

Drink driving among Indigenous Australians in outer regional and remote communities and development of a drink driving program: A summary of findings and recommendations

Michelle S Fitts and Gavan R Palk

Foreword

Drink driving is a leading cause of criminal justice system contact for Indigenous Australians. National and state strategies recommend Indigenous road safety initiatives are warranted. However, there is sparse evidence to inform drink driving-related preventive and treatment measures. Using quantitative and qualitative methods, the study examines the profile of Queensland's Indigenous drink drivers using court convictions and identifies the contributing psycho-social, cultural and contextual factors through qualitative interviews. Drink driving was more predominant in rural and remote areas, with some contributing factors unique to the Indigenous context, including kinship pressure and alcohol restrictions. These two phases informed the development of an Indigenous drink driving program, one of the first studies to do so in Australia. The four session program, underpinned by the community reinforcement approach, was trialled in Queensland and New South Wales. A program process evaluation was conducted to assess content and delivery. The program has the ability to be an effective treatment

option as part of a community-based sentencing option and assist in reducing drink driving in Indigenous Australian rural and remote communities. Program recommendations and other policy considerations to reduce drink driving in Indigenous communities are discussed.

Excessive alcohol use and driving is a serious public health issue and one of the leading reasons Aboriginal and Torres Strait Islander people, referred to as *Indigenous people* in this paper, are in contact with the criminal justice system. Over a decade ago in Queensland, the connection between drink driving and Indigenous imprisonment was recognised. The index offence for more than half of Indigenous prisoners was unlicensed driving or drink driving (National Crime Prevention Branch, 2000). More recently, the Department of Main Roads, Western Australia, reported a similar issue: Aboriginal people who represent approximately 3.5% of Western Australia's population comprise 15% of all drink driving arrests, 28% of third time arrests and 35% of drink drivers disqualified for life (Olney 2007). Other Australian and international research suggests

that being of Indigenous background is a significant predictor of re-arrest for drink driving (Gould & Gould 1992; Moffatt & Poynton 2007).

Indigenous injury prevention is a relatively novel area, with commentators in Australia considering this to be because of the high social and physical health burden Indigenous Australians present (Ivers et al., 2008). There is limited literature available in Australia regarding the cultural, contextual or social underpinnings supporting Indigenous drink driving. Moreover, data storage limitations prevent greater profiling evidence. Without this level of understanding, it is difficult to design prevention and treatment measures that meet the realities and values of both the offender and community, and reduce the contact Indigenous people have with police and the court system for drink driving. In 2011, the Australian Transport Council's National Safety Strategy (ATC, 2011) recognised the importance of improving the safe driving practices of Indigenous road users.

Indigenous Australians are 2.8 times more likely to be fatally injured and severely injured 30 percent more often than other Australians (Henley & Harrison 2013). The Strategy recommends development of programs and initiatives for Indigenous road users by 2014.

In light of the above, this study aims to fill the current gaps in the literature to inform a treatment program and future policy measures to reduce drink driving. This project is specifically focused on Indigenous Australians in rural and remote communities as a large proportion of the injury burden is experienced in 'outer regional', 'remote' and 'very remote' (Henley & Harrison 2013).

Existing Countermeasures and Drink Driving Programs

Studies on existing deterrence-based punishments, such as financial penalties and licence suspension, have identified these penalties as having limited success in shifting attitudes and behaviour among Indigenous drink drivers. Moreover, loss of a drivers' licence for Indigenous drink drivers often leads to further driving offences such as driving while disqualified. Consequently, the courts impose more severe punishments such as increased fines and/or imprisonment.

A review of current Australian programs to address the problem of drink driving indicates that they are

underpinned by values and contextual factors that meet the needs of mainstream non-Indigenous drink drivers (see Table 1). All of these programs appear to be underpinned by the principles of Deterrence theory (see Homel 1988; Ross 1982) and include both punitive and educational components as a means to encourage participants to complete the program and become educated about the negative consequences of drink driving. It is envisaged that through a process of education and punishment, offenders will be deterred from future drink driving. Most of these mainstream Australian programs have been developed based on the meta-analysis of 215 evaluations of all types of Drink Driving Programs by Wells-Parker, Bangert-Drowns, McMillen and Williams (1995). The meta-analysis revealed that drink driving interventions including a combination of education, counselling and probation supervision were more effective than interventions that did not have all of these components.

