving is among alcohol drinkers, and illicit drugs are more prevalent than alcohol among fatally injured drivers in Australia (Drummer et al. 2003).

The normative nature of drug driving among drug users is worthy of further research in understanding users' perceptions and attitudes towards this behaviour. The following section of this review examines the literature regarding how the decision to drug drive may be influenced by perceptions of safety, risk and overall attitudes towards this behaviour.

## **Attitudes, beliefs and risk perceptions**

In 2004, a literature review by Kelly and authors (2004) identified little research into risk perceptions in their review of drug driving literature, yet concluded that the majority of Australians hold negative views towards people driving while impaired by drugs or alcohol. More recently, similar results were found among university students (Davey, et al 2005). However, as noted by Vanlaar et al (2008), concern about (others) impaired driving is not synonymous with recognition of the risks associated with (own) driving after consuming licit or illicit substances. Studies examining perceptions of risk have increased since 2004, providing a more detailed understanding of impairment and accident risk perceptions among drug drivers. The findings of such research need to be considered in order to develop an effective intervention that will be accepted by the target group and as influence their attitudes towards drug driving (Mallick et al. 2007).

### **Perceptions of danger, risk and accident likelihood**

A survey of 5,074 NSW drivers found that drug driving was considered less risky than drink driving (where risk is defined as risk of an accident), regardless of the respondents' history of drug use (Hawkins et al. 2004) – although younger respondents were more likely to identify recreational drugs as the *most* dangerous for driving than older respondents. These results appear to conflict with a more recent survey of over 2,500 young drivers which indicated that those aged 18-24 were more likely than those aged 25 and over to believe that driving under the influence of illicit drugs was *safer* than alcohol (16% compared to 6% respectively) (AAMI 2008). However, the former study specifically identified perceived accident risk, whereas the latter referred to overall safety, suggesting perceptions are influenced by the type of risk being considered.

An internet survey of 6000 Australian drivers clearly indicated that most Australian drivers consider driving under the influence of any illicit drug is 'very risky/dangerous' (Mallick et al. 2007), supporting earlier conclusions of negative attitudes among the general community (Kelly et al. 2004); but also found that drug

users are less likely to be concerned about drug driving than drinkers are to be concerned about drink driving. For example, around 90% of drinkers *and* non-drinkers considered drink driving as very risky or dangerous, whereas 78% of cannabis non-users but only 30% of cannabis users held similar views towards drug driving. Similar differences are also found between the risk perceptions of ecstasy, methamphetamine and cocaine users and non-users (see Table 3).

**Table 3: Non-user and user perceptions of risk/danger regarding alcohol and illicit drugs**

<b>Drug</b>	<b>Non-users: very risky / dangerous (%)</b>	<b>Users: very risky / dangerous (%)</b>
<b>Alcohol</b>	94.0	88.9
<b>Cannabis</b>	78.6	30.0
<b>Methamphetamine</b>	88.6	31.0
<b>Ecstasy</b>	87.6	46.0
<b>Cocaine</b>	83.0	26.0

#### ***Perception of risk among non-drug drivers and drug drivers***

Smaller studies have explored drug user perceptions of risk in more detail, providing comparisons between users who drive under the influence and those who do not. These studies are limited to convenient samples of predominately heavy or regular drug users, but the results are consistent in their findings that drug drivers are less likely to believe accidents to be a likely or very likely outcome of drug driving (Duff and Rowland 2006; Matthews et al. 2009; Darke et al. 2004).

Furthermore, several studies have also reported an association between low perceptions of accident risk or danger, and a higher willingness to drug drive (Duff and Rowland 2006; Albery et al. 2000).

#### ***Perception of risk by drug type***

The literature consistently shows that cannabis is perceived as the least dangerous drug for driving. Nearly 60% of South Australian illicit drug users considered cannabis as ‘not at all dangerous’ (Donald et al. 2006); among IDU’s it was

considered significantly less dangerous than amphetamines (Darke et al. 2004); and 'frequent' drug drivers reported that cannabis is much less likely to increase accident likelihood than other substances (Albery et al 2000). However, in a study of cannabis users in NSW, over half of the drug driving participants reported that they felt that their accident risk increased when driving while intoxicated (Jones et al. 2003),

Stimulants are usually considered more dangerous than cannabis (Albery et al. 2000; Darke et al. 2004; Hawkins et al. 2004), yet some studies indicate that this difference is small and may also be dependent on the type of stimulant being considered. Donald et al (2006) found that 40% of their sample considered methamphetamines as 'not at all dangerous' for driving (compared to 60% considering the same for cannabis); and occasional drug drivers surveyed by Albery et al (2000) felt that there was a *slightly* higher chance of accident under the influence of stimulants (in general) than cannabis. Studies which have examined stimulants in more detail have indicated that ecstasy is more likely to be considered unsafe for driving than cannabis and methamphetamines (Donald et al. 2006; Hawkins et al. 2004). Among NSW drug drivers, 63% of those who reported driving under the influence of ecstasy felt that it made their driving worse (Hawkins et al. 2004).

### ***Perception of accident risk and influence on behaviour***

Despite lower perceptions of accident risk among drug drivers, there is also evidence that even if these perceptions were increased, drug drivers would not be deterred. Jones et al (2006) showed that among 320 cannabis users, most drug drivers indicated they would continue to drive even if they were convinced that their behaviour increases the risk of an accident. Among drug drivers in NSW, Hawkins et al (2004) showed that fear of accidents is the strongest deterrent for current *non-drug drivers*, yet this was not the case for current drug drivers (for whom, fear of being caught by police was considered the strongest potential deterrent). Many drug drivers in this study also indicated that little would deter them from drug driving. Therefore, while it is clear that drug drivers are likely to have lower perceptions of accident risk compared with non drug drivers, for at least some users the reversal of these attitudes may not result in behaviour change.

## Impairment or improvement

There have been several studies which have examined perceptions of *driving ability* under the influence of an illicit substance; which is conceptually different to perceptions of accident risk or overall danger..

Among those interviewed by Jones et al (2003) who had driven after using cannabis, 55% reported feeling intoxicated on their last drug driving occasion, however only 29% felt that their ability to drive was actually impaired. Cannabis was considered by over 70% of Adelaide illicit drug users to have no or only a small adverse effect on driving ability; and nearly half held similar views towards methamphetamine (29% expecting no effect and 19% only a small effect (Donald et al. 2006). Comparatively, participants in all the relevant studies that investigated perceived impairment or improvement indicated that alcohol is the most impairing drug for driving.

There is also some evidence that some illicit drug users consider their driving abilities to be *improved* by illicit drugs. Among NSW drug drivers, 18% of cannabis users and 21% of amphetamine users believed their driving was improved while under the influence (Hawkins et al. 2004); between 16% and 19% of drug drivers interviewed by Matthews et al. (2009) reported that their driving was 'slightly improved' under the influence of ecstasy, cannabis and methamphetamine; and over 10% of participants in the South Australian study felt that cannabis and methamphetamine resulted in some degree of improvement of driving ability (Donald et al. 2006).

Several studies offer some explanations, mostly in the form of qualitative research, as to why some illicit drug users feel that their driving is improved while under the influence. One commonly identified reason, particularly for cannabis, is perceived over-compensation (driving more slowly or cautiously as a result of knowing that their driving is affected) leading to overall safer driving (Donald et al. 2006; Lenne et al 2001; McIntosh et al. 2008a); and others believe that being under the influence helps them concentrate and make better decisions (Donald et al. 2006).

In regards to methamphetamines, it appears that perceived driving improvement is a result of the physical responses to the drug (increased alertness or concentration), rather than increased caution (Donald et al (2006) (Aitken et al. 2000).

Several studies support the view that a low perception of impairment results in increased willingness to drug drive (Albery et al. 2000; Hawkins et al. 2004). However, while drug users may acknowledge and perceive their driving to be impaired while under the influence, this may not deter them from drug driving (Matthews et al. 2009) particularly when compared to (for example) the perception of being caught by police, or overall perception of danger compared to drink driving.

### **Apprehension risk**

Various road safety studies have indicated that a driver's perception for being caught by police for drink driving is likely to influence their willingness to do so (Kelly et al. 2004). The majority of drug driving studies which examine participants' risk perceptions of being caught have indicated that drug drivers have low expectations of being apprehended (Donald et al. 2006) and that drug drivers are less likely than non-drug drivers to believe they will be caught driving under the influence (eg, Hawkins et al. 2004; Darke et al. 2004; Matthews et al. 2009). The majority of university students (63%) in a Queensland sample perceived apprehension for drug driving to be unlikely (Armstrong et al. 2005); as did respondents to a survey of nightclub attendees (Degenhardt et al. 2006). Other qualitative research has shown that perceived risk of being tested for illicit drugs is much lower than perceived risk of being tested for alcohol (Lenne et al. 2001).

Drug drivers who were also 'designated drivers' in Western Australia, stated that the presence of roadside drug testing was likely to reduce their likelihood of drug driving (Stevenson et al. 2001). Among a sample of NSW cannabis users, participants who were presented with a scenario that included random testing of drivers indicated they would be less willing to drug drive (Jones et al. 2006).

## **What is the greatest deterrent for drug driving?**

When types of risk perception are compared to each other, drug users seem to be more deterred by the risk of apprehension than of accident or injury. Despite many of the drug drivers (44%) interviewed by Hawkins et al (2004) believing that nothing would deter them from drug driving, increased risk of apprehension was regarded as the strongest deterrent by the remaining participants (25%) followed by the risk of hitting someone else (17%). Qualitative research with cannabis users has also found participants to have greater concerns for being caught than having an accident (Aitken et al. 2000); and interviews with night club attendees also indicated that 40% of users would be deterred as a result of roadside testing (Degenhardt et al. 2006).

## **The influence of knowledge and personal experiences**

Several researchers have indicated that personal experiences related to drug driving (having driven under the influence without being involved in an accident or being caught by police) are likely to be a primary factor in perceptions of future risk (Armstrong et al. 2005; Aitken et al. 2000; Albery et al. 2000; Mallick et al. 2007). Thus, these experiences may be causing drug drivers to underestimate the risks associated with driving while under the influence (Mallick et al (2007). The high awareness of drink driving testing and associated campaigns are also suggested to influence apprehension risk, with drivers recalling situations in which they have been breath tested but not drug tested while under the influence of an illicit drug.

## **Summary**

Studies which have examined attitudes towards drugs and driving among the general population have indicated that the majority of drivers hold negative or unfavourable attitudes towards this behaviour. However, there is consistent evidence that drug users (and particularly young people) underestimate the risks associated with drug driving, and particularly underestimate the effect of drugs on their driving skills. Drug driving appears to be more common among younger males, university students, and people who attend raves and nightclubs; with cannabis, ecstasy and methamphetamines the three most commonly used drugs. The available research suggests that cannabis and

methamphetamines are likely to be considered less risky for driving than ecstasy, alcohol or other drugs; and there is also evidence that some users believe their drug use improves their driving, particularly for cannabis users. There is some evidence to suggest that increasing perceptions of the risk of apprehension will be equally, if not more, effective than increasing perceptions of accident risk in deterring drug- driving behaviour.

# **Campaign efforts to reduce drug driving in Australia**

## **Anti-drug driving campaigns in Australia**

There have been several government funded anti-drug driving campaigns implemented throughout most Australian states, often coinciding with the introduction of random roadside drug testing. Due to the costs associated with effective and widespread advertising, and the negative attitudes towards drug driving reported by the general community (i.e., non drug users) these campaigns have generally been disseminated through targeted media channels to maximise exposure by those at risk, such as advertising in bathrooms at nightclubs and raves. The messages within these campaigns aim to raise awareness of: the impairing effects of drug use on driving, the dangers associated with drug driving, and the penalties for drug driving.

## **Implementation and Evaluation**

One program has reported involving young people in the development of appropriate messages, although the nature of this involvement is not described (Costello et al 2001). There is limited information available on the evaluation of these campaigns, however two programs have reported changes in attitude among young people following their implementation. In Western Australia, there was some attitudes shift among the 25% of 100 young people interviewed within venues who recalled seeing the messages (Costello et al 2001); and in Queensland, the 1999 public education campaign reported a reduction in the number of people who believed medicine would not affect their driving, but changes in attitudes towards illicit drugs and driving were not provided (Queensland Transport 2003).

## **Summary**

The literature has provided various suggestions as to the types of messages that need to be conveyed within campaigns in order to reduce the rates of drug driving. Several studies have reported on participants' opinions towards anti-drug driving campaigns and the messages they should or should not utilise. Some of these suggest that drug users do not believe any efforts to reduce drug driving would be successful (Hawkins et al. 2004; McIntosh et al. 2008b); with reasons including the expectation of drug

users to encounter danger (because of their drug use), reliance on individual judgement, and that any government funded or executed campaign would be considered ‘untrustworthy’ or ‘out of touch’ (Ingram et al. 2001).

However, Australian and international studies suggest that many drug users support roadside testing and believe that apprehension and penalties would act as a deterrent (Degenhardt et al. 2006; McIntosh et al. 2008b), suggesting that this should be a key message in campaigns targeting (particularly regular) drug drivers. However, ‘low risk’ drug drivers are more likely to report they would be receptive to an information campaign (Hawkins et al. 2004); and a study with cannabis users reported that 30% felt they would be influenced by a ‘good’ promotional campaign (Terry and Wright 2005), suggesting that provision of information about the effects of drug use on driving skills should not be excluded. Importantly, while drug drivers can recognize *potential* effects of drugs on driving abilities, many believe they can compensate with extra ‘careful’ or ‘slower’ driving. Therefore, it is likely that effective messages will incorporate efforts to reverse the current attitudes surrounding the effects of drug use on driving, and address the perception that drug-driving is safer than drink-driving.

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# Smashed: Drugs and Driving Don't Work

## **Attachment A1: Search Results**

<b>Search Terms</b>	<b>Database</b>	<b>Results</b>	<b>Relevant (including duplicates)</b>
(drug AND driv*) AND (risk perception OR attitudes OR awareness)	Proquest	26	5
	Australian Public Affairs	0	0
	– drug AND driving (ONLY)	15	10
	Ovid: CINAHL	11	3
	Ovid: Cochrane Database of Systematic Reviews	10	0
	Ovid: Medline	30	8
	Ovid: PsychInfo	82	17
	Expanded Academic Index	20	2
	Science Direct	8	5
(drug AND driv*) AND (health promotion OR social marketing OR marketing)	Proquest	18	3
	Ovid: Cinahl	7	2
	Ovid: Cochrane Database of Systematic Reviews	6	0
	Ovid: PsychInfo	5	2
	Ovid: Medline	26	4



# Smashed: Drugs and Driving Don't Work

## Appendix B: Survey 1 Results

Lance Barrie & Sandra Jones



## ***Demographics***

A total of 641 respondents completed and returned the survey; with an approximately equal gender distribution (50.5% female). The majority of participants (87%) were aged between 18 and 21; range 18-25 years. Over one-fifth of the sample were employed full-time, with nearly 30% in casual employment. A very small portion of the sample (1.6%) stated that they were unemployed; however over 30 % did not provide their occupational status. Two-thirds of the sample (66.8%) were university students, with the next largest group being TAFE students (15.9%). The largest proportion of respondents lived at home with their parents (42%); with the second most common living arrangement being resident in on-campus accommodation (26.1%). The remaining third of the sample lived with friends, with their partner, or lived alone.

The majority of respondents in the sample had a current drivers' licence (80%); and only a small number (4%) reported having have had their drivers' licence suspended in the past. Of the 27 reasons given for suspension of licence, 18 stated that they had been speeding and three stated that they had been driving under the influence of alcohol.

***Table 1: Demographics***

	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
<b>Gender</b>		
Male	317	49.5
Female	324	50.5
<b>Age (years)</b>		
18	231	36.0
19	179	27.9
20	96	15.0
21	52	8.1
22	21	3.3
23	23	3.6
24	19	3.0
25	20	3.1

<b>Occupational Status</b>	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
Full-time employee	138	21.5
Part-time employee	105	16.4
Casual employee	190	29.6
Unemployed	10	1.6
No response	198	30.9
<b>Student Status</b>	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
University student	428	66.8
TAFE student	102	15.9
High school student	31	4.8
Not a student	80	12.5
<b>Living arrangements:</b>	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
With parents	269	42.0
With friends	111	17.3
With partner	59	9.2
Alone	35	5.5
On-campus residence	167	26.1
<b>Drivers Licence</b>	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
Yes	513	80.0
No	127	19.8
No response	1	0.2

### ***Alcohol and drug use***

Over one-third of respondents reported that they had consumed alcohol at least once per week during the previous 12 months, with 83.3% ever drinking alcohol (Table 2). Cannabis was the next most commonly used drug, with 22.1% using it in the past year (although most had only done so once or twice). Interestingly, of the 22.1% who reported using cannabis, nearly three quarters stated that they had used alcohol and cannabis on the same night during the previous 12 months.

In relation to other illicit drugs, 11.8% had used ecstasy (MDMA) in the past 12 months, followed by speed (amphetamine) (7.9%), cocaine (5.8%), ice (methamphetamine) (3.6%) and heroin (2.1%). Chi-squared tests revealed that males were more likely to have used cannabis (THC) ( $\chi^2 = 10.897$ ,  $p = .001$ ), ice/base/crystal ( $\chi^2 = 7.407$ ,  $p = 0.006$ ), heroin ( $\chi^2 = 42.07$ ,  $p = 0.04$ ) and alcohol and cannabis combined ( $\chi^2 = 5.366$ ,  $p = 0.021$ ).

Older participants (21+) had significantly higher rates of alcohol use ( $\chi^2 = 4.180$ ,  $p = 0.041$ ), cannabis use ( $\chi^2 = 8.878$ ,  $p = 0.003$ ), speed ( $\chi^2 = 10.625$ ,  $p = 0.001$ ), ice/base/crystal ( $\chi^2 = 5.692$ ,  $p = 0.017$ ), ecstasy ( $\chi^2 = 23.557$ ,  $p < 0.001$ ), cocaine ( $\chi^2 = 13.162$ ,  $p < 0.001$ ), alcohol and cannabis combined ( $\chi^2 = 6.195$ ,  $p = 0.013$ ) and alcohol and another illicit substance ( $\chi^2 = 17.009$ ,  $p < 0.001$ ).

**Table 2: Frequency of Drug Use**

	Daily	1-2 times/ week	< once a week	< once a month	Once/ twice only	never
Alcohol	5.6%	30.9%	22.8%	13.0%	10.9%	16.7%
Cannabis	2.1%	1.3%	1.1%	5.2%	12.4%	77.9%
Speed	0.5%	0.6%	0.5%	1.8%	4.5%	92.1%
Ice/Base/Crystal	0.6%	0.5%	0.3%	0.6%	1.5%	96.4%
Ecstasy	0.2%	1.1%	0.8%	3.9%	5.8%	88.2%
Heroin	0.5%	0.0%	0.6%	0.3%	0.6%	97.9%
Cocaine	0.2%	0.3%	0.6%	1.5%	3.2%	94.2%
Alcohol plus Cannabis	0.6%	0.8%	1.6%	2.1%	11.2%	83.7%
Alcohol plus Any of the above	0.3%	0.3%	1.5%	2.6%	5.2%	90.1%

There were no significant differences in drug use by occupational status; but there were several significant differences associated with residential status (Table 3). Participants who lived at home were more likely ( $\chi^2 = 28.411$ ,  $p < 0.001$ ) to drink alcohol than those who lived in an apartment/house with friends, their partner, by themselves or in on-campus accommodation; and participants who lived by

themselves were more likely to use speed ( $\chi^2 = 24.252, p < 0.001$ ), ice ( $\chi^2 = 21.911, p < 0.001$ ), ecstasy ( $\chi^2 = 13.732, p = 0.008$ ), heroin ( $\chi^2 = 17.798, p = 0.001$ ), cocaine ( $\chi^2 = 23.612, p < 0.001$ ) and alcohol combined with an illicit substance ( $\chi^2 = 12.930, p = 0.012$ ). Chi=squared test also showed that people living with their partner had higher rates of combined alcohol and cannabis usage than those in other living arrangements ( $\chi^2 = 13.703, p = 0.008$ ).

**Table 3: Drug use by place of residence**

	House/ apartment with parents	House/ apartment with friends	House/ apartment with partner	House/ apartment by myself	On-campus residence
Alcohol	91.1	76.9	77.2	60.6	81.9
Cannabis	25.4	17.6	31.6	24.2	16.3
Speed	5.9	12.1	8.8	27.3	4.2
Ice/Base/Crys tal	2.7	2.8	3.5	18.2	2.4
Ecstasy	11.3	17.6	15.8	21.2	5.4
Heroin	1.6	1.9	0.0	12.1	1.8
Cocaine	4.7	7.5	3.5	24.2	3.6
Alcohol + cannabis	18.4	13.2	29.8	18.2	10.2
Alcohol + any of above	9.4	14.0	15.8	18.2	4.2

### ***Driving after alcohol and drug use***

Almost 30% of the sample reported that they had driven within 3 hours of consuming alcohol at least once in the past 12 months. Over 40 respondents (6.8%) had consumed cannabis and driven at least once, while 20 (3.2%) had driven after consuming a combination of alcohol and cannabis. Nearly one in twenty respondents (4.4%) had driven after taking ecstasy, while only a small percentage (less than 2% on average) had taken other illicit drugs before driving in the last 12 months (Table 4).

There was a significant relationship between gender and drink-driving ( $\chi^2 = 4.001$ ,  $p = 0.045$ ) with 34.5% of males reporting previous drink-driving compared to 27.1% of females; but no significant gender differences for driving after using other illicit substances.

There were clear age-related trends in substance use and driving. Participants aged over 21 were almost twice as likely to have drunk-driven in the past 12 months as those aged 18-20 years (48.8% vs. 25.9%;  $\chi^2 = 25.354$ ,  $p < 0.001$ ). Older participants were also 2.6 times more likely to have driven after using cannabis ( $\chi^2 = 10.719$ ,  $p = 0.001$ ), 5.8 times more likely to have driven after using cocaine ( $\chi^2 = 14.450$ ,  $p = 0.045$ ) and 3.2 times more likely to have driven after using both alcohol and cannabis combine ( $\chi^2 = 7.425$ ,  $p = 0.006$ ).

**Table 4: Consumed and then driven within 3 hours**

<b>Drug</b>						
	<b>Daily</b>	<b>1-2 times/ week</b>	<b>&lt; once/ week</b>	<b>&lt; once/ month</b>	<b>Once/ twice only</b>	<b>never</b>
Alcohol	0.5	1.8	2.1	5.8	20.6	69.2
Cannabis	0.8	0.8	0.8	0.2	4.2	93.2
Speed	0.3	0.6	0.3	0.5	1.1	97.1
Ice/Base/Crystal	0.2	0.5	0.2	0.2	0.6	98.4
Ecstasy	0.2	0.5	0.5	1.1	2.1	95.6
Heroin	0.2	0.0	0.6	0.0	0.0	99.2
Cocaine	0.2	0.2	0.5	0.5	1.1	97.6
Alcohol + Cannabis	0.3	0.3	0.5	0.5	1.6	96.8
Alcohol + Any of above	0.2	0.3	0.6	0.2	1.5	97.2

Of the 102 respondents who reported that they had driven after taking drugs other than alcohol, almost one-third (32.4%) recalled that their driving ability was the same as, or better than, usual; with just under half (47.2%) reporting that the drugs had impaired their driving ability, and 14.7% stated that they couldn't say what the impact was on their driving (Table 5). There were no significant differences between gender and age.

**Table 5: Perceived impact on driving ability (n = 102 who had drug driven)**

<b>Driving ability after taking drugs</b>	<b>Frequency (n)</b>	<b>Percent (%)</b>
Better than usual	11	10.8
The same as usual	22	21.6
Slightly impaired	47	46.1
Greatly impaired	7	1.1
Can't remember/can't say	15	14.7
<i>Total</i>	<i>102</i>	<i>100</i>

When identifying reasons for drug driving, more than half of those that had drug driven said that they knew they would drive more cautiously than usual, and that they would be safe. The next most commonly stated reasons for drug driving were that they were only driving a short distance (44%) and that they had only consumed a small amount of the drug (40%). Over one-third (37%) did not want to use alternate forms of public transport, with cost and inconvenience cited as deciding factors, and nearly 40% felt that they would not be caught by the police..

There were no significant differences in reasons by gender, but some differences were noted between age groups. As seen in Table 6, younger participants were significantly more likely to state that they drove safely ( $\chi^2 = 7.712$ ,  $p = 0.005$ ) whereas older participants were more likely to report enjoying driving while on drugs ( $\chi^2 = 12.568$ ,  $p < 0.001$ ), only consuming a small quantity of drugs ( $\chi^2 = 4.007$ ,  $p = 0.045$ ) and having a good time and not thinking about the consequences ( $\chi^2 = 9.855$ ,  $p = 0.002$ ).

When asked what would dissuade them from drug-driving, nearly three-quarters stated that they would not drug-drive if someone else who had *not* taken drugs offered to drive (Table 7). Half of the sample stated they would not drive under the influence of drugs if there was convenient public transport available; but over 70% would still drug drive if there were taxis available, due to the high cost of taxis. Over a third stated that the potential to be caught by the police would not be enough for them to reconsider drug driving. There were no significant differences in responses by gender or age.

**Table 6: Influences on deciding to drug drive (proportion responding in the affirmative; n = 102 who had drug driven)**

<b>Influence on the decision to drive</b>	<b>Under 21 (%)</b>	<b>Over 21 (%)</b>	<b>Total</b>
Drove more cautiously than usual	60.9	48.1	57.3
Drove safely	64.7	37.3	55.8
Only needed to drive a short distance	39.7	55.6	44.2
Had only consumed a small quantity of the drug	33.3	55.6	39.6
Did not expect to be caught by police	38.5	36.8	38.1
Did not want to use alternative transport	39.1	29.6	36.5
Didn't intend to consume drugs; had made no plans to get home	30.4	18.5	27.1
There were no other transport options	23.2	17.0	27.1
Having such a good time, did not think of consequences	14.5	44.4	22.9
Could not afford other transport options	17.4	22.2	18.8
Was the designated driver for my friends	17.4	11.1	15.6
Enjoy driving while feeling the effects of a drug	5.8	33.3	13.5
Drove immediately after; didn't expect the drug to take effect whilst driving	11.6	7.4	10.4
Had purchased and/or consumed the drug inside the car	7.2	14.8	
Wanted to remove the risk of being caught in possession of the drugs when I reached my destination	4.3	11.1	
Driving ability improves on these occasions	5.8	7.4	

**Table 7: Influences on deciding not to drug drive (proportion responding in the affirmative; n = 102 who had drug driven)**

<b>Situations where one would re-consider drug-driving</b>	<b>Yes (%)</b>	<b>No (%)</b>
If someone else (who had not consumed drugs) offered to drive	73.9	26.1
If I suspected that I would be caught by police	63.0	37.0
If my friends told me not to drive	54.3	45.7
If there was public transport available from the place I consumed to where I wanted to go	50.0	50.0
If my friends would not come with me	43.5	56.5
If there were taxis available	28.3	71.7

### ***Being a passenger of a drug driver***

Over half of the respondents (54.0%) reported being a passenger in a car where the driver had consumed alcohol in the past 3 hours, at least once in the past 12 months; 13.5% had been a passenger where the driver had taken cannabis, 8.2% ecstasy, and 8.5% had been driven by someone who had taken alcohol and cannabis combined (Table 8).

There were no significant differences in passenger behaviours by gender; however, there were several age-related differences. Participants aged 21 years or older were significantly more likely to have been driven by someone who they suspected or knew had consumed range of substances within the previous three hours; with significant relationships found for alcohol (62.3% vs 51.7%;  $\chi^2 = 12.568$ ,  $p = 0.001$ ), cannabis (22.7% vs 11.1%;  $\chi^2 = 11.552$ ,  $p = 0.001$ ), speed (12.5% vs 2.9%;  $\chi^2 = 30.108$ ,  $p < 0.001$ ), inco/cocaine/crystal (5.5% vs 1.4%;  $\chi^2 = 7.353$ ,  $p = 0.007$ ), ecstasy (17.2% vs 5.8%;  $\chi^2 = 17.542$ ,  $p < 0.001$ ), cocaine (7.8% vs 2.3%;  $\chi^2 = 9.375$ ,  $p = 0.002$ ), alcohol and cannabis combined (13.3% vs 7.2%;  $\chi^2 = 4.733$ ,  $p = 0.03$ ), and alcohol and another illicit substance (13.3% vs 3.7%;  $\chi^2 = 17.044$ ,  $p < 0.001$ ).

Significant relationships were also found between participants by type of dwelling/residence. Those who lived in an apartment/house with their partner were more likely to have been driven by someone who had taken cannabis ( $\chi^2 = 16.335$ ,  $p =$

0.03), speed ( $\chi^2 = 33.173$ ,  $p < 0.001$ ), ice/base/crystal ( $\chi^2 = 10.589$ ,  $p = 0.032$ ), ecstasy ( $\chi^2 = 21.397$ ,  $p < 0.001$ ), alcohol and cannabis combined ( $\chi^2 = 21.808$ ,  $p < 0.001$ ) and alcohol and another illicit substance ( $\chi^2 = 16.519$ ,  $p = 0.02$ ). Interestingly, participants who lived with their parents were more likely to be driven by someone who had been drinking alcohol ( $\chi^2 = 20.001$ ,  $p < 0.001$ ).

**Table 8: Frequency of being a passenger of a driver within 3 hours of taking a substance**

	1-2					
	Daily	times/ week	< once/ week	< once/ month	Once/ twice only	never
Alcohol	0.8	2.6	4.2	11.7	34.7	46.0
Cannabis	0.5	1.8	1.1	2.3	7.8	86.5
Speed	0.0	0.5	1.3	0.8	2.3	95.1
Ice/Base/Crystal	0.2	0.7	0.2	0.5	0.8	97.7
Ecstasy	0.0	0.3	1.6	1.5	4.7	91.8
Heroin	0.2	0.7	0.2	0.3	0.2	98.5
Cocaine		0.5	0.3	0.5	2.1	96.6
Alcohol + cannabis	0.0	0.8	1.0	1.5	5.2	91.5
Alcohol + any of above	0.0	0.8	1.0	1.0	3.0	94.3

Of the 163 respondents who reported being a passenger in a car where the driver was under the influence of drugs, almost half (49%) reported that the driver's ability was the same as or better than usual; with slightly less than 40% stating that the driver was at least slightly impaired due to the effects of the drugs, and 8.6% couldn't say (Table 9). There were no significant differences in responses by gender or age.

Almost half of these respondents (49%) stated that they travelled with the drug-driver because they believed that the driver would be safe; 37% that they had no other way of getting home; 36% that they only needed to be driven a short distance; and 34% that they believed that the driver had only consumed a small quantity of the drug (Table 10). Female participants were more likely to report being driven home by a drug driver because the driver had just consumed the drug (10.4% vs. 2.6%;  $\chi^2 = 3.932$ ,  $p = 0.047$ ); and participants aged over 21 were more likely than their younger

counterparts to state that they could not afford other transport to their destination (36.8% vs. 18.8%;  $\chi^2 = 5.234$ ,  $p = 0.022$ ).

**Table 9: Description by the passenger of the drug-driver's driving ability**

<b>Driving ability after taking drugs</b>	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
Better than usual	10	6.1
The same as usual	70	42.9
Slightly impaired	60	36.8
Greatly impaired	9	1.4
Can't remember/can't say	14	8.6
<i>Total</i>	<i>163</i>	<i>100</i>

**Table 10: Influences on the decision to get into the car with a drug-driver**

<b>Influence on the decision to be a passenger</b>	<b>Yes (%)</b>	<b>No (%)</b>
Believed the driver would drive safely	49.0	51.0
Had no other way of getting to my destination	36.8	63.2
Only needed to be driven a short distance	36.1	63.9
The driver had only consumed a small quantity of the drug	33.5	66.5
Did not expect the driver to be caught by police	32.3	67.7
Having such a good time, did not think of consequences	27.1	72.9
Did not want to use alternate transport	26.0	74.0
The driver was more cautious than usual	23.9	76.1
Could not afford other transport options	23.2	76.8
There were no other transport options	21.3	78.7
Driver just took drugs; didn't expect the drug to take effect whilst driving	6.5	93.5
Believe a driver's ability improves whilst under the influence of illicit drugs	2.6	97.4

Two-thirds of respondents who had been driven home by someone they suspected or knew had taken drugs (67%) stated that they would not be a passenger of that driver if there was another person willing to drive that has not taken any illicit drugs; and just over half (51.3%) said they would re-consider being a passenger if there were other

transport options to where they wanted to go, and if those options were either free or cheap (Table 11).

**Table 11: Influences on the decision not to get into the car with a drug-driver**

<b>Would re-consider being a passenger...</b>	<b>Yes (%)</b>
If someone else (who had not consumed drugs) offered to drive	67.2
If there were other transport options available to where I wanted to go	51.3
If there were other transport options at little or no cost	51.3
If I suspected that the driver would be caught by police	39.5
If my friends told me not to	37.8
If my friends would not come with me	36.1

### ***General perceptions of the effect of drugs on driving skills***

The majority of respondents (between 72.8% and 83.6%) stated that driving ability is not improved when experiencing the effects of illicit drugs, with between 8.2% and 18.6% unsure (Table 12). There were a small number of respondents who expressed the view that driving ability is improved after taking speed (9.7%), alcohol (8.2%), ecstasy (7.9%), cannabis (7.8%), ice/base/crystal (5.9%), heroin (5.4%), alcohol and cannabis (5.3%), and alcohol and other illicit drugs (5.0%). It is interesting to note that these figures are substantially lower than the same items when asked about the effects of drugs on *their own* driving skills, suggesting a degree of defensive optimism in the earlier responses (a pattern which is common in this age group when considering risk behaviours).

Younger drivers (less than 21 years old) were more likely to believe that alcohol improved your driving skills than those over 21 years (9.1% vs. 4.8%;  $\chi^2 = 11.148$ ,  $p = 0.025$ ). There were no significant differences by gender.

**Table 12: Driving ability of drug driver while under the influence of various substances**

	Improved	Not improved	unsure
Alcohol	8.2	83.6	8.2
Cannabis	7.8	77.9	14.4
Speed	9.7	72.8	17.5
Ice/Base/Crystal	5.9	75.5	18.6
Ecstasy	7.9	75.2	16.8
Heroin	5.4	78.6	16.0
Cocaine	7.4	76.4	16.1
Alcohol + Cannabis	5.3	80.4	14.3
Alcohol + Any of above	5.0	80.0	15.0

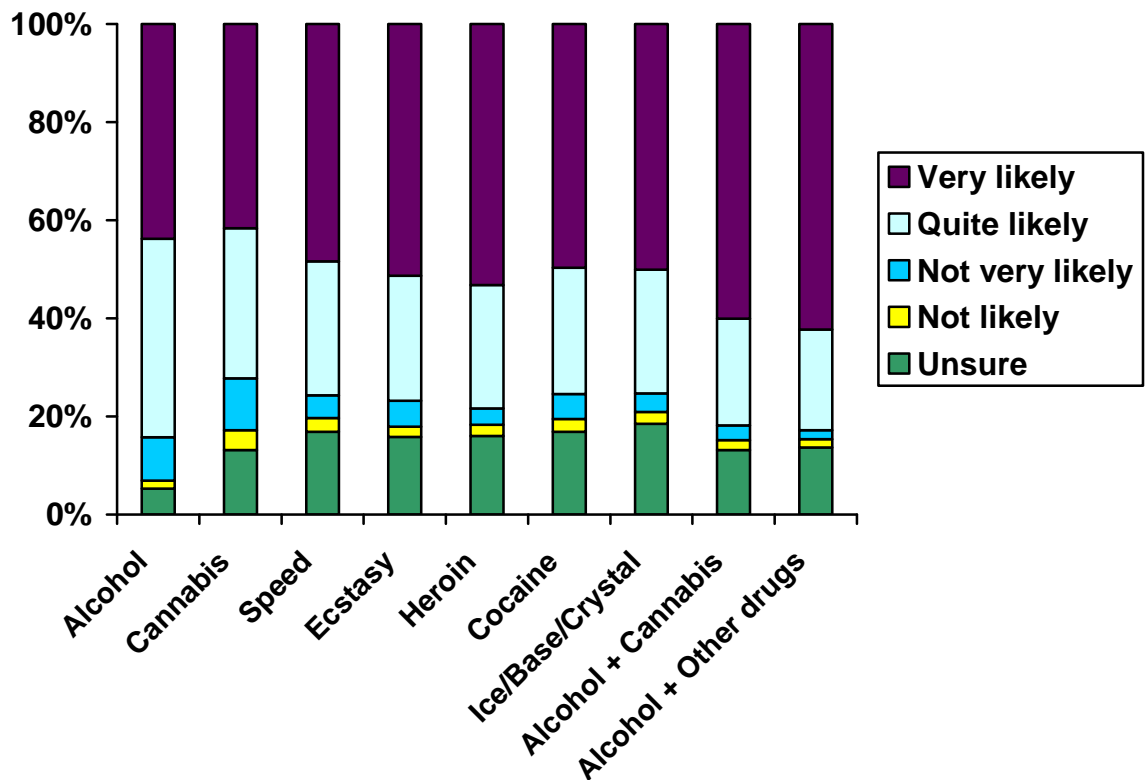
***General perceptions of the effect of drugs on accident risk***

The majority of respondents (79.1% to 93.2%) stated that drivers under the influence of illicit drugs are more likely to cause an accident while driving (Table 13). Males were significantly less likely to think that drug driving would cause an accident; this was evident for cannabis (70.0% vs. 85.5%;  $\chi^2 = 7.494$ ,  $p = 0.024$ ) and ecstasy (78.6% vs. 85.2%;  $\chi^2 = 6.584$ ,  $p = 0.037$ ). Age was also a significant factor, with younger participants (under 21 years old) believing that driving after alcohol consumption was less likely to result in an accident (91.9% vs. 97.6%;  $\chi^2 = 6.301$ ,  $p = 0.043$ )

**Table 13: Likelihood of having an accident after taking various substances**

	Likely	Not likely	Unsure
Alcohol	93.2	1.6	5.3
Cannabis	82.9	4.0	13.2
Speed	80.3	2.8	16.9
Ice/Base/Crystal	79.1	2.4	18.5
Ecstasy	82.0	2.1	15.8
Heroin	81.6	2.3	16.0
Cocaine	80.5	2.6	16.9
Alcohol + Cannabis	85.8	2.0	13.2
Alcohol + Any of above	79.9	1.6	12.9

### Likelihood of a drug-driver to cause an accident after taking...



### Perceptions of 'safe' driving after drug use

On average, respondents thought that a person should wait 7.7 hours ( $SD = 8.44$ ) to drive after feeling the effects of consuming alcohol; with almost a third (31.7%) stating that it was acceptable to drive within two hours and an additional 20.2% two to four hours after feeling the effects of alcohol (see Table 14).

Almost one in five (17.0%) thought that a person should wait less than two hours after feeling the effects of cannabis, with an additional 15.3% suggesting a wait of two to four hours; although over a quarter stated that a person should wait at least twelve hours after feeling the effects of cannabis before driving. On average, respondents stated that it would take 13.3 hours ( $SD = 16.47$ ) before the effects of cannabis would no longer affect driving ability.

In relation to other illicit substances, there was some variation in perceptions of the amount of time an individual would have to wait before driving; with 12.8% of participants believing it would be acceptable to drive within less than two hours after feeling the effects of speed, 10.7% for cocaine, 10.3% for ecstasy, 8.9% for ice, and

6.5% for heroin. It is noteworthy that there was more variation in responses between respondents for speed, ice/base/crystal, ecstasy, heroin and cocaine; with standard deviations varying from 20.65 to 23.15 (compared to only 8.44 for alcohol). This suggests that participants' limited knowledge of the effects of these drugs made them less confident in estimating the safe length of time they would need to wait before driving.

When asked about the *combined* effects of alcohol and cannabis on driving ability, 45% of respondents stated that a person would need at least 18 hours after feeling the effects before they could drive safely; with an average delay of 21.2 hours ( $SD = 23.32$ ) suggested. However, over 40% of the sample thought that it would be safe to drive within 12 hours of consuming both alcohol and cannabis, and 7.1% within less than two hours. In relation to using a combination of other illicit drugs and alcohol, almost 60% of respondents reported that a person would need to wait at least 12 hours before they would be safe to drive; with an average delay of 25.6 hours ( $SD = 27.45$ ) suggested. However, there were over 100 respondents (16%) who stated a person could drive safely within six hours of consuming alcohol and drugs in combination.

Males were significantly more likely than females to state that it would be acceptable to drive within 12 hours of drinking alcohol (88.9% vs. 82.9%;  $\chi^2 = 10.881$ ,  $p = 0.028$ ); but there were no gender difference for any of the illicit substances.