The majority of the Australian programs are part of the sentencing process and completion in some cases is a mandatory requirement prior to re-licensing. Process and/or outcome evaluations have demonstrated that these types of programs can be both educationally beneficial and effective in reducing recidivism among the mainstream population of drink drivers (Dwyer & Bolton 1998; Hennessy 1998; Mills, Hodge, Johansson, & Conigrave 2008; Mazurski, Withneachi, & Kelly 2011; Siskind, Sheehan, Schonfeld & Ferguson, 2001; Sheehan, Watson, Schonfeld, Wallace & Patridge 2005). Some programs such as the Queensland Under the Limit Drink Driving Rehabilitation Program (UTL) (Palk, Sheehan & Schonfeld 2006) and the Victorian Drink Driver Education (Sheehan, Watson, Schonfeld, Wallace & Patridge 2005) program also assess for risky alcohol consumption and encourage participants to undertake more in-depth alcohol treatment where appropriate. However, none of the existing Australian programs consider the impact of alcohol on other health issues or take into account in a meaningful way the cultural context and factors that contribute towards drink driving among Indigenous peoples. The national and international literature is sparse in regards to the characteristics, prevalence and impact of drink and driving among the original inhabitants of developed nations.

Table 1: Outline of Australian Drink Driving Programs

	Queensland	New South Wales & Australian Capital Territory	Northern Territory	Victoria
Name	Under the Limit Drink Driving Rehabilitation Program (UTL)	Traffic Offender Program (TOP) and Sober Driver Program (SDP)	Drink Driver Education Program	Drink Driver Education Program
Focus and Length	Education, Rehabilitation & Assessment, based on CBT principles Fees apply Weekly sessions (1.5hr) over 11 weeks Aimed at repeat offenders	TOP - Education - Weekly sessions (2hr) over 8 weeks Fees apply SDP - either 9 weekly 2 hour sessions or 6 weekly 3 hour sessions	Education - 1 st session (10hours); 2 nd session (4 hours) for repeat/high range BAC Fees apply	Assessment & Education 8 hour education course and assessments for alcohol problems – not all offenders are required to undertake all components Fees apply
Legislation & Support after program	Part of sentencing system – Part of completed as part of an optional Court ordered Probation Order	TOP – pre-sentence diversionary – Optional SDP – part of sentencing system completed as part of an optional Court ordered Probation Order	Legislative – part of sentencing system - requirement prior to re-licensing for drink drivers disqualified from driving	Independent of the sentencing system but a administrative requirement prior to re-licensing for some offenders
Target Audience	Urban; Regional	Urban; Regional	Regional	Urban, Regional
Evaluation	Outcome: Siskind, et al. (2001) – reduced recidivism of 55% for high risk, serious repeat drink drivers	Outcome: Mills, Hodge et al. (2008)- an effective intervention; Mazurski et al. (2011) – recidivism reduced by 44%	Outcome: Dwyer & Bolton (1998) – re-offending rate of 12.85 within 2 years following re-licensing	Process: Hennessy (1998) – good to very good; Sheehan et al. (2005) – 23 recommendations made to improve the program

However, a drink driving first offender treatment program that considers the cultural aspects of participants (Native Americans, Hispanics and non-Hispanic Whites) appears to be promising for Native American peoples of North America (see Woodall, Harold, Kunitz, Westerberg & Zhao, 2007). The program is called the San Juan County Driving while impaired (DWI) First Offender Program and is conducted in San Juan County, North-Western New Mexico. It targets first-time convicted drink drivers and participants come from rural and tribal settings. First-time convicted drink drivers are required to undergo multicomponent treatment that is culturally appropriate while they are imprisoned in a minimum security facility for 28 days. Native Americans in the program have access to a sweat lodge and talking circles in their own language.

The treatment components of the San Juan DWI First Offender Program addresses alcohol use, abuse and dependence, health and nutrition, psychological effects of alcohol abuse, drinking and driving awareness, stress management, goal-setting, family issues and alcohol, domestic violence and HIV/AIDS prevention. Prisoners who are employed can continue with employment through a work release program.

Monitoring, individual counselling and assistance with a personal action plan is provided for 3 to 12 months following completion of the program. An evaluation of the program demonstrated that participants were less likely to be re-arrested compared with non-program drink drivers and after 5 years post program completion, treated drink drivers were 16.7% less likely to be re-arrested than non-treated drink drivers (Kunitz et al., 2002; Woodall et al., 2007).

In view of the benefits that The San Juan DWI First Offender Program has provided for America's First Nations peoples and the limited culturally appropriate Australian Indigenous drink driving programs, is timely that the most appropriate program content and delivery style is identified for Indigenous Australians.

The Centre for Accident Research and Road Safety – Queensland was funded by the National Drug Law Enforcement Research Fund (NDLERF) to explore the psycho-social, cultural and contextual factors contributing towards Indigenous drink driving. Additionally, the project aimed to identify the most appropriate content and delivery process, particularly for Aboriginal and Torres Strait Islanders living in rural and remote areas.

This paper presents a summary of the findings from one of the first projects to develop an Indigenous drink driving program underpinned by research, with outer regional and remote Aboriginal and Torres Strait Islander communities in Queensland, as well as regional New South Wales. For a more detailed description of the findings, readers are referred to the full report prepared for NDLERF and/or publications prepared by the authors (Fitts, Palk, Lennon & Clough 2013a; Fitts, Palk, Lennon & Clough 2013b).