**Table 14: Amount of time before driving after taking each substance**

<b>Drug</b>	<b>&lt;2 hours</b>	<b>&gt;2 – 4 hours</b>	<b>&gt;4 – 6 hours</b>	<b>7-12 hours</b>	<b>13-18 hours</b>	<b>19-24 hours</b>	<b>25+ hours</b>
Alcohol	31.7	20.2	12.5	21.0	2.3	11.2	1.1
Cannabis	17.0	15.3	14.4	22.3	2.3	22.3	6.4
Speed	12.8	10.8	13.8	23.2	1.8	26.6	11.0
Ice/Base/Crystal	8.9	10.4	10.4	23.3	1.3	31.1	14.7
Ecstasy	10.3	11.7	12.2	22.9	1.8	29.3	11.9
Heroin	6.5	8.5	11.3	23.1	2.2	30.9	17.4
Cocaine	10.7	10.3	10.3	22.9	2.2	30.9	12.7
Alcohol + cannabis	7.1	7.3	10.4	23.8	4.8	28.6	18.0
Alcohol + any of above	5.5	4.7	8.8	22.0	4.2	29.7	25.0

### **General perceptions of drug-driving apprehension risk**

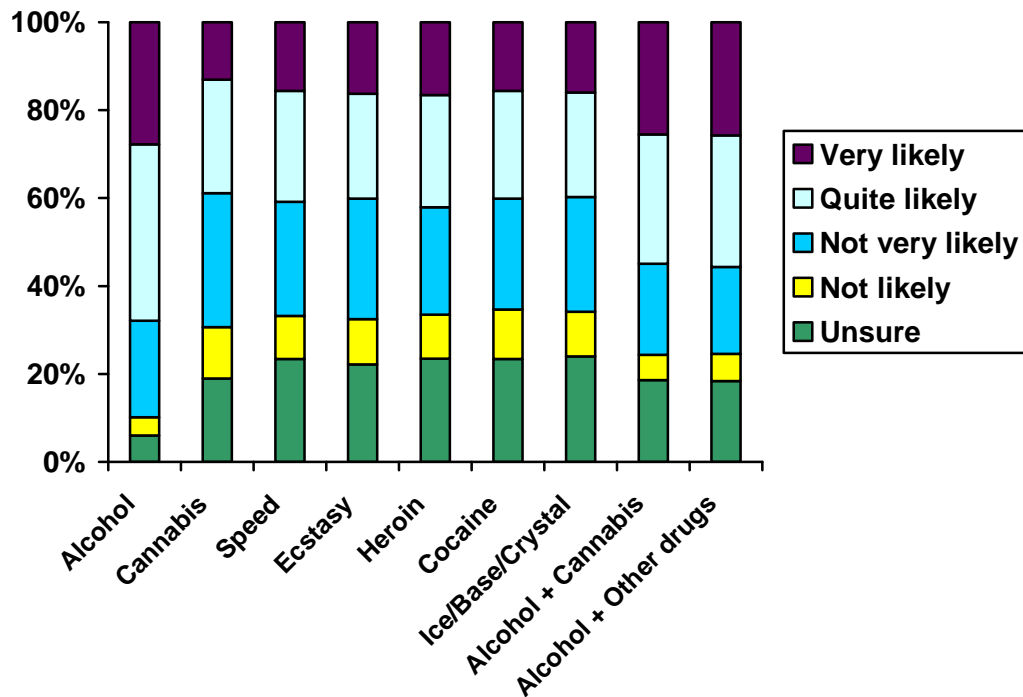
Most participants (88.8%) felt that it was likely that a person would be caught by police for drink-driving. As shown in Table 15, the majority of participants also perceived that the risk of apprehension was quite high across all illicit drugs, ranging from 65.3% (cocaine) to 69.3% (cannabis). This presents a somewhat different picture to that noted in the literature review and expressed by our focus group participants, which in both cases suggests young people perceive the risk of getting caught for drug driving to be low (although this is likely to be explained, in part, by the difference in perceived risk of ‘a person’ getting caught compared to they themselves being caught, with the literature suggesting that the latter is generally considered less likely).

Females were more likely to believe that a person would get caught by police for driving under the influence of ecstasy (72.1% vs. 62.9%;  $\chi^2 = 6.882$ ,  $p = 0.032$ ) and cocaine (70.0% vs. 60.8%;  $\chi^2 = 6.212$ ,  $p = 0.045$ ) than males. While the responses were generally consistent across the age groups, older participants believed it was less likely that people would be caught drug driving for cannabis (19.9% vs. 9.9%;  $\chi^2 = 10.327$ ,  $p = 0.006$ ), speed (17.8% vs. 7.9%;  $\chi^2 = 10.109$ ,  $p = 0.006$ ) and cocaine (20.6% vs. 9.0%;  $\chi^2 = 11.812$ ,  $p = 0.003$ ).

**Table 15: Perceived risk of being caught drug-driving, by drug type**

	<b>Likely</b>	<b>Not likely</b>	<b>Unsure</b>
Alcohol	88.8	4.2	6.0
Cannabis	69.3	11.7	19.0
Speed	66.7	9.8	23.4
Ice/Base/Crystal	65.9	10.2	24.0
Ecstasy	67.5	10.3	22.2
Heroin	66.5	10.0	23.5
Cocaine	65.3	11.2	23.4
Alcohol + Cannabis	75.6	5.7	18.6
Alcohol + Any of above	75.4	6.2	18.4

### Likelihood of being caught by police if under the influence of drugs...



### Perceptions of 'detection' after drug use

Respondents were asked to indicate how long they would have to wait to drive to avoid being caught by police if they were tested for a range of substances. As shown in Table 16, 22.0% of respondents felt that a person would have to wait less than two hours after feeling the effects of alcohol before driving to avoid being caught by police, with a further 20.0% stating they would need to wait two to four hours.

Approximately half that number thought the same delays would be required to avoid apprehension after feeling the effects of cannabis (10.9%, less than two hours and 11.9%, two to four hours); with almost 60% of participants stating that 12 hours or less would be sufficient.

Respondents' estimates for all other drugs (i.e., excluding alcohol and cannabis) were very similar to one another, suggesting a lack of distinction between the effects/detection of the different drugs (likely due to limited knowledge). Between 5.4% (for heroin) and 8.6% (for cocaine) felt that less than two hours was sufficient; between 26.3% and 32.1%, less than six hours; and between 20.9% and 22.0%, seven to 12 hours.

**Table 16: Avoiding the risk of being caught by police under the influence of drugs**

Drug	<2 hour s	>2 – 4 hour s	>4 – 6 hour s	7-12 hours	13-18 hours	19-24 hours	25+ hours
Alcohol	22.0	20.0	15.4	23.2%	2.2%	15.4%	1.7%
Cannabis	10.9	11.9	16.2	20.3%	2.9%	25.1%	12.7%
Speed	8.6	9.5	14.0	21.5%	2.6%	25.9%	18.0%
Ice/Base/Crystal	6.6	8.8	12.5	22.0%	1.8%	27.7%	20.7%
Ecstasy	6.1	10.6	13.1	21.0%	2.5%	27.3%	19.2%
Heroin	5.4	7.8	13.1	20.9%	2.2%	28.1%	22.4%
Cocaine	7.9	8.6	11.7	21.3%	2.4%	27.2%	20.9%
Alcohol + Cannabis	5.2	6.0	10.1	24.9%	4.5%	26.5%	22.7%
Alcohol + Any of above	4.2	4.9	8.0	23.7%	3.7%	27.7%	27.7%

Another noticeable trend was that participants thought that for all of the illicit substances a driver would have to wait slightly longer after feeling the effects to avoid the risk of being caught by the police than to be able to drive competently. As seen in table 17, this was most evident for cannabis; with a mean recommended wait time of 13.3 hours to drive effectively but 17.1 hours to avoid being caught by police.

**Table 17: Mean recommended delays for driving in general and to avoid apprehension**

Drug	General		To avoid police	
	Mean	SD	Mean	SD
Alcohol	7.7	8.4	9.2	9.5
Cannabis	13.3	16.5	17.1	19.3
Speed	16.8	20.6	19.8	21.4
Ice/Base/Crystal	19.2	20.0	22.0	23.5
Ecstasy	17.9	20.9	21.1	23.3
Heroin	21.3	23.1	23.6	27.8
Cocaine	19.1	23.6	21.6	23.1
Alcohol + Cannabis	21.2	23.3	23.1	22.9
Alcohol + Any of the above	25.6	27.4	26.5	26.8

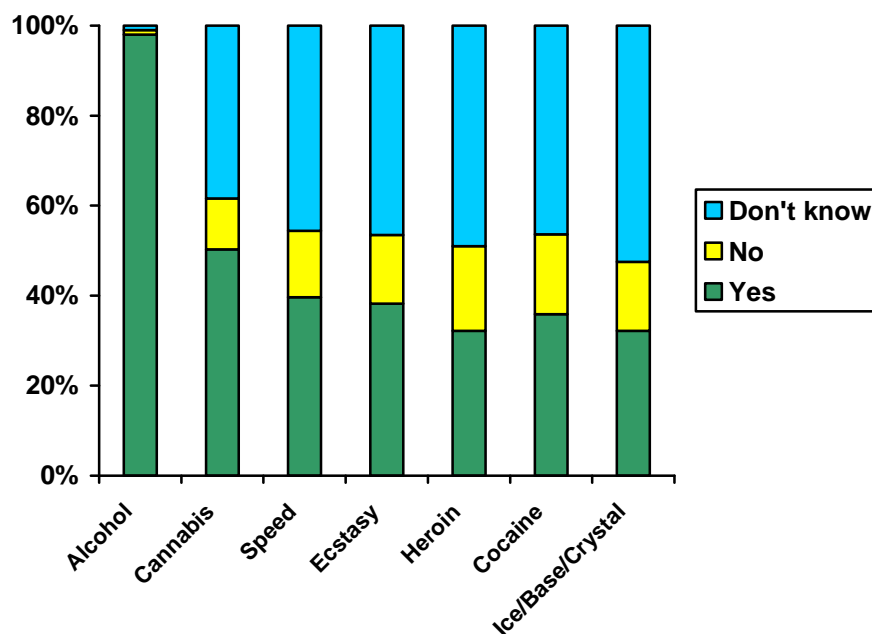
### Awareness of drug testing and drug-driving penalties

The vast majority of respondents (98%) knew that police could conduct roadside tests for alcohol. However, only 50.3% of respondents correctly identified that cannabis can be tested by police in a roadside test; and 60.4% and 61.8% incorrectly stated that speed and ecstasy (respectively) could not be tested by police in a roadside test. Of the other illicit drugs (which currently cannot be tested by police in roadside test) between 32% and 39% of respondents believed that such testing could be conducted (Table 18).

**Table 18: Perceived availability of roadside testing**

	Yes	No	Don't know
Alcohol	98.1	1.0	1.0
Cannabis	50.3	11.3	38.4
Speed	39.6	14.8	45.6
Ice/Base/Crystal	32.2	15.3	52.5
Ecstasy	38.2	38.2	15.3
Heroin	32.2	18.8	49.0
Cocaine	35.9	35.9	17.7

### Can police test (road-side) drivers for the presence of...?

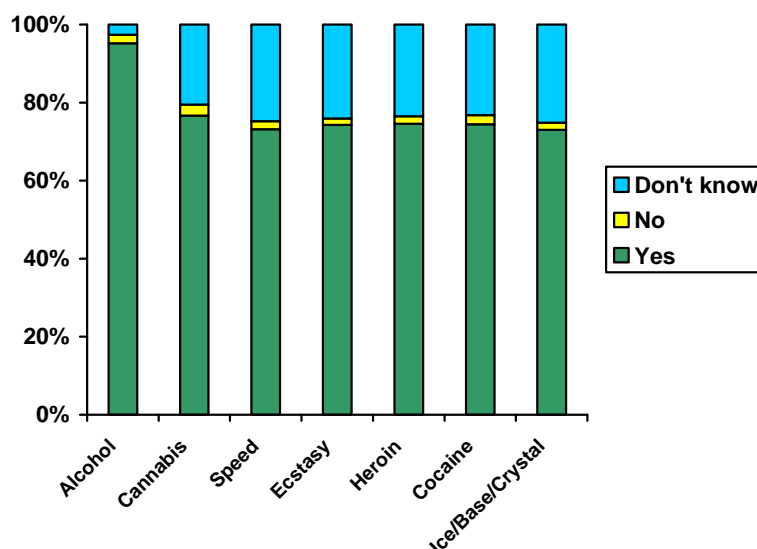


Similarly, nearly all participants knew that there are fines and potential imprisonment for drivers who drink drive; but were less consistent in their responses regarding illicit substances (Table 19). Approximately one-fifth of respondents stated that they didn't know if there were penalties for drivers who tested positive for illicit drugs (20.5% for cannabis and between 23-25% for speed, ice/base/crystal, ecstasy, heroin and cocaine). This is consistent with responses to the previous questions and highlights the overall lack of knowledge amongst young people when discussing drug driving. There were no significant differences by gender, occupation status and student status. However, younger participants (18-20 years) were significantly more likely to be unsure if there were fines and potential imprisonment for drivers who test positive for speed ( $\chi^2 = 4.733$ ,  $p = 0.036$ ).

**Table 19: Perceived existence of penalties for driving under the influence**

	Yes	No	Don't know
Alcohol	95.2	2.2	2.56
Cannabis	76.6	2.9	20.5
Speed	73.2	2.1	24.8
Ice/Base/Crystal	73.1	1.8	25.2
Ecstasy	74.3	1.6	24.1
Heroin	74.5	1.9	23.5
Cocaine	74.4	2.4	23.2

#### Are there fines and potential imprisonment consequences...?



## Potential influencers regarding drug-driving

Participants were also asked to identify the one person who is most likely to influence them in regards to messages about drug driving. A range of people was listed, with a family member being the most popular choice (as seen in table 20). Other potential influencers were friends, health professionals, a passenger who has been injured while driving with someone under the influence of drugs, and someone who has been injured under the influence of drugs. Those least likely to be nominated as potential influencers were someone who has been caught drug driving, scientists and government officials.

**Table 20: Potential influencers regarding drug driving**

<b>Influential Person</b>	<b>Frequency (<i>n</i>)</b>	<b>Percent</b>
Family member	106	19.5
Friend	97	17.9
Health professional	95	17.5
A passenger who has been injured as a result of a driver under the influence	85	15.6
Someone who has been injured whilst under the influence of drugs	72	13.3
Someone who has been caught drug driving	36	6.6
Scientist	30	5.5
Government department or official	22	4.1
Total	543	100

# Smashed: Drugs and Driving Don't Work

## Attachment B1: Survey

*The following questions are general questions about you.*

**Q1. What is your gender?** Male / Female

**Q2. What is your age?** \_\_\_\_\_

**Q3. What is your occupation status?**

- ☐ Full time employee (occupation \_\_\_\_\_)
- ☐ Part time or casual employee (occupation \_\_\_\_\_)
- ☐ Casual employee (occupation \_\_\_\_\_)

**Q4. What is your student status?**

- ☐ University student
- ☐ TAFE student
- ☐ High school student
- ☐ I am not a student

**Q5. What is the postcode of your current address?** \_\_\_\_\_

**Q6. What type of dwelling do you currently live in?**

- ☐ House/apartment with parents
- ☐ House/apartment with friends
- ☐ House/apartment with partner
- ☐ House/apartment by myself
- ☐ On-campus residence

**Q7. Do you have a current, valid driver's license?** Yes/No

**Q8. Have you ever had your license suspended for any reason?** (Specify reason/s \_\_\_\_\_)

*The following questions are about your awareness and knowledge related to driving under the influence of drugs.*

**Q9. How long do you think someone should wait after feeling the effects of each of the following drugs, before driving a vehicle in order to reduce the risk of a car accident?**

<b>Drug</b>	<b>Number of hours</b>
Alcohol	
Cannabis (THC)	
Speed	
Ice/Base/Crystal	
Ecstasy (MDMA)	
Heroin	
Cocaine	
Alcohol <u>plus</u> cannabis	
Alcohol <u>plus</u> any of the above (excluding cannabis)	

**Q10. To avoid the risk of being caught (by police) driving under the influence of the following drugs, how long do you think someone should wait after feeling the effects of these drugs, before driving?**

<b>Drug</b>	<b>Number of hours</b>
Alcohol	
Cannabis (THC)	
Speed	
Ice/Base/Crystal	
Ecstasy (MDMA)	
Heroin	
Cocaine	
Alcohol <u>plus</u> cannabis	
Alcohol <u>plus</u> any of the above (excluding cannabis)	

**Q11. As far as you know, can police test (road-side) drivers for presence of the following drugs? Please circle one answer only.**

<b>Alcohol</b>	Yes	No	Don't know
<b>Cannabis (THC)</b>	Yes	No	Don't know
<b>Speed</b>	Yes	No	Don't know
<b>Ecstasy (MDMA)</b>	Yes	No	Don't know
<b>Heroin</b>	Yes	No	Don't know
<b>Cocaine</b>	Yes	No	Don't know
<b>Ice/Base/Crystal</b>	Yes	No	Don't know

**Q12. As far as you know are there any fines and potential imprisonment consequences for drivers who are tested positive for the presence of the following drugs? Please circle one answer only.**

<b>Alcohol</b>	Yes	No	Don't know
<b>Cannabis (THC)</b>	Yes	No	Don't know
<b>Speed</b>	Yes	No	Don't know
<b>Ecstasy (MDMA)</b>	Yes	No	Don't know
<b>Heroin</b>	Yes	No	Don't know
<b>Cocaine</b>	Yes	No	Don't know
<b>Ice/Base/Crystal</b>	Yes	No	Don't know

*The following questions are about your past driving and drug use behaviours.*

**Q13. How often in the past 12 months have you consumed the following?**

<b>Drug</b>	<b>Daily</b>	<b>1-2 times a week</b>	<b>Less than once a week</b>	<b>Less than once a month</b>	<b>Once or twice only</b>	<b>Never</b>
Alcohol						
Cannabis (THC)						
Speed						
Ice/Base/Crystal						
Ecstasy (MDMA)						
Heroin						
Cocaine						
Alcohol <u>plus</u> cannabis						
Alcohol <u>plus</u> any of the above (excluding cannabis)						

**Q14. How often in the past 12 months have you driven within 3hrs or while feeling the effects of the following drugs?**

<b>Drug</b>	<b>Daily</b>	<b>1-2 times a week</b>	<b>Less than once a week</b>	<b>Less than once a month</b>	<b>Once or twice only</b>	<b>Never</b>
Alcohol						
Cannabis (THC)						
Speed						
Ice/Base/Crystal						
Ecstasy (MDMA)						
Heroin						
Cocaine						
Alcohol <u>plus</u> cannabis						
Alcohol <u>plus</u> any of the above (excluding cannabis)						

IF YOU ANSWERED NEVER TO ALL DRUGS IN Q14, PLEASE GO TO Q 18.  
 IF YOU ANSWERED YES TO ALCOHOL **ONLY**, PLEASE GO TO Q 18.  
 IF YOU ANSWERED YES, TO ANY **OTHER** DRUG OR COMBINATIONS OF DRUGS, PLEASE GO TO Q 15.

**Please answer the following questions for your most common experiences of driving within 3hrs of consuming (or while feeling the effects of) an illicit drug(s). Note: this excludes experiences of alcohol only.**

**Q15. Which of the following would best describe your driving ability on these occasions?**

- ☐ Ability to drive was better than usual
- ☐ Ability to drive was the same as usual
- ☐ Ability to drive was slightly impaired
- ☐ Ability to drive was greatly impaired
- ☐ Can't remember/can't say

**Q16. Which of the following had some influence on your decision to drive on these occasions?**

**Tick all that apply**

- ☐ I had no concern or did not expect that I would be caught by police
- ☐ I drove safely
- ☐ I drove *more* cautiously than usual
- ☐ I was having such a good time I didn't think about the consequences
- ☐ I only needed to drive a short distance
- ☐ I had only consumed a very small quantity of the drug
- ☐ I had purchased and/or consumed drugs inside the vehicle
- ☐ I drove immediately after consuming the drug, and did not expect the drug to take effect whilst driving
- ☐ I was the designated driver for my friends (my friends needed me to drive)
- ☐ I wanted to remove the risk of being caught with possession of illicit drugs when I reached my destination
- ☐ I didn't intend to consume drugs and so I had no alternative plan to get home
- ☐ There were no other transport options
- ☐ I could not afford other transport options
- ☐ I enjoy driving while feeling the effects of a or several drugs (other than alcohol)
- ☐ My driving ability improves on these occasions
- ☐ I did not want to use alternative transport or a taxi - Why?  
\_\_\_\_\_
- ☐ Other (please describe) \_\_\_\_\_

**Q17. Which of the following would most likely influence you to re-consider or decide not to drive within 3hrs of consuming (or while feeling the effects of) an illicit or several illicit drugs? Tick all that apply.**

- ☐ If my friends told me not to drive
- ☐ If my friends would not come with me
- ☐ If someone else (who had not consumed an illicit drug) offered to drive
- ☐ If there was public transport available from the place I consumed, to where I wanted to go
- ☐ If there were taxis available
- ☐ If I suspected I would be caught by police

*The following questions are about your experiences as a passenger.*

**Q18. How often in the past 12 months have you been driven by someone you suspected or knew had consumed any of the following within the previous 3 hours?**

Drug	Daily	1-2 times a week	Less than once a week	Less than once a month	Once or twice only	Never
Alcohol						
Cannabis (THC)						
Speed						
Ice/Base/Crystal						
Ecstasy (MDMA)						
Heroin						
Cocaine						
Alcohol plus cannabis						
Alcohol plus any of the above (excluding cannabis)						

IF YOU ANSWERED NEVER TO ALL DRUGS IN Q 17, PLEASE GO TO Q22.  
 IF YOU ANSWERED YES TO ALCOHOL ONLY, PLEASE GO TO Q 22.  
 IF YOU ANSWERED YES, TO ANY OTHER DRUG OR COMBINATIONS OF DRUGS, PLEASE GO TO Q 19.

**Please answer the following questions for your most common experiences of being driven by someone you suspected or knew had consumed any illicit drug within the previous 3 hours. Note: this excludes alcohol only.**

**Q19. Which of the following would best describe the driver's ability?**

- ☐ Ability to drive was better than usual
- ☐ Ability to drive was the same as usual
- ☐ Ability to drive was slightly impaired
- ☐ Ability to drive was greatly impaired
- ☐ Can't remember/can't say

**Q20. Which of the following have influenced your decision on these occasions?  
Tick all that apply.**

- ☐ I had no concern or did not expect the driver would be caught by police
- ☐ I believed the driver would drive safely
- ☐ The driver was *more* cautious than usual
- ☐ I was having such a good time I didn't think about the consequences
- ☐ I only needed to be driven a short distance
- ☐ As far as I know, the driver had only consumed a very small quantity of the drug
- ☐ The driver had only just consumed the drug, and I did not expect the drug to take effect whilst driving
- ☐ I had no other way of getting to my destination
- ☐ There were no other transport options
- ☐ I could not afford other transport options
- ☐ I believe a driver's ability improves while under the influence of an illicit drug
- ☐ I did not want to use alternative transport -  
Why? \_\_\_\_\_
- ☐ Other (please describe) \_\_\_\_\_

—

**Q21. Which of the following would most likely influence you to re-consider your decision (to be driven by someone who has consumed illicit drugs within the previous 3hrs) on these occasions? Please tick all that apply.**

- ☐ If my friends told me not to
- ☐ If my friends would not come with me
- ☐ If someone else (who had not consumed an illicit drug) offered to drive
- ☐ If there were other transport options available to where I wanted to go
- ☐ If there were other transport options available at little or no cost
- ☐ If I suspected the driver would be caught by police

**Q22. To what degree do you think someone's driving ability would be *improved* as a result of consuming the following?**

<b>Drug</b>	<b>Very improved</b>	<b>Quite improved</b>	<b>Not very improved</b>	<b>Not improved</b>	<b>Unsure</b>
Alcohol					
Cannabis (THC)					
Speed					
Ice/Base/Crystal					
Ecstasy (MDMA)					
Heroin					
Cocaine					
Alcohol and cannabis					
Alcohol and any of the above (excluding cannabis)					

**Q23. Please indicate how likely it is for someone who is driving while feeling ANY effects of the following drugs to cause an accident?**

<b>Drug</b>	<b>Very likely</b>	<b>Quite likely</b>	<b>Not very likely</b>	<b>Not likely</b>	<b>Unsure</b>
Alcohol					
Cannabis (THC)					
Speed					
Ice/Base/Crystal					
Ecstasy (MDMA)					
Heroin					
Cocaine					
Alcohol <u>plus</u> cannabis					
Alcohol <u>plus</u> any of the above (excluding cannabis)					

**Q24. Please indicate how likely it is for someone who is driving while under the influence of the following drugs that they will be caught by police?**

<b>Drug</b>	<b>Very likely</b>	<b>Quite likely</b>	<b>Not very likely</b>	<b>Not likely</b>	<b>Unsure</b>
Alcohol					
Cannabis (THC)					
Speed					
Ice/Base/Crystal					
Ecstasy (MDMA)					
Heroin					
Cocaine					
Alcohol plus cannabis					
Alcohol plus any of the above (excluding cannabis)					

**Q25. Please indicate the types of media which you use at least fortnightly (and specify the source you are most likely to use)?**

- ☐ Television (Specify Station \_\_\_\_\_)
- ☐ Radio (Specify Station \_\_\_\_\_)
- ☐ Social networking website (e.g. Facebook or MySpace; Specify Site\_\_\_\_\_)
- ☐ Newspaper (Specify newspaper\_\_\_\_\_)
- ☐ Street/Free magazine (Specify magazine \_\_\_\_\_)
- ☐ Other magazine (Specify magazine\_\_\_\_\_)
- ☐ Other media (Specify media \_\_\_\_\_)

**Q26. Please choose from the following list the (one) person who is most likely to influence you in regards to messages about driving under the influence of illicit drugs (not including alcohol).**

- \_\_\_\_ health professional (e.g. doctor or nurse)
- \_\_\_\_ government department or official
- \_\_\_\_ scientist
- \_\_\_\_ friend
- \_\_\_\_ family member
- \_\_\_\_ someone who has been caught driving under the influence of drugs
- \_\_\_\_ someone who has been injured whilst under the influence of drugs
- \_\_\_\_ a passenger who has been injured as a result of a driver under the influence of drugs



# Smashed: Drugs and Driving Don't Work

## Appendix C: Focus Group Results

Sandra Jones & Liz Wiese



### ***Perceived prevalence of drug driving in ACT***

Overall, participants believed that drug driving was becoming more common among young people, but that drink driving was more common. Drug use (more generally) amongst younger people was also discussed, with participants perceiving that drug use was common for many young people.

*Between people who actually take drugs [they] are probably doing it all the time. It happens a lot. (University, Male)*

*Nowadays it's become, I shouldn't say normal, but more people are doing it more and more. (Driving Course, Female)*

*Based on a lot people I know say that it happens all the time, if you do go to a concert or something like that, for sure. (Driving Course, Male)*

Many participants also noted that drug driving behaviour was rarely discussed and was 'under the radar' in the general social arena, largely due to the taboo nature of illegal drugs.

*...People are aware of the effects of alcohol because people talk about it all the time, but with drugs because people don't talk about it, there's not that awareness out there and people don't know about it. (Driving course, Female)*

*I think young people are drunk driving is a lot worse and lot a lot more prevalent than drug driving... You don't really talk about it (University, Female)*

Participants perceived that this reluctance to openly admit to drug taking may prevent young people from seeking alternative travel arrangements such as asking for a lift home (but not prevent them from taking the drugs in the first place).

*Because they don't talk openly with people, it's not like 'I'm going to be doing speed or ecstasy or whatever tonight, can you give me a lift home?'. They're not going to tell people because there's such a stigma about it. (University, Female).*

### ***Perceived risk of apprehension and related consequences***

Nearly all participants knew that drug driving was a chargeable offence; yet few were certain about the testing procedure or the potential legal consequences if caught, and they differed in their knowledge of whether or not drivers could be tested on the spot.

*And how do they test it, they don't have – they have a breathalyser test but do they have a drug test, can we check if you're high right now, They can't do that*

*Can they do that now?  
They can do it if they smell it on you or they see your eyes  
Don't they have swabs?  
Yeah (Driving Course, Female)*

*I heard they have swabs for your tongue or something  
Can they test that straight away?  
I don't know  
And let you drive away  
Nobody really knows  
No one knows  
Are they going to look at you? (TAFE Female)*

Others queried whether drugs were actually identifiable via roadside testing facilities, or were unsure of the equipment used to test drivers.

*Whereas because it's so varied, and people say 'how do you test it, you don't know I've had this in me' or whatever it's so vague, no one actually knows how they test it. (TAFE Female)  
I think these new things have come in when you have to count to ten in it, and it gets stuff on your breath, not just alcohol. It used to be only in NSW and only just come in ACT. (Driving Course, Male)  
...if someone's gone out all night they might be more inclined to take drugs like ecstasy or something, then they won't be caught breathalysing or something if you're pulled over on your way home whereas you can still have a great night out, so I've heard, and it's not as traceable  
Not as testable, anything else is 'untestable'. (Driving Course, Male)*

A limited number of participants mentioned the roadside testing facility, in the form of a bus, however were unsure whether or not it was actually in use by police. Some participants had heard of, or seen the bus, but not in action. Some had also seen negative media reports about the costs and effectiveness of the bus.

*There was this bus  
They used to have it back in 2003 or something  
Its' a new one and it's a giant and like really big, parked behind the police station and I've never seen it move... I used to walk past the police station every day and every weekend it was parked in the same position...  
I saw something on the news a while ago about people complaining about they spent all this money on it and it never gets used. (TAFE, Female)*

Most participants assumed that the consequences of being caught drug driving would be the same as drink driving, yet they were not confident in their responses.

*Lose your licence maybe, a fine, I would think it would be the same as alcohol.  
Would it be possibly the same as possession?  
Yeah  
Especially if you have a lot on you*

.....

*Maybe plus what you get for drunk driving, say removal of licence and fine and that kind of thing. (University, Female)*

They also expressed a range of views regarding what they would believed would cause a police officer to test a driver for illicit drugs. Some believed that testing would occur if the driver had been speeding, was involved in an accident, was driving uncontrollably or appeared to be under the influence (e.g. red eyes). There was some reference to on the spot testing facilities (random testing), but this were based on what participants had seen or heard in other states (NSW or Victoria). Ultimately, testing for illicit drugs was generally believed to be initiated only if the police officer suspected the driver to be under the influence, as opposed to randomised testing specifically for drugs.

*They stop you for going too slow*

*If you stick to the speed limit, if you follow all the rules they have no reason to pull you over*

*(Driving Course, Female)*

*If the cops believe that you're under the influence of something, they don't have to test you there. They can say alright, we're going to take you back and do a blood test. (TAFE, Male)*

*I think they more pull you up if you have an accident or something.*

*Check if you're stoned or something.*

*It depends how you're driving. If you're driving erratically. They're going to pull you over. (TAFE, Male)*

*Facilitator: So it has happened?*

*Participant: Yeah but I think it's the drink driving that gets them caught (TAFE, Female)*

Across all groups, participants felt that young people would not be tested, and consequently apprehended, for drug driving within the ACT. These responses were often unprompted and made in comparison to the heavy police presence for the purposes of testing drivers for alcohol.

*And getting caught as well, you have alcohol breath tests but with drugs, it's prevalent, people aren't as afraid of getting caught. I think anyway. (University, Female)*

*Probably, because I said earlier a lot of people like pot smokers just don't think they'll get caught; or can't get caught. (Driving Course, Male)*

Reasons for this belief varied across groups. Some felt that the lack of awareness of the legal consequences for drug driving increased willingness to drug drive, while

others participants believed that roadside testing facilities were not capable of testing for illicit drugs:

*I don't know the severity so you don't know the severity of drug driving so you can't really scare people; you're going to lose your licence as soon as you are caught drug driving or anything. (TAFE, Female)*

*...if you've managed to get rid of the smell then only way they can tell is they eyes and you can always say 'that's because I'm tired not because I'm high' so it's kind of difficult because they can't detect it so they think that they're fine. (Driving Course, Female)*

*And people also know that the cops don't have the facility to do on the spot drug tests. They do now. (TAFE, Male)*

*Well I mean it's not out there, like in Victoria they've advertised 'we've got this drug driving things but I don't know in the ACT. They [police] definitely don't have it with them; they're mostly out to catch the drunk drivers. (University, Female)*

In one group, however, some felt that despite this overall belief, young people who do drug drive are conscious of being caught by police and shorten the driving trip as much as possible.

*I've been in a situation at a BBQ during the day and there were a few people who worked at a bar and had to go to work for the evening but they had been taking ecstasy, and they had no worries getting in the car and driving but they said they weren't driving anyone else, they were just going straight to the city, just along these roads, but [they said] I'm not going to drive you home. (TAFE, Female).*

Several participants explicitly stated that the low perceived risk of being tested or caught ultimately influenced the choice of driver in a situation where drinking and drug taking had taken place, with the drug driver preferred over the drink driver because of the perceived lower risk of being apprehended by police.

*I've known people (undiscernible) one's high and one's on alcohol, the person who's high we choose to drive because they obviously can't get caught, even though if they're in a worse case than the drunk person. (Driving Course, Female)*

In regard to illicit drugs only, when deciding who would drive for a group of people who were under the influence, it was evident that a driver would be selected on the basis of appearance (looking clean) in order to avoid being caught. For instance, in the female TAFE group, participants expressed a preference for a driver under the influence of marijuana than ecstasy or speed, because that driver was less likely to appear to be under the influence. That is, they did not take into account driving skill or safety, but solely the ability to avoid detection.

Facilitator: *Well there's 3 young girls, there's one that's taken some marijuana, there's one that's take some speed, and there's one that's taken some ecstasy. If they had to choose a driver, who do you think they'd choose?*

Participant: *The marijuana one.*

Facilitator: *How come?*

*Because she might not appear to be affected she might appear to have herself under control*

Facilitator: *Why would appearance be really important?*

Participant: *Because if you get pulled over you look like you're in control.*  
(University, Female)

Several participants thought that testing was becoming more available, based on hearing things from friends; and that drug drivers are likely to be caught, *because* police who are testing drivers for alcohol presence would also be on the lookout for signs of drug use.

*They do now. A lot of my friends have started getting checked recently. I wasn't sure how common it was or whether it's every car.*

*I think it's getting more common now.* (TAFE, Male)

*But I don't think it will be any more common or any less common that testing for drink driving, because...then they're going to be tested for the lot so it's not going to be specific. It's just not going to be dedicated like testing for drug driving...* (Driving Course, Male)

Participants were aware that their assumptions were a result of a limited experience with being tested for the presence of illicit drugs, having never been tested themselves or not hearing of others being tested.

*Getting caught, I don't think a lot of people [yeah], I personally have never been tested for anything except drink driving, I have never met anyone who has ever been tested for drug driving* (TAFE, Female)

*And again we've never seen a drug test or random drug testing so...*  
(University, Male)

Some also mentioned they had never received any information about the issues associated with drug driving during their application for a licence, or during their driving training.

*...They didn't tell me about the different road rules, the different laws, just transferred me over, handed me my new licence and said 'you're done'. They don't tell you anything about it, if the P plate laws or anything is different.* (University, Female)

When asked if they thought there was a need for more drug testing or greater awareness or risks and consequences, participants agreed that young people would

need more information about the consequences and the risk of being caught in order to change their behaviour. They again drew parallels to drink driving, stating that young people were aware of drink driving consequences and that the same level of awareness would be required to deter drug driving.

*I agree with that, if you go out drink driving if you get caught, you know you're gone like you don't have a licence for so many months and there's a high chance you'll go to gaol. If they do that with drugs I reckon the exact same thing would happen. (Driving Course, Male)*

*I don't want to lose my licence, I can't handle the fact, you automatically [lose it] for nine months, for a very big chunk of time that will make people think 'I can't handle losing my licence' (Driving Course, Female)*

*And it's also the shame, having to say to your parents 'I lost my licence because I was drug driving' (Driving Course, Female)*

*I think they would care more about losing their licence than how much it costs*

*I don't know about other people but when you see 'speeding, be prepared to pay a hefty fine' you don't normally go 'ok' Driving Course, Female*

Overall, participants felt that increasing knowledge and awareness of the consequences of being caught drug driving had high potential for reducing drug driving among young people. They felt that limited knowledge of both the testing procedure and the legal consequences was a key reason why young people do not feel that drug driving is an important issue, or not as important as drink driving.

*But if you blow into the bag they know what's going to happen, if it's over, they know it's accurate, you get fined, whatever, but if because it's a new thing and people don't understand how it works they're not scared of it and people are so scared of drink driving and losing their licence and being caught. And to me it doesn't seem like a big issue (TAFE, Female)*

*Because we didn't know they can do the saliva test thing. Now we know that. So just spread that out... (TAFE, Male)*

*People don't take it seriously enough*

*That's because we don't know the consequences, like when you blow zero point 5 you get maybe 2 points, I don't know the severity so you don't know the severity of drug driving so you can't really scare people, you're going to lose your licence as soon as you are caught drug driving or anything (TAFE, Female)*

### **Perceived effects of drugs on driving skills**

Participants did not know a great deal about the effects of drugs on driving ability; however most assumed that illicit drugs would negatively impact on driving skills.

Once again, comparisons were made with drink driving. Participants in all groups commented on the large amount of information available regarding the effects of alcohol on driving ability, compared to the absence of education/communication about the effects of drugs on driving skills.

*Well maybe there's no knowledge about it, it's only campaigns about drink driving, but no one knows, I mean, you might think speed makes you more alert so it makes you a better driver, there's just no information out there. (University, Female)*

*We don't actually know the effects of driving with marijuana; we don't have that (Driving Course, Male)*

*That sort of goes back to the advertising as well. The advertising the drink driving, they're advertising that you get slower and your reaction time slows down but they don't advertise, if you don't know, what it feels like to take a drug. You wouldn't know what the consequences are. (TAFE, Female)*

*Like with alcohol, they say it slows your reaction time, the ad with the guy and his brain with the lights slowly turning off but they never tell you why drug driving is bad, it's always just 'it's bad, don't do that.' University, Female*

While many participants believed that illicit drugs did impair driving abilities, they felt that young people were generally unaware of the specific effects of drugs on driving behaviours, and thus on the risk of harm. This was due to the variations in effects of different drugs, making drug-driving more of a 'grey area' than drink driving, and also due to the heavy advertising and education around the effects of alcohol on driving ability.

*That sort of goes back to the advertising as well. The advertising the drink driving, they're advertising that you get slower and your reaction time slows down but they don't advertise, if you don't know, what it feels like to take a drug. You wouldn't know what the consequences are. TAFE, Female*

#### Perceived differences between drugs

Participants were aware that impairing effects are likely to differ according to drug type; and believed that certain drugs were less impairing than alcohol or other drugs. The most commonly mentioned drug was marijuana, with the perception that it was the least impairing drug and that driving while under the influence was not an issue for regular users.

*I think it depends on the type of drugs  
Weed is pretty mild compared to other types of drugs  
People smoke like bongs and they're off their head  
Yeah, some people just smoke it everyday and learn how to function with being stoned and it's not like an ecstasy or hallucinogen where you do see things, you're just stoned all day. (Driving Course, Male)*

Participants did not express any real distinctions between the impairment caused by ecstasy or speed, but drugs such as 'ice' were seen as very dangerous to use prior to driving.

*And things with an 'up', when they think they've come done they actually haven't. I guess that's also e's (ecstasy) and stuff and then obviously when you don't have that high any more you think 'Oh, I'm off it and you go and drive' (Driving Course, Female)*

*It's like your risk is great depending on what drug your one. Like ice is crazy but if you just smoke a bit of dope it's not that bad... it just depends on the person. (TAFE Male, unprompted)*

One female participant also highlighted that hearing about truck drivers using methamphetamine type substances to stay awake while driving may cause young people to believe that it is not as bad as alcohol or that this behaviour is acceptable.

*Also some drugs, say speed, you hear about truck drivers using speed, so there's also a kind of 'maybe it's not as bad as say alcohol' because people have used it to stay awake. (University, Female)*

#### Perceived improvement in driving skills

Interestingly, throughout the focus groups there were many references to beliefs that certain illicit drugs had the ability to improve their driving skills. These comments usually referred to the increased alertness from ecstasy or speed, or the slowing down effects of marijuana.

*No just the same as pills as well, a lot of people do think they're even better when they're driving because [they feel like they're better, more confident, maybe take more risks] more dangerously [other people I guess]. (TAFE, Female)*

*Stuff that's more an upper rather than....gives you more energy rather than stuff lets you mellow out and see things. That's maybe why people think that's ok because they think they need more energy so they're probably more alert. (TAFE Male)*

*Also, people just think that, or some do, when they're on drugs they're better off driving, as opposed to drink driving. They think it actually enhances your driving ability.*

*Yeah, my mate said "I drive better when I'm stoned." It was quiet when I drove home that night but.*

*Drives like grandma.*

*A bit hard on the highway. (TAFE, Male)*

*People would think they've got a higher reaction time under ecstasy  
Or speed*

*And you know the world slows down when you have marijuana, so better reaction time. (University, Female)*

### Need for education on drug driving

In each of the groups participants expressed the view that an increase in awareness of specific effects of drugs on driving skills would help in deterring people from drug driving.

*I think there needs to be more awareness with drugs, with proper groups that people can get in because if people actually knew the effects even after a little bit. (Driving Course, Female)*

*...people just think they're relaxed, not in control, they just think 'oh, I'm relaxed' while I drive. I think if people really knew just how badly it screws up their perception they might not jump [into a car] (Driving Course Female)*

One participant suggested that conveying these effects in comparison to alcohol would help increase the perceived severity of impairment.

*Are there any statistics? I think that would be something that would make people (undiscernible) drug driving as compared to drink driving to completely get rid of it, it's not as bad. I think people need to realise that if you do this you're more likely, I don't know what the research. [says] but maybe there needs to be more awareness of the effects ... (TAFE Female)*

One participant also believed that it was the occasional drug users that needed this information more than regular users, as they would not be familiar with the effects of drugs on their overall functioning and were less aware of how these may influence their driving.

*I think that also heavier users of drugs, like regular users do know a lot about what they're taking, they know exactly what it's doing to them and they know about quantities. They know what they're doing pretty much because they're regular and they're heavy users. So it's for the people who aren't informed, who don't take drugs often or at all – people are always going to want to try, what does it do to you, what's the big deal? (Driving Course, Female)*

### **Perceived risk of accident or injury**

Most groups agreed in a general sense that drug driving could potentially cause an accident or injury; however there was some indication that several participants were not convinced of an increase risk associated with drug driving.

*I guess ... statistically I don't know how many people die from drug driving. I don't do it so I don't know the effect it has on people.... Obviously with drink driving, if I drink something, there's no way I'm going to be drink driving, heavily. So for drug driving, I don't know, does it kill anyone? TAFE, Male*

Participants relayed experiences of their friends who had showed minimal concern for danger or accident risk associated with drug driving; with one participant recalling discussion of drug related crashes that were considered as a 'funny' experience.

*I know people that drug drive, but it's just not spoken about, and it's not, I don't know, the perception is it's just not as dangerous, depending on what drugs it is as well. (University, Female)*

*The only accidents I've heard from people I've talked to is from pot and going out and dropping people off in the morning and just crashing, and it's all funny, it's like 'he's so crazy' he was driving and it's sort of a joke. (Female, Driving Course)*

The reasons for lack of concern regarding the risk of accidents were consistent with earlier comments regarding (improvements in) driving skills, such as driving slower or general perceived improvement. This was, again, particularly the case for marijuana.

*And I know people that have spoken about drug driving, particularly with marijuana; they don't consider it unsafe because they're like 'I'll drive really slowly' (University Female)*

*They don't think of it as dangerous, they think like, if anything, I'm a better driver, which I understand because they don't speed or something like that, so I don't know if they perceive it as dangerous. (University, Female)*

*I'd sort of associate it, with easier driving, with marijuana alcohol, really cant speak out of experience for drugs but just looking at the, you'd look at something like ice and you'd be like, that would be like really dangerous to drive under. (University, Male)*

There was some indication that hearing of a local, drug related accident has the potential to resonate with younger people, with one participant recalling such an accident as a first response to the issue. However, overall, the groups did not feel that perception of accident or injury risk at a personal level was a sufficient deterrent.

*Actually because just down the street where I live there was this girl who was about 15 years of age. She was in a car with an older guy, he was about 20 or so and they had gotten on drugs and they crashed and they both died. That's the first thing I thought actually. TAFE, male*

*People don't listen, even though everyone knows what can happen to you as far as your own personal health and injuries and death if you have an accident but it still continues, people still take those risks. Male, Driving Course*

## ***The Influence of Past Behaviours***

Many of the male participants highlighted that past ‘successful’ drug driving experiences would contribute to the carefree attitude towards this behaviour.

*...because if they’ve done it once they’ve done it before and then they will continue to do it because they know they can do both and be safe, probably.* (Male, Driving Course)

*If you do it more often you’re going to be more in control, more aware of the effects and you’re going to be more confident in driving.* (Male, Driving Course)

Similarly, they felt that having experienced of being tested or caught for drug driving would increase their perception of risk of being tested in the future.

*Because if I had been tested before I’d assume it would be more likely to happen.* (Male, University)

*I guess I’ve tried more drink driving so I’m probably more scared of drink driving than I am of drug driving.* (TAFE Male)

One participant summed up the importance of prior experience in his perception that any campaign to reduce drug driving would only deter those who are not regularly engaged in the behaviour, as those who do so have accepted the risk and decided to drug drive anyway.

*Because I think campaigns like that only stop people who do that once off. The people that do it over and over again already know of the consequences that happen.* (Male, University)

## ***Reasons for drug driving***

Some participants felt that drug driving was a behaviour that was not consciously considered as a potential risk, due to the expectation they will not be caught for doing so and/or that their driving skills are improved or not impaired.

Facilitator: *Can you think of any other reasons why people might drug drive?*

*Just because they don’t care. Like they just don’t consider getting caught.* (Male, TAFE)

*Or they perceive that they’re a better driver or they think they’re just as good.* (Male, TAFE)

Driving was seen by some as a necessary or automatic step within the overall drug taking experience. It was not viewed as an action which young people ‘decided’ to do, rather it was expected in order for people to reach their drug taking destination or home again.

*That it's like driving becomes a necessity, it's so much part of our lives, so if you've still got drugs in your system, you just have to drive somewhere, you just need to get somewhere. I don't think it's more a case of 'I'm stoned so now I'm going to drive to my mates place to get even more stoned'.*

(University, Male)

Some participants felt that because drug taking was often a part of everyday life (whether as an addiction or regular social activity) then driving automatically became part of that experience. Males were more likely to make mention of this, as well as one female participant referring to her male peers.

*I know being at college people are going to take drugs, it's not an addiction, it's a social thing, and for them then to get in a car and drive is another step whereas if its in a group where it's really common that it's occurring then that step becomes easier because they're under the influence a lot more. So it becomes a part of their everyday life, so why wouldn't it become part of their driving life. It's just easy to make that step. Does that make sense?*

(University, Male)

*Or to work and because they're working ...they take something, usually coke and they'll be 'I'm working, and then I have to get home' and that's just the habit.* (TAFE, Female)

*I've got neighbours before, who just smoke weed every night and it's nothing unusual to sit around and talk, drink and smoke weed and they talk pretty normal, I think they're just used to it, and after that they just drive.* (Driving Course, Male)

Others mentioned that taking illicit drugs is not a planned experience, and therefore drivers may not be prepared or have planned to use an alternative method of transport.

*Sometimes it's a spontaneous thing as well. It might be, I don't know, you just haven't really thought about it and then you might drive but you haven't thought about the [drugs] you've taken* (TAFE, Female)

*They want to be able to take drugs but they don't want to plan to be able to get home or wherever they're going at the end of the night.* (Driving Course, Male)

*They might have planned but the thing about drugs and alcohol, it's really difficult to stick to what you have come up with, like you shouldn't drive.* (Driving Course, Female)

When discussing the reasons for drug driving, some participants mentioned the overall reduced costs of taking drugs in comparison to drinking. However, this appeared to be a complex cost-benefit analysis that incorporated both the financial costs of drugs compared to alcohol and the perceived likelihood of being caught for drug driving compared to drink driving. They expected young people to consider taking drugs and driving as more desirable than drink driving; with this being a much

more cost effective experience due to the lower overall cost, relatively similar experience, and perhaps even a safer option. That is the 'lower cost' of drug driving seems to be connected to the perceptions of risk associated with drink driving (which were well known among participants), the low perceived risk of being caught or having an accident while drug driving, and the inconvenience of finding an alternative transport method after drinking alcohol.

*I do think that people think that they're being good, they're not drink driving, they're drug driving. I think people think 'at least I'm not drink driving' which sounds shocking but ... (TAFE, Female)*

*Yeah, drive out to Civic, have a few pills, still have a good night, and its a pretty cheap night realistically compared to paying for drinks and then drive home after. (TAFE Male)*

*I used to work at a club, a few years ago and that was among the other workers there, I don't know, people going to the clubs that they would think that was a substitute for drinking and if they were gong to drive it was more convenient to drive and take ecstasy ... (TAFE, Female)*

### Lack of Alternatives

There were many (unprompted and prompted) references to the lack of reliable and appropriate alternative transport options as a reason why young people drug drive. These were discussed in combination with the geographical spread of Canberra and the difficulty it causes when trying to get home from a night out. While participants were able to identify other transport methods – such as public transport, taxis or walking – these were mentioned only in their inadequacy as an alternative to driving while under the influence.

Buses were viewed as useless as they finish running before the need to travel home (11pm) or dangerous to be travelling on late at night. Furthermore, bus trips still require some walking distance to reach a specific house.

*Cut it off at 11. We all got to the party but no one could get home on it. You can't leave a party at 11! TAFE, Female*

*But not even that, when it's a suburb centre it's like a bus from civic to Belco [it's called town centre] with all the suburbs around there, you might still have a 6 k walk or whatever it is. University, Male*

Despite the availability of a night bus, this was still viewed as ineffective due to the limited times and destinations and also being around only once a year.

*We have nightrider but that only goes to the bus interchanges. But it's only every two hours or something. It's pretty terrible. Canberra is the capital city of Australia. It should have decent transport, I reckon. It's ridiculous. It's stupid.* University, Male.

*They do that from the Christmas/New Year time, they call it the night rider, but the only do it one time of the year.* Driving Course, Male

Taxis were seen by most participants as too expensive, as inconvenient due to the waiting time required, and by some females as dangerous to be travelling in when alone.

*Because Canberra is so separated so if you live in Tuggeranong or you live in Belconnen and you're going out in Civic it's going to cost you 80 dollars to get home.* TAFE, Female

*Sometimes people will pressure other people into driving under the influence because they don't want to have to pay for a taxi.* Driving Course, Female

*This year, they got a taxi home, there was one in Civic, she got a taxi home and the taxi driver raped her. So you don't want to be in a taxi by yourself and you don't want to be walking home by yourself.* University, Female

Similarly, walking was seen by females as too dangerous; and the overall spread of Canberra was perceived as not conducive to walking;

*And its dangerous walking around at night* University, Female

*I guess Canberra's so spread out. Most suburbs are quite far and there's quite a lot of drugs on Saturday night in town so I'm sure they would probably drive if they have to get home. I'm just speculating.* University, Male

### **Getting the message right**

It was clear in the discussions of which type of message would be most effective (i.e. accident vs. loss of licence vs. driving impairment) that participants felt that the threat of losing their licence would be the strongest deterrent.; exceeding even the threat of having to pay a fine.

*Yeah, I think people would be more paranoid about losing their licence because that's something that can happen I mean, accidents happen less frequently than getting pulled over and losing your licence [yeah] and that's what people think. So if that's the main problem you've got to get people to care about it, you will lose your licence. There's no limit, there's no 'you've had this much and you will be ok'. Any trace of drugs and you're gone.* (Driving Course, Female)

*No one wants to get caught, they're all happy to break the rules but if they get caught, oh shit - consequences! No one likes consequences.* Driving Course, Female

*I know lots of people who got caught for drink driving who got slapped with fine 5 or 6 times and they're still not in prison but they're laughing, 'I've been caught 5 times and I still do it because all I keep getting is fines. I'm out of pocket but as long as I'm not in jail or anything*

*They can still drive*

*That's right (Driving Course, Female)*

However participants also felt that there was an overall lack of knowledge about the impairing effects of drug use on driving ability and the risk of having an accident.

Thus, they felt that accident-related messages *may* be useful as an adjunct to information about apprehension and penalties. Consistent with research on drink driving and other risk behaviours, they felt that these needed to convey the threat of injuring another person or friend, rather than the driver themselves.

*And it's about your friends. Normally it's about you, it's about other people, it's like 'I have responsibility' it puts it sort of..*

*If it's just yourself you don't care as much*

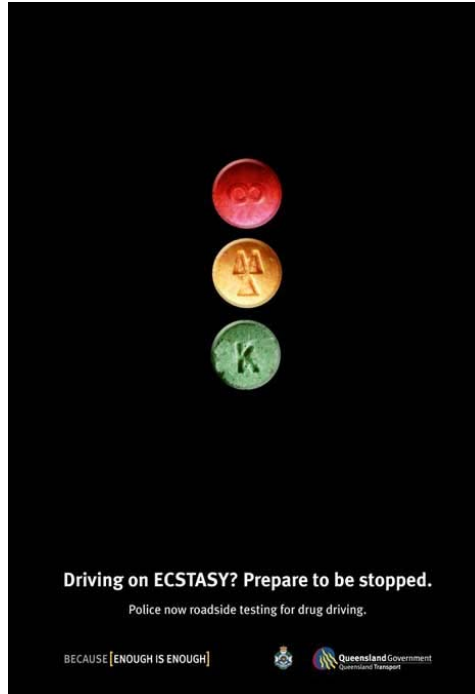
*Yeah*

*You'd rather yourself get hurt that the people you care about*

*So if they focus it on the people you care about, you're more willing to pay attention. University, Female*

## Responses to individual posters

### Poster A: Driving on ECSTASY?



**Tag Line:**

“Driving on ECSTASY? Prepare to be stopped.”

**Text:**

Police now roadside testing for drug driving”

**Source:** Queensland Government. Queensland Transport

**Logo:** Police

**Other:** “BECAUSE [ENOUGH IS ENOUGH]”

This advertisement was considered ‘clever’ by both groups it was shown to, but was not perceived to be effective as a deterrent of drug-driving behaviour. While the words *Police now roadside testing for drug driving* relayed the message, it was clear that the more dominant image and tagline distracted participants from this and the link between the image and drug driving was considerably weak. Most participants needed to firstly clarify the purpose of the image, (i.e. that they were ecstasy pills in the form of traffic lights) although once the association was made, there was little indication

that the image was effective. In regard to the words, some also interpreted the tagline as even a 'threat' or a 'dare' from police and the message itself was not regarded as very strong. The lack of consequences was also an issue in that the advertisement as there was no conclusions regarding any consequences for the testing. Consistent with the earlier findings, this was considered as important due to the lack of awareness around drug driving among ACT youth:

*...we need to be aware that we can get caught, and I don't think we are, and then the consequences as well.* University, Male

*Poster B: Driving on MARIJUANA?*

(no image available) Description:

**Tag Line:**

“Driving on MARIJUANA? Prepare to be stopped.”

**Text:**

“Police now roadside testing for drug driving.”

**Source:** Queensland Government. Queensland Transport

**Logo:** Police

**Other:** “BECAUSE [ENOUGH IS ENOUGH]”

Responses to Poster B were similar to Poster A, which was expected due to the similarity of the tag lines and identical sub-phrase. However, despite the target being a different type of drug user, the use of police lights as a spark in the end of the joint was not well received, mainly due to the time taken to actually make the association, and that the lights were not highly noticeable. Several male participants did indicate that the obviousness of the joint did make the poster more ‘direct’ than others and that it was ‘cool’; however across all groups, the poster was still classified as ineffective.

Furthermore, participants suggested that the message lacked any conclusion, which should be given in the form of highlighting the consequences of drug driving. Finally this advertisement was also compared, and perceived as similar, to smoking prevention messages. The participants perceived this as problematic as those in the actual target group (drug drivers) who do not smoke are likely to ignore the ad, and those who do smoke may disregard this as simply ‘another’ smoking ad.

*Think I might have seen that one for smokes...* University male

*For A and B it's what you'd expect to see everywhere and not pay too much attention, kind of like propaganda, always there and don't really take any notice of it*

Driving Course, Male

*Poster C: Monster Driver*



**Tag Line:** 'TONIGHT, DON'T PUT YOUR FRIENDS IN DANGER'

**Text:** "With a cocktail of speed and alcohol, marijuana and fatigue you really aren't yourself on the road."

**Source:** Not stated

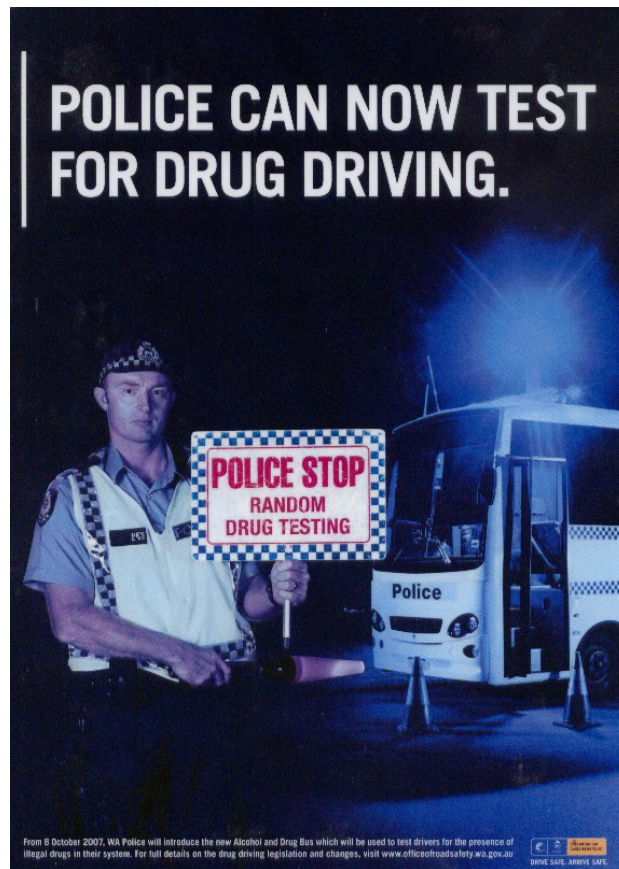
There was limited discussion among the male groups regarding this advertisement; and most participants grouped this within the "ineffective" pile of advertisements.

Despite a few participants indicating they liked this advertisement, it seemed that the overall response was that it was unappealing due to its failure to grab attention. The image did not suggest an association with drug driving among any participants, who also felt that they could not relate to the image. However, the message focus on guilt was seen as effective by some participants. Thus, it was primarily the choice of image in this advertisement, rather than the overall concept, which reduced its impact and rating among all groups.

*The monster one you don't really know what it was about, you have to read the small fine print in the bottom corner. University male*

*You'd rather yourself get hurt that the people you care about  
So if they focus it on the people you care about, you're more willing to pay attention. University female*

Poster D: Policeman and Roadside Testing Van



**Tag Line:** POLICE CAN NOW TEST FOR DRUG DRIVING

**Text:** From 8 October 2007, WA Police will introduce the new Alcohol and Drug Bus which will be used to test drivers for the presence of illegal drugs in their system. For full details on the drug driving legislation and changes, visit [www.officeofroadsafety.wa.gov.au](http://www.officeofroadsafety.wa.gov.au).

**Source:** Office of Road Safety, WA

**Logo:** (undiscernable)

The female participants were consistent in their overall positive response to this advertisement; perceiving that it was easy to understand, no effort was needed to receive the message, and one clear and simple message was being delivered (i.e. drug testing is now available).

*It's got the point*

*...The policeman shows us what to do*

*...You can imagine him driving on the road*

*...It applies to more people.*

*...No matter what drug, you're going to find out.* University, Female

The reality of the image was very important, in that participants were able to imagine undergoing a test by the policeman in the picture and were able to relate to the situation. The female Driving Course group showed more interest in this message, despite some suggestions that a little more information (e.g. include the word 'random') was needed. These reactions were consistent with their previously expressed concerns for being tested and losing their license. There were different opinions regarding the word 'drug,' with some participants feeling this needed to be emphasised to ensure that it was not perceived as a drink driving advertisement.

*But the word drug has to be more obvious  
It's still up there; we all would read it still  
They obviously know they're not going to get tested for Panadol or you know  
what I mean?  
It's too much like drink driving. People tend to ignore drink driving adverts  
now because there on tv ... Driving Course, Female*

Male respondents did not respond as positively to the advertisement, mainly due to a lack of information or eye-catching factors. However several participants indicated that the message was successful in regards to raising awareness or introducing the issue of drug driving in the area. The lack of information prevented any further consideration of which drugs can be tested, although responses indicated this may be useful information. As with the female participants, there was also concern for potential confusion with drink driving messages, particularly in a quick glance.

The image was considered successful by some participants in providing a realistic potential of getting caught. However, many of the male participants seemed to dismiss the advertisement as they had never seen a random drug testing unit before, which made the image less believable.

Overall, this was considered that this was one of the more effective posters presented.

*Poster E: Truck Driver Tested*



**Tag Line: ARE YOU DRIVING ON DRUGS**

**Text:** From Saturday 1 December 2007 there will be zero tolerance for drug driving. Police will be conducting random roadside drug tests to detect the presence of illegal drugs. You can be tested for: 1. THC – the active component in cannabis/marijuana. 2. Methylamphetamine – also known as speed or ice. 3. MDMA – the active ingredient in ecstasy. These drugs can be detected in a simple saliva test. A first offence carries a penalty of up to \$1050 and you could be disqualified from driving for up to nine months. Nobody's going to hire a truckie without a license. **If you drive on drugs, you're out of your mind.**

**Source:** Queensland Government. Queensland Transport.

**Logo:** BECAUSE [ENOUGH IS ENOUGH]

While female participants did indicate that the positioning of the male in the image did attract attention by being more 'in your face', overall, the feeling among most participants was that they could not relate to the person in the picture. However, in comparison to previous posters (namely A and B) the picture did provide a more conclusive and imaginable situation, with useful information and a clear (for male participants) indication of how drivers are tested.

It was clear that participants needed to be able to relate to the people in the image, in order to easily imagine themselves in that situation. Male participants welcomed the further information provided, particularly regarding how the test is applied (in the image) and the potential loss of license. Females were more likely to disregard the image due to its 'gross factor' or failure to relate to the situation (due to the person being tested).

*I think with E it alerts you to 'we can test you' it's not just an empty threat, it shows what they're going to do. Driving Course Male*

*The caption says no one's going to hire a truck without a licence, doesn't really relate to most of us. University Male*

*OK, I didn't see that, I looked at him and looked away TAFE, Female*

*It's more in your face University, Female*

*Poster F: 'The End' Emma (Female Group Only)*



**Tag Line:** EMMA – 18. HAD A LINE. DROVE HOME. THE END

**Text:** None

**Source:** THINK!

While there was a degree of acceptance of the message among the younger participants in the Road Ready group, this was not received as being in relation to drug driving. Rather, the connection was made between drug use and death, not. However, the concept of a story was well received among this group as it was a simple message delivered without the need to read.

Older participants were less positive, with university students indicating the advertisement had too many gaps in the story in regard to the connection between drug driving and death. Some also felt that it was more suitable to younger women (16-18 years). Once again, the university and TAFE groups perceived that there was no clear indication that she had died because she had driven (indicating that the words 'drove home' were not enough to convey this message).

*It's just – why? She had a line, she drove home, why did she die? I know people who've had a line and haven't died, you know, scare tactics. University female*

*You just know this girl died because she did drugs  
And it's simple, it's not cluttered, there's not a lot of information to read  
It's story and it's simple and you can get it without reading. I'm not sure you'd read it  
anyway. Road Ready female*

*Poster F: 'The End' Mark (Male Group Only)*



**Tag Line:** MARK - 21. HAD A LINE. DROVE HOME. THE END

**Text:** None

**Source:** THINK!

Similar to female responses to the previous poster, male participants felt there was a need for more information in order to tell the story – particularly how the girl had died and how exactly marijuana had caused the accident. However, the use of a young male of similar age was considered more effective in that they were able to relate to the character. Also consistent with the female response (and comments earlier in the focus group) was the perception of the impact of the overall message: the possibility of killing another person.

*If there was more emphasis on how it inhibited your driving ability rather than 'you're going to die' it's a bit more down to earth about it. I think that's more effective* Driving Course, Male

*...they give us someone's name so we can relate to the person, we're given his age which relates to most of us what he's done and what's happened* University Male

*So it's saying it's not just you'll get fined, it's you can kill someone* University Male

*Poster G: Female Driver Tested (Female Group Only)*



**Tag line:** The ecstasy and the agony

**Text:** Random roadside drug testing commences 1 December 2007. You can be tested for: 1. THC – the active component in cannabis/marijuana. 2. Methylamphetamine – also known as speed or ice. 3. MDMA – the active ingredient in ecstasy. These drugs can be detected in a simple saliva test. There is a zero tolerance for drug driving. Any trace of illegal drug in your system and you'll be fined up to \$1050 or sentenced to three months jail and you could also lose your license for up to 9 months. **If you drive on drugs, you're out of your mind.**

**Source:** Queensland Government. Queensland Transport.

**Logo:** BECAUSE [ENOUGH IS ENOUGH]

Despite the ad including a female character, the image still remained ineffective in holding the attention of female participants, or providing them with a clear and obvious message. It was even considered less effective than the similar poster E, because of its 'boring' nature and less interesting tag line.

Despite the testing procedure shown, two participants in separate groups indicated (with widespread agreement from others in the group) that it looked more like a 'pregnancy test' than a device used to test for drug presence. It was clear that the picture was not convincing enough to explain how the procedure took place.

While the extra information was considered useful by some participants, the layout was not conducive to reading and processing the information

*.... if you just see this, I'm not going to read this, I'm just going to look at the picture*  
*And the design is pretty boring.* TAFE female

*I think it's OK if its part of a campaign [Yeah, not by itself] it provides actual information.* Driving Course, Female

Poster G: Male Driver Tested (Male Group Only)



**Tag line:** The ecstasy and the agony

**Text:** You reckon you're safe to drive home after taking ecstasy.

After all, you haven't touched any alcohol, so you'll sail through any RBT without a problem.

But do you want to risk your chances with a random roadside drug test? There's zero tolerance for drug drivers; if you're caught with any trace of the active ingredients found in marijuana, ecstasy or speed in your system, you will be fined. Illegal drugs can be detected in a simple saliva test. A first offence carries a penalty of up to \$1050 and you could lose your licence for up to 9 months. Plus the embarrassment of telling your work mates or your parents that you lost your licence because you were caught driving under the influence of drugs.

That's not to mention the danger you are putting yourself, you passengers and other road users in by taking drugs and driving. Driving under the influence of drugs can cause drowsiness, blurred vision, reduced alertness and reaction time. **If you drive on drugs, you're out of your mind.**

**Source:** Queensland Government. Queensland Transport.

**Logo:** BECAUSE [ENOUGH IS ENOUGH]

The male respondents who viewed this poster (a male version of Poster G) welcomed the further explanation of the consequences of being caught, however the information

was also considered difficult to read due to the font size. Overall, there was little detailed discussion regarding this advisement.

*You need to get across a message by the first look rather than have to stop and read all the fine print.* Driving Course, Male

*These ones actually tell you what is going to happen which is pretty scary in itself, just getting caught. No license for nine months is pretty big.* TAFE, male

## **Tag Lines**

The following tag lines were presented to each group for their opinions. Similar to the posters, these were presented in random order and participants were asked to group them in terms of likeability and effectiveness.

- **Drug driving? You'd be off your head**
- **If you drive on drugs, you'd be out of your mind**
- **Drug Driving: A Trip you don't want to take**
- **You'll get smashed if you drive on Drugs**
- **Wrecked: Drugs and driving don't mix**
- **Wasted: Drugs and driving don't mix**
- **Smashed: Drugs and driving don't mix**
- **Slammer 'Mixing drugs is a lethal**
- **Cocktail'**
- **RU Getting Wrecked**
- **Drive High: People Die**

Firstly, it was clear among the groups that the tag line (much like the image and overall message) needs to be clear, simple and complete without leaving the reader confused or feeling like they have missed something. As a result, *Drive high. People die* had the most positive response among all groups:

*It's short and it's catchy.*  
*You'd remember it.* University, Female

*And it's simple*  
*It's simple*  
*And easy, they don't try too hard*  
*If they keep it simple they do it fine.* University, Male

Across all groups, it was clear that the choice of words within the tag line significantly influenced whether or not the receiver would take the whole message seriously. Two specific factors were the use of colloquial language and the overall message within the tag line.

In reference to a campaign that was discouraging the act of text-messaging while driving, one participant clearly indicated that the reason the use of slang within campaigns is not well received is due to who is sending the message; it was not perceived to be appropriate for government departments to use colloquial language as this was interpreted as an effort to be 'cool'.

*Because they're trying to be cool.* University female

*Even though they're from our language, it's just the way they're put; it's like combining lingo with an adult speaking.* Driving Course, Female

*The authorities are trying to get to your level.... It's like they're trying to, they think they're above you, so it's like they have to sink to your level.* University, Female

*If they get it wrong it's just patronising [And pathetic] it's like, well It's not funny and xxx into the message because it's just too ridiculous.* University, Male

*Because they're trying to be [use meaning] trying to be cool and it takes it out of that.* TAFE, Female

A second risk associated with word use was the potential for words to be positively associated with the act of being under the influence and therefore potentially interfering with the negative message. In relation to specific words such as *wrecked* and *smashed*, 'or the line: *you'd be out of your mind*', participants felt that these words were received positively by young people thus may fail to make an association between danger and drug driving.

*Because people associate those things with positive things, you're wasted, it actually goes completely against...* University male

*Whereas people might go, oh cool, you're wrecked or you're so smashed...* TAFE, Female

*I think people would think so what, you're telling me that but I'm out of my mind, ... That's the whole point I'm on it* Driving Course, Female

There were some exceptions to the use of these words within the context of anti-drug driving messages. The tag lines *Drive high people die* and *A trip you don't want to*

take were well received by participants: the word 'high' is a common term which has been used for a long time to describe the influence of drugs; and the term trip is not necessarily a positive term associated with drug use, and therefore may be more suited to the overall aim of sending a negative message.

*It's realistic when you look at 'drive high people die' or 'speed kills' – that's realistic in that speed kills. University, Male*

*With 'on a trip' it's acid but it's also path you don't want to go down. University, Female*

*Whereas people might go, oh cool, you're wrecked or you're so smashed Not taking the issue seriously enough. This is the issue, if you drive high, people die. TAFE, Female*

*I think these ones are examples of them wanting to use the street language and that sort of thing and actually getting it right [yeah] 'the trip you don't want to take', that works. Everyone says 'I'm going to go tripping tonight' [yeah] and they've actually got the language right [mmm] for a change. University, Female*

Overall, any use of colloquial language needs to be considered very carefully and, in most cases, avoided. Participants clearly indicated that using such words, particularly without clear and simple messages of deterrence, can influence the receiver's overall respect for the messenger source and therefore whether or not they will take the message seriously. Tag lines must be simple, catchy and short as well as conveying the whole message.

### Other features

#### **Images**

The overall importance of the image was clearly indicated among all groups. Even the slightest effort needed to understand the image alone, or in connection with the words, can potentially jeopardise the receiver's willingness to keep reading. The role of the image was to provide an easy and clear indication of the poster's main message.

*Not read, if you just see this, I'm not going to read this, I'm just going to look at the picture. Driving Course, Female*

*You need to get across a message by the first look rather than have to stop and read all the fine print.* Driving Course, Male

Images should not require the participants to figure out the connection between what is being shown and the underlying message in the advertisement. While ‘clever’ advertising was noted, it was clear that any time taken to understand the association between the image and message was time wasted.

*That’s right, it’s too clever, (and) you need to just put it out there  
I think there’s no point; these ones are just gimmicky...  
You’ve just got to put it out there, rather than a hidden meaning  
The shock.* TAFE, Female

Images must also be ones the target group can relate to, particularly in regard to characters in the picture.

## **Text**

Overall, there was very little awareness about drug testing for drivers among participants, and knowledge about the process or consequences was very little. As a result, participants felt that many of the posters required more information (but not too much information).

*These ones actually tell you what is going to happen which is pretty scary in itself, just getting caught. No license for nine months is pretty big.* University, Male

Despite a heavy reliance on images to capture attention and deliver the message to young people, there were repeated suggestions that more information was needed, particularly among the male participants. Those advertisements which provided more information were generally better received among the male participants. Statistics were commonly suggested as a way of providing sufficient information without overloading the receiver.

*And I think the statistics, like so many people actually die each year from drug driving.* TAFE, male

Similar to the images, textual elements should be conclusive in their message and not leave anything ‘empty’ for the receiver. They should also not require the reader to spend too much time or effort in trying to read the small text.

### *Drug vs. Drink driving messages*

There was a clear potential for drug driving messages to be perceived as ‘another’ drink driving message; this was particularly the case for Poster D, but there were many other instances where participants compared the advertisements shown to drink-driving campaigns. The discussions indicated that there is a need for anti-drug driving messages to be clearly distinguished from drink driving related material and from other health related messages (e.g. smoking).

*If you write the word drug people will notice*

*Yeah*

*Put drugs in the middle of the screen.* Driving Course, Female.

### The Local Context

There were also suggestions within several of the groups to contextualise the message further to make it more applicable to young people within the Canberra region. These suggestions focused on developing messages that addressed the low knowledge levels about drug driving in general (regarding policies and dangers), but also specifically utilised images and text that was directly relevant to the region and the type of drug user:

*If they put more real statistics in I think it would be better as well... if they said ‘this many people died on Northbourne because of drink driving’ it would be more effective, it’s more specific. If they have the same sort of car crash it could be anywhere and you don’t know if that’s happened to scare people because most of the ads you see on TV you just assume are made up.*

University, Male

*That would be so effective in Canberra especially because it is such a small place and in the ACT you see ads, this many people die in NSW roads. Ok, where in NSW, this many people have died in Civic or on Tuggeranong Pathway – I doubt it would be many, but even if it was ‘this many people have been caught on drugs or drug driving’.* University, Male

## Campaign presence

There were regular suggestions (most of which were unprompted) from participants regarding the campaign presence, i.e. that in order for any message campaign to work, it must also be supported by visual sightings and personal experiences of the testing procedure. This was also influenced by the word of mouth promotion that was expected to follow.

*Because if I had been tested before I'd assume it would be more likely to happen.* University, Male

*Or if you told someone when you get pulled over you're going to get drug tested, that will spread, and if you're 'be careful'.* Driving Course, Female

Posters were also seen as limited in their ability to capture the attention of young people and effectively deliver all the information needed. There were several references to the very short period of time young people will give to a poster of this nature. However, magazines and signage in public transport facilities were recognized as settings in which the posters may be given more attention.

*As far as posters, for me, hierarch-wise, I'd never read that text  
I'd just feel like ok, I'm over it  
I used to live in Sydney and I used to catch trains. If I was bored on a train or something like that I'd read.* Driving Course, Female

*Those ones there are pretty good, for real quick...they tell you.  
You're not going to put that on a billboard on the highway. No one can read that writing.* TAFE, Male

*It depends on the media they use as well. Obviously these ones, g and e are good for magazines and stuff like that because people will actually read it but with outdoor advertising are like for roadside banners and stuff.* TAFE, Male

Smashed: Drugs and Driving Don't Work

**Attachment C1: Focus Group Discussion  
Guide**

# Smashed: Drug Driving Focus Group Script

## Welcome and thank-you

- Welcome, thanks for coming, introduce yourself
- Ask everyone for their first names and to write on a name label
- Briefly go through participant information sheet/consent form
- Discuss purpose and context of focus group (to collect information), how it will flow, your role as facilitator
- Incorporate ground rules including that all ideas have value (respect others' opinions), it is important for everyone to participate; participants should inform you if they need a break, please turn off mobile. We're not looking for yes / no answers – just a few people here, so the idea is to hear a lot from everybody.
- Explain about audio-taping (to ensure that valuable discussions are captured to be transcribed- no names written down) and what will be done with the information after it is collected. Ask participants try not to talk over one another.
- Clarify that we do not want to ask about their personal drug use, we want to get an idea of what their perceptions of drug driving are.

## Introduction:

ASK:

Firstly, I just wanted to write down a few ideas/thoughts you had when you hear the term drug driving, what things come to mind?

*NB: Write down responses on a white board/butchers paper*

## Perceptions of Drug Driving Behaviours

Now we are going to ask a few general questions about your perceptions of drug driving behaviours in young people.

ASK:

Is there a general perception amongst young people when it comes to drug driving? *Prompt: is one safer than the other?*

Do you think there is a difference between drinking alcohol and driving and drug driving? *Prompt: is one safer than the other?*

Does it depend on the type of drug? *Prompt: do you think some drugs have a greater impact on driving skills than others? Opinions on which are perceived to be the worst and least problematic drugs – which ones? Why?*

Do you think there is a safe quantity of drugs that can be consumed before driving, similar to alcohol? Why/why not? *Prompt: does it depend on the drug? What drugs would it be ok to drive after using?*

ASK:

What do you think are the reasons why young people might drug drive?  
*Prompt: transport difficulties, no other way of getting home, easier, it is safer than drink driving; not thinking about the consequences; enjoy the feeling*

In what kind of situations do you think drug driving is most likely to occur?  
*Prompt: parties, raves, nightclubs, driving home or between venues - Where are they driving from/to?*

ASK:

As a rough percentage, how common is drug driving among 18-25 year olds in the ACT? *Prompt: how common do you think it really is? Prompt: different types of drugs?*

Do you think there is a particular group of people who drug drive more frequently than others? Why this group? What makes them different from those who don't drug drive? *Prompt: males vs females, older/ younger people, different drug users (recreational vs habitual)*

### **Awareness of Testing in the ACT**

ASK:

Have you heard/seen any information about drug driving? Where did you see it? Can you remember what it said? Was it useful? *Prompt: have you thought about it since?*

If they don't discuss it: Is there drug driving testing in the ACT? If yes: what drugs do they test? (We are from NSW and it is different there) And what are the fines/penalties? How do they work? Do you think that there needs to be drug testing among drivers – should they be tested?

Do you think the drug tests are effective/work? *Prompt: there is a common perception that the tests don't actually work, what do you think?*

Do you know anyone or heard a story about someone who was caught drug driving? *Prompt: what happened to them?*

How likely do you think it is that drug drivers will get caught? (PROBE; More or less likely than driving under the influence of alcohol?)

Do you think young people need more information about the prevalence and effectiveness of roadside drug testing in the ACT? Do you think this type of information discourages young people from drug driving? *Prompt: is the threat of arrest and fines scary enough to change your behaviour*

### **Drug Driving Campaigns Feedback:**

*SHOW: Current Print Drug Driving Ads (5 or 6).*

*Get participants to break up in to 2 groups and have a look at the 7 different ads and ask them to rank them from the ad which had the greatest impact on them to the lowest impact. Write responses on sheet (A to G)*

**ASK:**

*What are the elements of the top 2 ads that make it effective? Prompt: images, tagline, characters, tone, setting, and source of message, relatable, information provided.*

*Briefly explore what is unappealing about the two lowest ranking messages.*

*What could be done to improve the ads just shown to you? Prompt: colours, a different message, targeting friends or mates to care about one another, better slogans, graphic images to attract the attention of young people, images of what. More informative messages, less information/more to the point messages.*

*What messages do you think should be included in drug driving advertisements? Prompt: what would have an impact on you, should they show the potential negative consequences of drug driving, injuring/ killing a friend, -yourself- or a stranger, losing your licence, large fines, imprisonment, shame).*

*Show participants a list of taglines from a range of drug driving ads (various sources). I just want to get your opinions on a range of taglines that have been used for recent drug driving campaigns in Australia and overseas.*

**ASK:**

*What do you think of these taglines in general? Prompt: which ones are most effective, and why?*

*What do you think about the terms/ language used in these ads - do they reflect common terms that young people would use (e.g *Smashed, Wasted, Out of your Mind*). Are there other words more commonly used?*

*Can you think of any recent ads similar to the drug driving ads we discussed that had a strong impact on you? (even drink driving or speeding ads or other health related messages).*

*What was it about these ads that made them effective?*

Do you think the kind of messages and images used for drink driving ads are also appropriate for drug driving? If not what are the elements that should be different for a drug driving ad?

Who do you think is the most effective voice to deliver drug driving messages. Why? *Prompt: health professional, govt dept, friend, family, someone who has been injured by a drug driver etc.*

**Media and Message Summary:**

*Just thinking overall about all of the things we have discussed today and if we have time:*

ASK:

If you were creating a drug driving message for young people what would you include to give it greatest impact? Could you divide into two groups and quickly sketch an outline of your ideal drug driving ad?

Thank you very much for your contribution today.




## Smashed: Drugs and Driving Don't Work

### Appendix D: Advertisements Developed for Testing



Ad 1: Drive with drugs- your license will go up in smoke




**DRIVE  
WITH  
DRUGS**

Your license  
will go up in  
smoke

Random roadside drug testing commences 1 August 2009. You can be stopped for:

1. THC- the active component in cannabis/marijuana
2. methylamphetamine- also known as speed or ice
3. MDMA- the active ingredient in ecstasy.

These drugs can be detected in a simple saliva test.  
There is zero tolerance for drug driving. Any trace of illegal drugs in your system and you'll be fined up to \$1000 or sentenced to 6 months jail and you could also lose your license for up to 6 months.



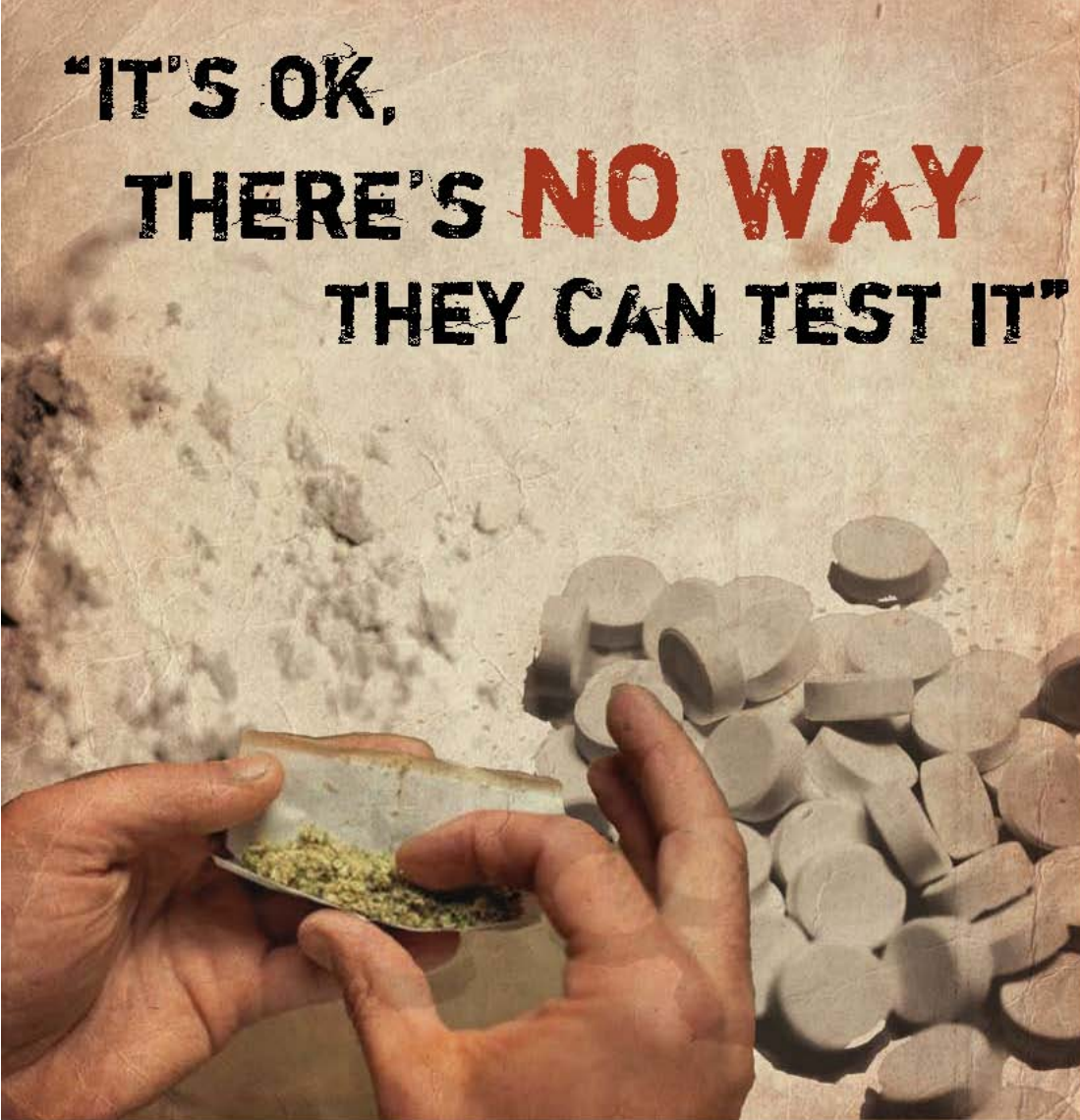
Ad 2: Drive high-say goodbye to your license and hello to police officer



If you  
**drive high**  
you'll be saying goodbye  
to your **licence**  
and up to \$1,050...

and hello to a police officer.  
Police now conduct  
**random roadside testing.**

Ad 3: 'It's ok, there's no way they can test it'



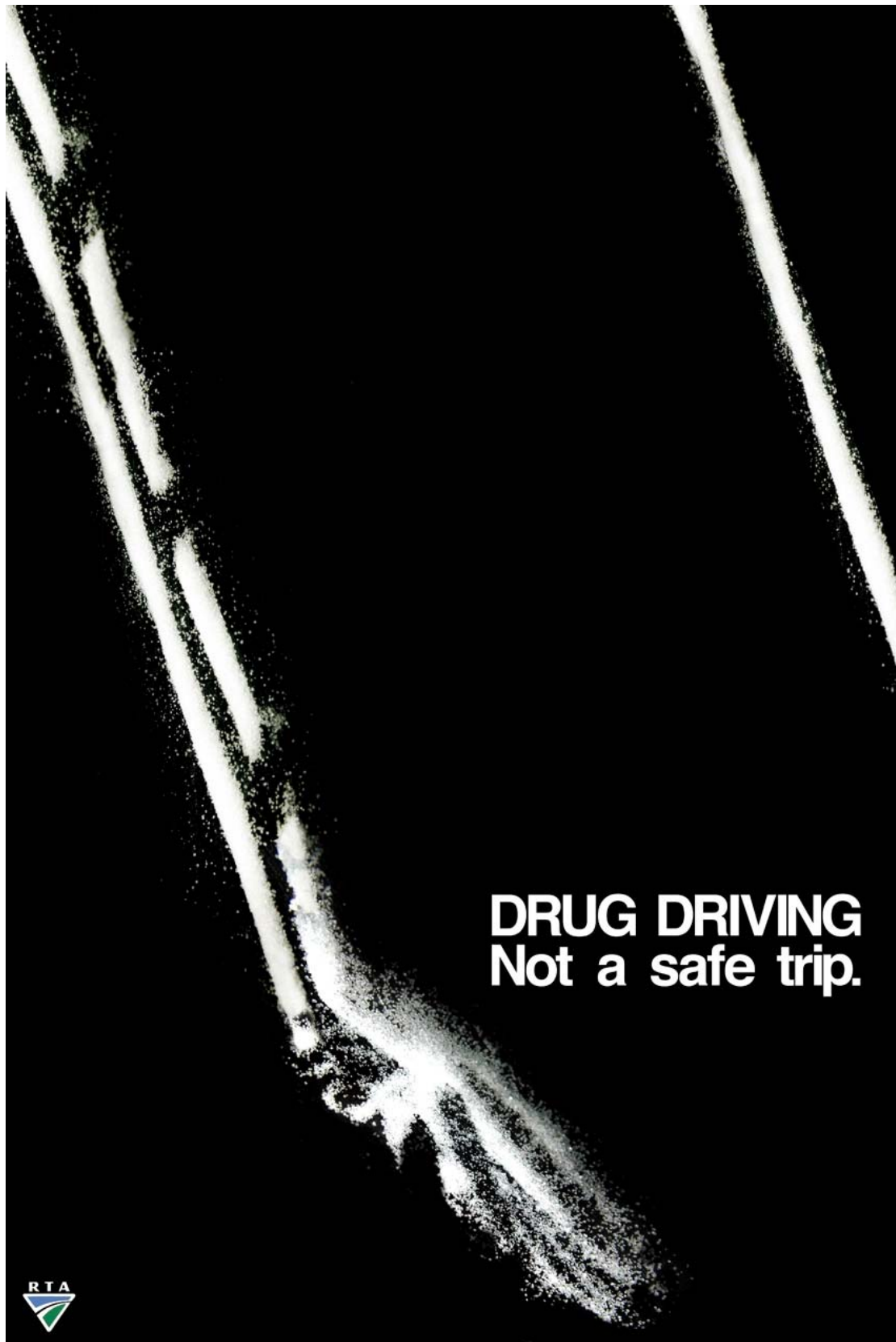
**"IT'S OK,  
THERE'S NO WAY  
THEY CAN TEST IT"**

**[ ACTUALLY, THERE IS. ]**

ACT Police are now conducting random roadside saliva tests to detect drivers travelling while affected by illicit drugs. Saliva screening is an accurate and reliable method for detecting recent consumptions of **THC** (the active component of cannabis), **MDMA** (ecstasy) and **methamphetamines** (speed or ice). If you drive under the influence of drugs not only do you run the risk of immediate loss of license and a fine in excess of \$1050; you are risking the lives of your friends.

And no high is worth that.


Ad 4: 'Drug driving- not a safe trip- cocaine road lines'



Ad 5: 'Drug driving- not a safe trip- distorted dashboard'



Ad 6: 'Drugs alter reality'



**DRUGS ALTER REALITY**


Your trip will be nothing you ever imagined

There is zero tolerance for drug driving. Any trace of illegal drugs in your system and you'll be fined up to \$1050 or sentenced to 3 months jail and you could also lose your licence for up to nine months.

Random roadside drug testing commences 1 August 2009. You can be stopped for:

1. **THC**- the active component in cannabis/marijuana
2. **Methylamphetamine**- also known as speed or ice
3. **MDMA**- the active ingredient in ecstasy.

These drugs can be detected in a simple saliva test.



Ad 7: 'Drive high- say goodbye to a mate'



Ad 8: 'Drugs + driving = all of the above'

# DRUGS + DRIVING =

- a) immediate loss of license
- b) heavy fine and demerit points
- c) killing a friend



## D) ALL OF THE ABOVE

ACT Police are now conducting random roadside saliva tests to detect drivers travelling while affected by illicit drugs. If you drive under the influence of drugs not only do you run the risk of immediate loss of license and a fine in excess of \$1050; you are risking the lives of your friends.

And no high is worth that.

Ad 9: 'One trip at a time'

ADIDAS  
ONE  
BRAND  
UNITED  
WORLD

**ONE**<sup>TRIP</sup>  
**AT A TIME**  
**DRUGS AND**  
**DRIVING**  
**DON'T**  
**MIX**



# Smashed: Drugs and Driving Don't Work

## Appendix E: Evaluation Survey Results

Lance Barrie & Sandra Jones



## **Demographics**

The survey<sup>1</sup> was distributed to 459 young people (nearly 75% of respondents were under 22 years old). A little over half of the respondents were female (54.9%). The dataset was collected at three locations; 193 at the Australian National University (ANU), 217 at the Canberra Institute of Technology (CIT), and 49 at the Road Ready driving program (Table 1).

Just over half of respondents (51.0%) had their provisional license, 29.2% had a full license, 24% a learner's permit, 4.6% no license, and 2.8% both a motorcycle and car license (2.8%). Due to the sampling framework, participants were either living on campus (41.5%) or at home (34.7%). There was a mixture of employment types with 39.4% employed casually, 23.8% not currently working, 18.8% working full time and a further 17.6% working part time. Slightly less than half (43.5%) of participants stated they were Christian and 41.1% were unsure or not religious.

**Table 1: Demographics**

	<b>Frequency (<i>n</i>)</b>	<b>Percent (%)</b>
<b>Gender</b>		
Male	207	45.1
Female	252	54.9
<b>Age (years)</b>		
18	88	19.2
19	96	20.9
20	97	21.1
21	50	10.9
22	48	10.5
23	36	7.8
24	25	5.4
25	19	4.1

<sup>1</sup> A copy of the survey is provided as Attachment E1 to this Appendix.

<b>Location</b>	<b>Frequency (n)</b>	<b>Percent (%)</b>
Australian National University (ANU)	193	42.0
Canberra Institute of Technology (CIT)	217	47.3
Road Ready (RR)	49	10.7
<b>Occupational Status</b>	<b>Frequency (n)</b>	<b>Percent (%)</b>
Full-time employee	83	18.1
Part-time employee	79	17.2
Casual employee	175	38.1
Unemployed	105	22.9
No response	19	3.7
<b>Student Status</b>		
University student	216	47.1
TAFE student	193	42.5
High school student	19	4.1
Not a student	26	5.7
No response	5	1.1
<b>House/apartment with:</b>	<b>Frequency (n)</b>	<b>Percent (%)</b>
Family	158	34.4
Friends	44	9.6
Partner	41	8.9
Alone	21	4.6
On-campus residence	189	41.1
No response	6	1.3
<i>Total</i>	<i>459</i>	<i>100.0</i>
<b>Drivers Licence</b>	<b>Frequency (n)</b>	<b>Percent (%)</b>
Yes	513	80.0
No	127	19.8
No response	1	0.2

### ***Drug driving knowledge and relevant driving experiences***

Over half (53.2%) of the sample reported having been stopped for a Random Breath Test (RBT) for alcohol at least once while they have been driving; with 68.2% of

those tested being breathalysed two or more times. It was encouraging to learn that less than 4% ( $n = 9$ ) of respondents that had been stopped for a RBT had a blood alcohol concentration (BAC) of 0.05 (the legal limit) or greater. Only a very small group ( $n = 11$ ) of respondents had been stopped for a random drug test (RDT). Of these respondents, two had taken drugs other than alcohol prior to being pulled over by the police.

The majority of respondents ( $n = 268$ , 58.4%) stated that they were “more likely” or “much more likely” to be involved in a car accident whilst under the influence of drugs (Table 2). Surprisingly, 27.7% of participants said that they were much less likely to have a car accident while under the influence of drugs. A higher proportion of females than males said they were less likely to have an accident while under the influence of drugs (35.9% vs 27.9%;  $\chi^2 = 14.630$ ,  $p = 0.001$ )

**Table 2: Likelihood of having a car accident under the influence of drugs compared to being sober**

<b>Likelihood</b>	<b>Freq (%)</b>
Much less likely	127 (27.7)
Less likely	20 (4.4)
About the same	40 (8.7)
More likely	118 (25.7)
Much more likely	150 (32.7)
<i>No Response</i>	4 (0.9)
<b>Total</b>	<b>459 (100.0)</b>

Respondents rated the ease with which they could personally avoid driving while under the influence of drugs (Table 3), and most (89.4%) reported that they could easily avoid doing so (although it is important to note that slightly more than 10% said this would be somewhat or very difficult for them).

**Table 3: Ease of avoiding driving under the influence of drugs**

<b>Ease</b>	<b>Freq (%)</b>
Very easy	328 (71.5)
Somewhat easy	82 (17.9)
Somewhat difficult	34 (7.4)
Very difficult	13 (2.8)
<i>No Response</i>	2 (0.4)
<b>Total</b>	<b>459 (100.0)</b>

Respondents were asked how they would feel if they were charged for drug driving, and how they would feel if they caused serious injury to another person while driving under the influence of drugs. When asked to imagine being charged with drug driving, 88% of respondents stated that they would feel very bad and very worried (Table 4), with less than 1% stating that they would not be worried at all. Nearly all respondents (97.6%) stated that they would feel bad and worried if they caused serious injury to another as a result of driving under the influence of drugs.

**Table 4: Anticipated feelings if charged with drug driving or if caused serious injury to another**

	<b>Charged with drug driving</b>	<b>Caused serious injury</b>
	<b>Freq (%)</b>	<b>Freq (%)</b>
Very bad and very worried	404 (88.0)	438 (95.4)
A little bad and a little worried	20 (4.4)	10 (2.2)
A little worried, but would just face it if it happens	27 (5.9)	3 (0.7)
Not worried, because these things just happen	3 (0.7)	3 (0.7)
<i>No Response</i>	5 (1.1)	5 (1.1)
<b>Total</b>	<b>459 (100.0)</b>	<b>459 (100.0)</b>

### ***Responses to the advertisements***

Each respondent was randomly given one of the six advertisements for evaluation, with approximately equal numbers viewing each advertisement (see Table 5). Advertisement-specific analyses are provided as Attachment E2 to this Appendix.

**Table 5: Distribution of advertisement presentations**

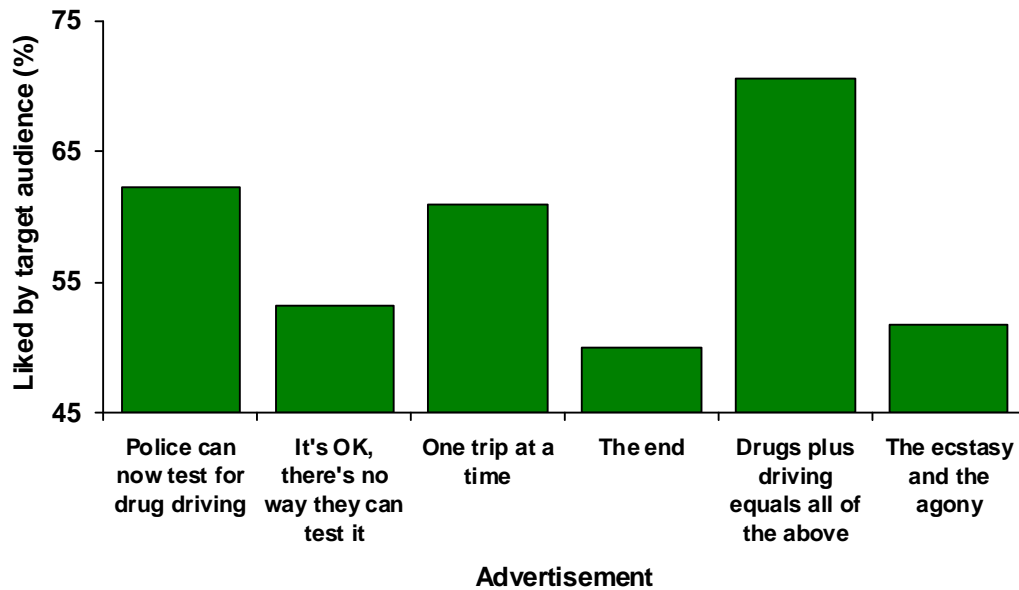
<b>Advertisement</b>	<b>Freq (%)</b>
Police can now test for drug driving	78 (17.0)
It's OK, there's no way they can test it	80 (17.4)
One trip at a time	77 (16.8)
The end	72 (15.7)
Drugs plus driving equal all of the above	69 (15.0)
The ecstasy and the agony	83 (18.1)
<b>Total</b>	<b>459 (100.0)</b>

The primary aim of the survey was to evaluate which of the six drug driving advertisements most effectively conveyed the message to the target group of young drivers. Specifically, respondents viewed one of the advertisements, and then noted any thoughts, memories or images that came to mind. Respondents were then asked to what extent they felt anxious, surprised, nervous, bored, concerned, annoyed, scared, relieved, and shocked. Further, respondents had to rate how realistic they perceived the advertisement to be, and also rated various aspects of the advertisement, including the image, tagline, text size, messages, and colours used. They were invited to suggest any changes or improvements to the advertisement, and to specify anything that they found confusing or unclear.

The normality assumption was violated for every distribution in the dataset. Therefore, non-parametric tests were utilised in the analysis. Significant differences between the advertisements were highlighted with chi-square analyses.

### Likability

The advertisement most preferred by the respondents (in terms of overall likability) was Test Ad 1 (Drugs plus driving equals all of the above; 71%,  $\chi^2 (10, N = 456) = 18.67, p = .045$ ). Other advertisements which rated highly on this measure were the Western Australian Road Safety Council ad (Police can now test for drug driving; 62%), closely followed by Test Ad 2 (One trip at a time; 61%). On the individual measures, Test Ad 1 (Drugs plus driving equals all of the above) was also rated as having the best-liked tagline (65%),  $\chi^2 (10, N = 457) = 19.62, p = .033$ , and best-liked message (82%),  $\chi^2 (10, N = 454) = 24.11, p = .007$ ; and Test Ad 2 (One trip at a time) was rated the most favourably for text size (74%),  $\chi^2 (10, N = 456) = 28.74, p = .001$ .

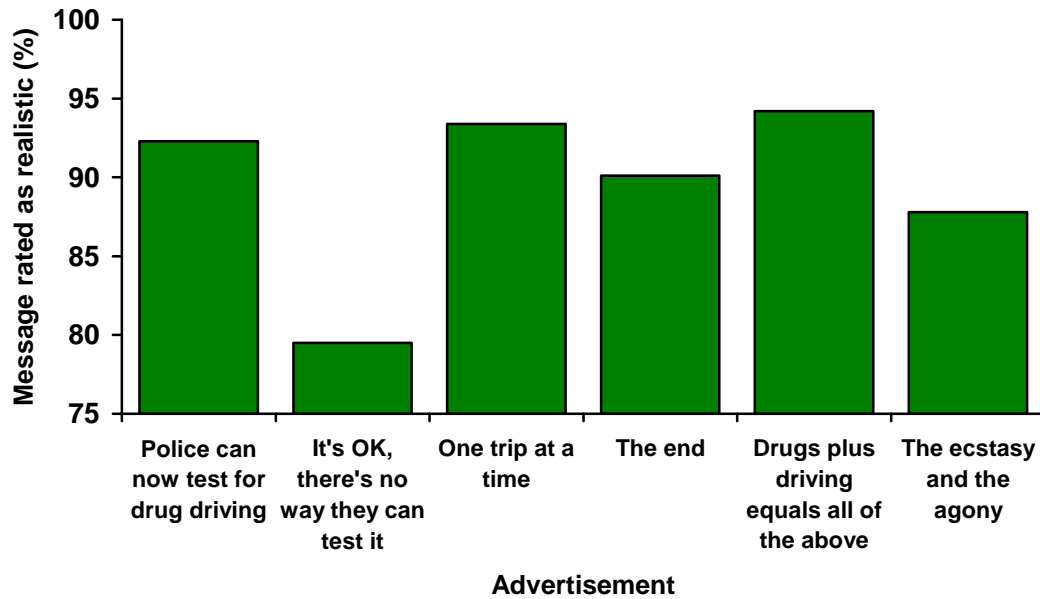


**Figure 1. Overall likability ratings of the tested advertisements**

### Realism

Test Ad 2 was perceived as realistic by the greatest proportion of respondents (93%), closely followed by Test Ad 1 (91%) and the WA Road Safety Council ad (89%). On the individual measures, Test Ad 1 was assessed as having the most realistic message (94%),  $\chi^2 (5, N = 454) = 12.05, p = .034$  (Figure 2); Test Ad 2 as having the most realistic colours (92%),  $\chi^2 (5, N = 455) = 11.29, p = .046$ ; and the WA ad was viewed as containing the most realistic image (91%),  $\chi^2 (5, N = 456) = 26.50, p = .000$ , and tagline (90%),  $\chi^2 (5, N = 450) = 21.18, p = .001$ .

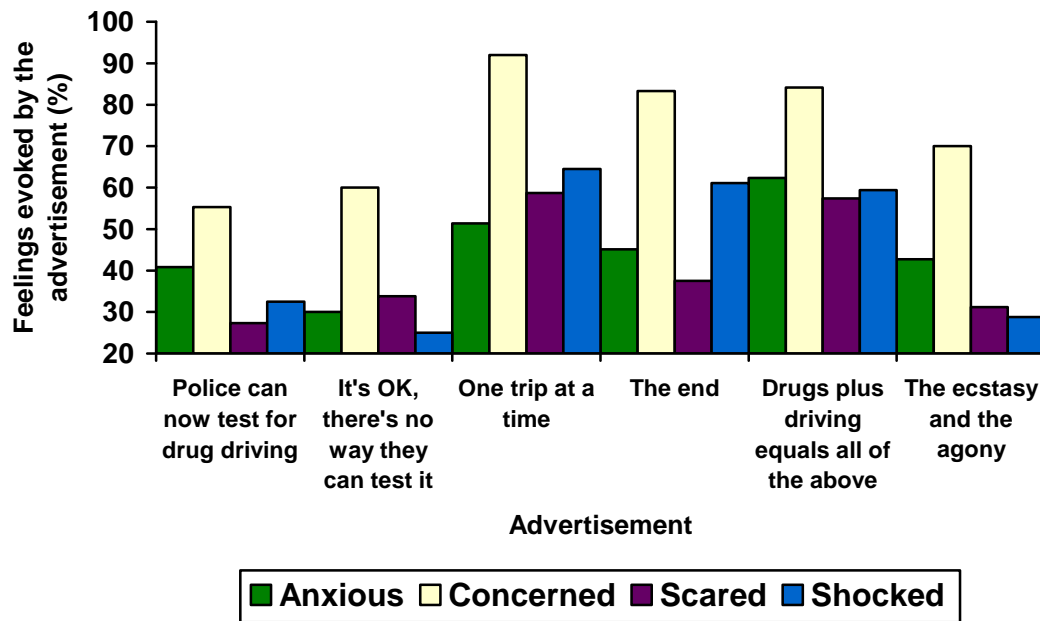
Test ad 3 (It's OK, there's no way they can test it) was deemed unrealistic in terms of image (39%),  $\chi^2 (5, N = 456) = 26.50, p = .000$ , message (21%),  $\chi^2 (5, N = 454) = 12.05, p = .034$ , and the colours used (25%),  $\chi^2 (5, N = 455) = 11.29, p = .046$  (it was also the advertisement least likely to have an emotional impact on the target audience). The Queensland Transport ad (The ecstasy and the agony) was assessed as having the most unrealistic tagline (38%),  $\chi^2 (5, N = 450) = 21.18, p = .001$  (and was the most disliked advertisement overall).



**Figure 2. Perceived realism of the tested advertisements**

### Emotional responses

In terms of emotional responses (see Figure 3), the same advertisements stood out; with Test Ad 1 (Drugs plus driving equals all of the above) most likely to make respondents feel anxious (63%),  $\chi^2 (5, N = 452) = 17.59, p = .004$ , nervous (49%),  $\chi^2 (5, N = 452) = 17.00, p = .004$ , and second most likely to make them feel scared (57%),  $\chi^2 (5, N = 452) = 28.50, p = .000$ . Test Ad 2 (One trip at a time) was the most likely to make respondents feel concerned (92%),  $\chi^2 (5, N = 452) = 41.84, p = .000$ ; scared (59%),  $\chi^2 (5, N = 452) = 28.50, p = .000$ ; and shocked (65%),  $\chi^2 (5, N = 454) = 51.41, p = .000$ . The WA ad (Police can now test for drug driving) was the most likely to evoke a sense of relief (54%),  $\chi^2 (5, N = 452) = 72.46, p = .000$ ; and the UK ad (The end) the most likely to evoke annoyance in the target audience (59%),  $\chi^2 (5, N = 452) = 21.54, p = .001$



**Figure 3. Comparison of advertisements: Feelings evoked by advertisement**

### Behavioural Intentions

Finally, the survey sought to ascertain any potential behaviour change by comparing respondents' stated past behaviour (before they saw the advertisement) to their reported behavioural intentions after having seen the poster. Wilcoxon Signed Ranks tests determined any significant differences between respondent attitudes before and after seeing the advertisement; both for driving under the influence of drugs and being a passenger of a driver under the influence. XXX ad (The ecstasy and the agony) was the only advertisement for which respondents' reported a reduction in the likelihood of them drug driving after viewing the advertisement ( $Z = -2.27, p = .023$ ). However, this result should be interpreted with caution, as should the apparent lack of effect for the other advertisements, as the vast majority of respondents stated that it was "very unlikely" for them to drive after using drugs both before and after seeing the advertisement. This 'ceiling effect' meant that for the majority of respondents no change (in the desired direction) was possible. More change was observed in terms of willingness to be a passenger in a car where the driver is under the influence of drugs (although a ceiling effect was still evident). Four advertisements significantly reduced the reported future likelihood of respondents being a passenger in a car where the driver had been using drugs; 'One trip at a time' ( $Z = -3.50, p = .000$ ), 'The ecstasy

and the agony' ( $Z = -3.00, p = .003$ ), 'Police can now test for drug driving' ( $Z = -2.18, p = .029$ ), and 'It's OK, there's no way they can test it' ( $Z = -2.00, p = .046$ ).

**Table 1: Overall likeability of tested advertisements (by gender)**

	Drugs plus driving equals all of the above		One trip at a time		The end		Police can now test for drug driving		There is no way they can test it		The ecstasy and the agony	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Overall (liked)</b>	60.6	80.0	60.6	61.4	41.2	57.9	51.4	72.5	54.5	52.2	48.6	54.2

**Table 2: Likeability of advertisement components**

	Drugs plus driving equals all of the above	One trip at a time	The end	Police can now test for drug driving	There is no way they can test it	The ecstasy and the agony
<b>image</b>	58	49	39	47	38	41
<b>tagline</b>	65	47	47	52	55	47
<b>Text size</b>	62	74	49	52	53	45
<b>message</b>	82	71	58	60	67	69
<b>Colors used</b>	62	63	50	56	49	59
<b>overall</b>	71	61	50	62	53	52

**Table 3: Overall realism of tested advertisements (by gender)**

	Drugs plus driving equals all of the above		One trip at a time		The end		Police can now test for drug driving		There is no way they can test it		The ecstasy and the agony	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Overall (realistic)</b>	88.2	94.1	84.4	97.7	76.5	83.8	86.8	90.0	78.1	78.3	91.4	84.8

**Table 4: Realism of advertisement components**

	Drugs plus driving equals all of the above	One trip at a time	The end	Police can now test for drug driving	There is no way they can test it	The ecstasy and the agony
<b>image</b>	87	82	76	91	62	84
<b>tagline</b>	87	78	78	90	76	62
<b>message</b>	94	93	90	92	80	88
<b>Colors used</b>	78	92	75	83	75	86
<b>overall</b>	91	92	80	89	78	88

**Table 5: Emotional responses to tested advertisements**

	<b>Drugs plus driving equals all of the above</b>		<b>One trip at a time</b>		<b>The end</b>		<b>Police can now test for drug driving</b>		<b>There is no way they can test it</b>		<b>The ecstasy and the agony</b>	
	<b>No change</b>	<b>Some change</b>	<b>No change</b>	<b>Some change</b>	<b>No change</b>	<b>Some change</b>	<b>No change</b>	<b>Some change</b>	<b>No change</b>	<b>Some change</b>	<b>No change</b>	<b>Some change</b>
<b>Anxious</b>	38%	62%	49%	51%	55%	45%	59%	31%	70%	30%	57%	43%
<b>Surprised</b>	61%	39%	67%	23%	60%	40%	51%	49%	63%	27%	57%	43%
<b>Nervous</b>	52%	48%	60%	40%	61%	39%	66%	34%	83%	17%	64%	26%
<b>Bored</b>	58%	32%	53%	47%	51%	49%	51%	49%	39%	61%	49%	51%
<b>Concerned</b>	16%	84%	8%	92%	17%	83%	45%	55%	40%	60%	30%	70%
<b>Annoyed</b>	58%	42%	47%	53%	41%	59%	71%	29%	61%	39%	68%	32%
<b>Scared</b>	43%	57	45%	55%	63%	37%	73%	27%	66%	36%	69%	31%
<b>Relieved</b>	81%	19%	91%	9%	90%	10%	46%	64%	53%	47%	54%	46%
<b>Shocked</b>	41%	59%	36%	64%	39%	61%	68%	32%	75%	25%	71%	29%

## Smashed: Drugs and Driving Don't Work

### Attachment E1: Evaluation Survey

**Questions 1 to 11, ask you about your reaction to, and feelings about the advertisement on page 1. PLEASE ANSWER BOTH FRONT AND BACK OF EACH PAGE**

1. Please look at the advertisement on page 1. What thoughts, memories or images came to your mind while you were looking at the advertisement? You may have had several thoughts or images. Please write each one in one of the boxes below.

2. The following items (a – i) ask you to indicate how you felt after viewing the advertisement on page 1. For each statement, place a tick in the box that best describes how you felt after viewing the advertisement.

		Not at all	Slightly	Moderately	Very
a)	I felt anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	I felt surprised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	I felt nervous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	I felt bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e)	I felt concerned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f)	I felt annoyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g)	I felt scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h)	I felt relieved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i)	I felt shocked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Apart from “Drugs + Driving =” what do you think are the main messages this ad is trying to get across? You can list more than one message.

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4. Before seeing this ad, how likely would it have been for you to drive after using drugs?

Very unlikely	Unlikely	Likely	Very likely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Having seen this ad, please indicate how likely it is that you would drive after using drugs?

Very unlikely	Unlikely	Likely	Very likely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Before seeing this ad, how likely would it have been for you to be a passenger in a car where the driver had been using drugs?

Very unlikely	Unlikely	Likely	Very likely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Having seen this ad, please indicate how likely it is that you would be a passenger in a car where the driver had been using drugs?

Very unlikely	Unlikely	Likely	Very likely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How much did you like each component of the advertisement? (For each of the following, please place a tick in the box that best describes how you felt)

	Strongly Disliked	Disliked	Neither Liked or Disliked	Liked	Strongly liked
Image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tagline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Text Size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Message	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colors used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Did you feel that the following components were realistic? (For each of the following, please place a tick in the box that best describes how you felt)

	Not at all Realistic	Not very Realistic	Realistic	Very Realistic
Image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tagline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Text Size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Messages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colors used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Was there anything about the ad that you particularly found confusing or unclear?  
Please list:

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11. If there were two things that you would change/improve about the advertisement, what would they be?

1. 

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2. 

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3. 

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**Questions 12 – 19 ask you about your previous experiences and attitudes towards drugs and driving.**

12. How likely would it be for you to have a motor vehicle accident whilst driving under the influence of drugs (compared to driving whilst NOT under the influence of drugs)?

Much less likely	Less likely	About the same	More likely	Much more likely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Thinking about your driving and your lifestyle, how easy do you think it would be for you personally to avoid driving while under the influence of drugs?

Very easy	Somewhat easy	Somewhat difficult	Very difficult
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How would you feel if you were charged with driving under the influence of drugs?

- ☐ I would feel very bad and very worried
- ☐ I would feel a little bad and a little worried
- ☐ I would feel a little worried, but I would just face it if it happens
- ☐ I would not feel worried; these things just happen

15. How would you feel if you were charged with causing serious injury to someone as a result of an accident whilst driving under the influence of drugs?

- ☐ I would feel very bad and very worried
- ☐ I would feel a little bad and a little worried
- ☐ I would feel a little worried, but I would just face it if it happens
- ☐ I would not feel worried; these things just happen

16. Please indicate that number of motor vehicle accidents that you have had as a driver (if none, please write zero).

\_\_\_\_\_ major accidents (extensive car damage or resulted in injury)  
 \_\_\_\_\_ minor accidents (minor car damage)

17. How many accidents, if any, have you been involved in (even minor ones) as a passenger?

\_\_\_\_\_ major accidents (extensive car damage or resulted in injury)  
 \_\_\_\_\_ minor accidents (minor car damage)

18. As a driver, have you ever been stopped for a random breath test for alcohol?

- ☐ No      Go to Question 19
- ☐ Yes     Please answer the following two questions (18a & 18b).

18a. How many times have you been stopped for a random breath test?

\_\_\_\_\_

18b. How many times have you been stopped for a random breath test and have had a Blood Alcohol Content of 0.05 or greater (i.e. above the legal limit)?

\_\_\_\_\_

19. As a driver, have you even been stopped for a random drug test (NOT for alcohol)?

- ☐ No      Go to Question 20  
☐ Yes      Continue to part 19a

19a. On how many of those times had you taken any drugs (other than alcohol)?

\_\_\_\_\_

**The remaining questions are about you.**

20. Your sex:

- ☐ male  
☐ female

22. Your age: \_\_\_\_\_ yrs

23. What is your religion?

- ☐ Christian  
☐ Muslim  
☐ Buddhist  
☐ Hindu  
☐ Jewish  
☐ Unsure/not religious  
☐ Other- Please Specify Other: \_\_\_\_\_

24. What driver's license do you currently hold?

- ☐ Learners License  
☐ Provisional License (P's)  
☐ Full license  
☐ Motorcycle License  
☐ I do not currently have a drivers/motorcycle license

25. Which of the following best describes your current living arrangement?

- ☐ Living by myself  
☐ Living with friends/others

- ☐ Living on campus
- ☐ Living with partner
- ☐ Living with family
- ☐ Other

26a. Where are you currently studying?

- ☐ TAFE (please answer Q26b and c)
- ☐ University (please answer Q26b and c)
- ☐ High School (please go to Q27)
- ☐ I am not a student (please go to Q27)

26b.If you selected either TAFE or University Student, what is your status?

- ☐ Full time
- ☐ Part time

26c. Are you:

- ☐ A domestic student
- ☐ An international student

27. Which of the following best describes your current employment status?

- ☐ Employed casually
- ☐ Employed part time
- ☐ Employed full time
- ☐ Not currently working
- ☐ Other- Please Specify Other: \_\_\_\_\_

If you would like to enter the draw to win one of four \$100 Myer Gift Vouchers, please leave your name and contact telephone number below. Once all surveys are collected, competition entry forms will be placed in the competition box and your survey will remain completely anonymous. After competition winners have been contacted, all entries will be destroyed.

Thank you

Name: \_\_\_\_\_

Ph Number: \_\_\_\_\_

Smashed: Drugs and Driving Don't Work

Attachment E2: Advertisement-specific  
analyses

**Advertisement one: ‘Police can now test for drug driving’ (Government of Western Australia, Road Safety Council)**

*Perceived messages*

Respondents’ believed that this advertisement was primarily raising awareness that drugs other than alcohol can now be detected by roadside police. It also conveyed to respondents the message that drug driving is illegal and dangerous, and drug drivers will be caught and heavily penalised. Responses regarding the main message of the poster included “Police are cracking down on drug drivers as much as they do drink drivers”, “If you are caught there will be serious consequences”, and “Testing will be random”.



*Components of the advertisement found to be confusing or unclear*

The use of a police bus instead of a car confused many respondents, as it was unfamiliar to them. In addition, respondents commented that the poster was unclear in terms of the way police will test for drugs, which drugs will be tested for, and how drug driving relates to individual state laws. Respondents asked questions like “Why do the police have a bus?” and “What drugs will they be testing for?”

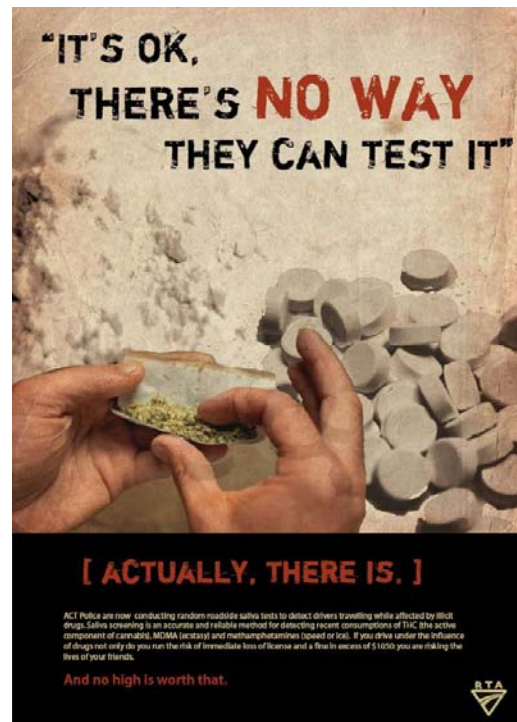
*Suggestions for changes and improvements*

The most common suggestion for this advertisement was to show drivers being stopped, tested and caught. It was suggested that the image include more police officers, and also change the bus shown for a police car. Respondents stated that the advertisement was not shocking enough to change behaviour, and suggested that more information be included about consequences and penalties of drug driving. Further, respondents commented that the text at the bottom of the poster was too small to read and suggested the use of other, more striking colours for the background.

## Advertisement 2: 'It's OK, there's no way they can test it' (CHI Test Ad)

### *Perceived messages*

The main messages that the target audience perceived were that drugs other than alcohol can be tested for, that many types of drugs can be detected with the roadside test (not entirely true), and that drug drivers will be caught. Responses included “there is a way for them to test it and you should be mindful of that if you intend to drive while high”, “no high is worth the risks of getting tested and getting caught” and, “there are a variety of drugs that can be tested for”.



### *Components of the advertisement found to be confusing or unclear*

Many respondents commented that the advertisement was not clearly related to driving specifically, that it appears to be an anti-drug campaign at first glance. Further, respondents thought that the image was confusing, and that it was unclear which drugs could be tested for. Actual comments regarding confusing and unclear components of the poster included “I didn’t know it had anything to do with driving” and “the image makes me think about drugs, but doesn’t give any information related to the text below”.

### *Suggestions for changes and improvements*

Most suggestions regarded changing the image. Respondents were distracted by the unrealistic size of the drugs in relation to the hands, and commented on the poor resolution of the picture. Further, respondents suggested that a more obvious connection to driving be made, to include some statistics about drug driving, and to emphasise the non-financial consequences of driving under the influence.

### Advertisement 3: 'One trip at a time: Drugs and driving (CHI Test Ad)

#### *Perceived messages*

The most commonly perceived message was that drug driving has serious consequences and that one accident could cost a future. Another message observed was simply do not do drugs and drive, and that drugs impair driving ability as much (if not more than) alcohol. Messages noted by respondents included “not all accidents involve death, but life long disabilities”, “even driving once under the influence of drugs can result in severe trauma”, and “life can change in an instant with one bad decision”.



#### *Components of the advertisement found to be confusing or unclear*

Respondents commented that the tagline ‘One trip at a time’ did not make sense and was confusing, particularly due to the use of the word “trip”. In addition, the layout of the text was confusing, because the word trip is vertical and there is no use of punctuation. Respondents also thought that the message was unclear to an extent, commenting that the advertisement seemed to suggest that drug use was acceptable when driving was not a factor. One respondent remarked, “So drugs are OK, just don’t drive on them?”

#### *Suggestions for changes and improvements*

Regarding the text on the poster, many respondents suggested that the word “trip” be changed and not written vertically. They also commented that having punctuation would make the message easier to read and understand. Respondents thought that image was not very realistic, and that it would be more effective to show more injuries and to even put the person pictured in a wheelchair. Further, respondents suggested that a background image be added; a car wreck, a distraught family, and a hospital were proposed.

#### **Advertisement 4: ‘The end’ (Warwickshire Police, Impaired Driving Campaign, UK)**

##### *Perceived messages*

The majority of respondents perceived the main message to be that drug driving places the driver and all others on the road in serious danger. More than that, that drug driving can lead to death. Another message perceived was that drugs can impair driving as much as alcohol. Respondents wrote that the main message of the poster was “Don’t smoke and drive; getting stoned is just as bad as getting drunk”, “it could impact someone else’s life”, and “your personal choices can affect others”.



##### *Components of the advertisement found to be confusing or unclear*

The most confusing aspect of this advertisement for the target audience was the story. Respondents found that the story was not cohesive, that the timeframes were unrealistic, and that it was unclear what the outcomes were for the driver. The respondents commented that they were confused about the identity of the girl in the third picture. In addition, the tagline “The end” confused some of the target audience; they commented that it was unclear.

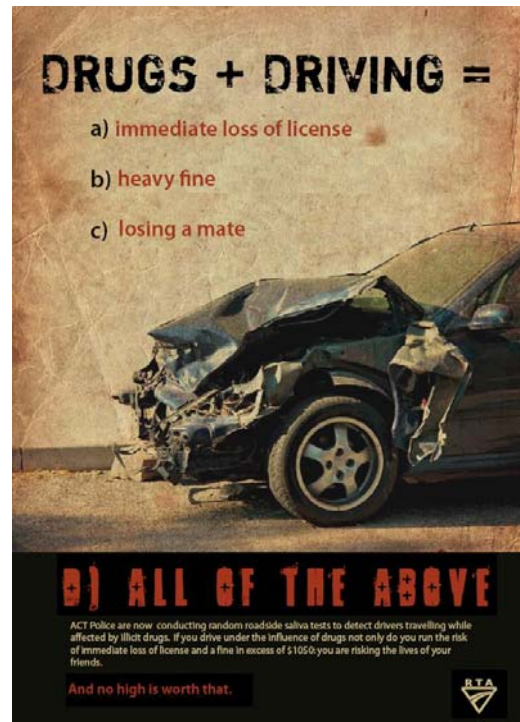
##### *Suggestions for changes and improvements*

Many respondents suggested that the advertisement could be more shocking to gain the attention of the audience. They also recommended that the story be made clearer; the timeframes should be removed (or made more realistic), the girl should be identified, and the outcome for the driver should be made more explicit. Respondents suggested having the driver as the one in the third picture, or at least someone related to him, as it would have more impact than the involvement of a stranger.

### Advertisement 5: 'Drugs plus driving equal all of the above' (CHI Test Ad)

#### *Perceived messages*

The main message perceived by the target audience was do not use drugs and drive because there are severe personal and financial consequences; that driving under the influence could mean that you “lose a lot of important things in your life”, “that there is more to lose than just your licence”. Further, respondents were made aware that drug driving affects not only the driver, but others too. One respondent commented that the message of this poster was that drug driving “isn’t worth the damage they can do to your lives and others”.



#### *Components of the advertisement found to be confusing or unclear*

Overwhelmingly, respondents commented on the font of “D) All of the above”; that it was difficult to read and confusing because ‘D)’ appeared to read ‘DJ’ or ‘OJ’. Further, the layout confused some respondents, as it was unclear that option ‘D)’ followed on from ‘a)’, ‘b)’ & ‘c)’. This confusion can probably be attributed to the difficulty of reading option ‘D)’.

#### *Suggestions for changes and improvements*

The main suggestion made by the target audience was to change the font of ‘D) All of the above’, and place it directly beneath the other three options so that the message is clear. Respondents also suggested that the advertisement would have a larger impact if there were people in the image; “put a person/policeman into the image so people have somebody to relate to” and “having passengers/people in the image would be more confronting”. The phrase ‘And no high is worth that’ could be larger for emphasis.

## Advertisement 6: 'The ecstasy and the agony' (Queensland Government, Queensland Transport)

### *Perceived messages*

Respondents reported that the main message of this advertisement was that drug drivers will be caught and penalised, and that there is zero tolerance for those who drive under the influence. Due to the tagline, many respondents took the main message to be that the ecstasy (of being on a high) is not worth the agony (of the consequences). Actual responses included “random drug testing can detect a range of drugs”, “if you take drugs and drive be prepared to get caught”, and “drug driving is not tolerated and will result in big fines”.



### *Components of the advertisement found to be confusing or unclear*

The image was the most confusing component of the advertisement, as many respondents thought that the girl pictured was holding a pregnancy test. It was not immediately obvious that the girl was in a car and that the out-of-focus person in the background was a police officer. In addition, respondents thought that the tagline ‘The ecstasy and the agony’ did not make sense, and that the message of the advertisement was unclear. One respondent commented that “The tagline and picture are not very clear for what it is advertising”.

### *Suggestions for changes and improvements*

Respondents suggested that the image be lighter and clearer, with the police officer in focus and an explanation of the testing device. There were comments regarding the girl in the picture; that she did not look under the influence of drugs or worried about being tested. Further, a new, informative tagline would prove more useful in getting the message across to the target audience. Some respondents wanted to see more information and statistics about drug driving, while others commented that there should be less text on the advertisement.