Methods and Materials

The study uses both quantitative and qualitative methods to inform the basis of the drink driving program. Phase 1 of the project aims to provide information about the prevalence and the characteristics of drink driving convictions. Convictions from 2006–2010 were extracted from the Queensland Department of Justice and Attorney General database. Convictions were regrouped by gender, age, Accessibility/Remoteness Index of Australia classification and sentence severity. Chi-squares with standardised adjusted residuals were calculated for cross-tabulations between variables.

In phase 2, primarily qualitative methods are used to capture information about the drink driving histories of Indigenous drink drivers and the psycho-social, cultural and contextual factors that contributed towards their drink driving. Program facilitators who were experienced in providing life skills to groups of Indigenous persons were also recruited. The research was conducted in Cairns region and Cape York, Far North Queensland, and the Clarence Valley, Northern New South Wales. The research conducted was based on the principals of participatory action research (Reason 1994) and undertaken with regard to cultural sensitivities. Indigenous persons familiar with the communities provided support to the research team to assist with liaison in the communities and identifying volunteer participants. Participants were recruited for the research project via word of mouth and the snowball approach. This approach allowed for community members to become familiar with the aims of the project and to feel comfortable about the aims of the research and talking to the researcher. Participants for the project were provided from a number of community organisations including: the Indigenous justice group and health services, as well as from key individuals in community groups (for example, the men's and women's groups). Approval

to conduct this program of research was obtained from the QUT Human Research Ethics Committee, Queensland Corrective Service Research Committee and the Department of Justice and Attorney-General.

A sample of 73 Indigenous drink drivers was identified and following a discussion about the aims and requirements of the research, consent for participation was obtained. Participants completed in-depth interviews in respect of their drink driving behaviour and an assessment of their level of alcohol consumption and cannabis use was also undertaken. In regards to participants who self-reported they no longer drive after drinking, protective factors that assisted them to desist from further drink driving episodes were identified. Participants were also requested to share their ideas about the type of information that should be included in the program and the delivery style they felt most comfortable with. Facilitators from government and non-government organisations with experience in delivering alcohol or drug programs were also interviewed to identify their views about the content of the program and the most feasible and effective process for delivering a culturally sensitive drink driving program.

For phase 3, concepts from the community reinforcement approach (Hunt & Azrin 1973) and the findings from the earlier phases were utilised to inform the development of a drink driving program. The program was piloted in the Clarence Valley, North New South Wales, Cape York and Cairns region, Far North Queensland in order to obtain feedback from program participants (n=19), program facilitators and other attendees about the initial content and delivery process.

Key findings from the project

Below is a summary of the pertinent findings from the three phase program of research.

Phase 1 – Drink Driving Conviction Data (2006–2010)

- The findings identified the Indigenous drink driving conviction rate to be 6 times that of the non-Indigenous population of Queensland. Half (52.6%) of the convictions were of persons <25 years.
- Age was significantly different across the five regions for males only, with a greater number of convictions in the 'very remote' region of persons 40+ years of age.

- High range BAC ($\geq 0.15\text{g}/100\text{ml}$) convictions were linked with increased remoteness for both males and females.
- Monetary penalties were the primary sentence received in all regions.

Phase 2—Interviews with Drink Drivers and Program Facilitators

- Participants reported a strong sense of **'family obligations'** which referred to situations where they described pressure from members of their extended families to drive after drinking. The underlying responsibility for transporting family members appeared to be difficult to avoid and related to cultural values that involved responding to family needs as a priority.

There is a lot of pressure. You can't say no to family sometimes when people ask you to drive
(Male, age 30).

- Some young participants were also motivated by a **bravado mentality, referred to as 'being the hero'** in the narratives. This involved situations where participants insisted on being the person who would take the risk of being caught by police for drink driving and hence protect other members of the group. These participants despite having, on some occasions, the opportunity to avoid drink driving (e.g. another person offering to drive) still insisted on 'being the hero' and taking the risk. Furthermore, in many cases, excerpts from the narratives of younger participants captured under this sub-theme talked about attempting to 'show off' with an audience of peers while drink driving within the community only, and without an intended destination.

The other guys might think she knows how its rolls, she knows how to get down without getting pulled over. It makes you like a hero when you make it down to (community name)...
(Female, age 26).

The other people around me would be finding it fun. Yeah like he...he's a hero... (Male, age 33).

...that what the thinking is today...showing off, styling up, being hero (Male, age 28).

- Participants were generally aware that drink driving increased the risk of being involved in a road crash and that it was dangerous. However, there was a perception among some drink drivers that the

known **risks could be managed through speed reduction and group decision making**, including nominating the person who was least intoxicated to drive. There appeared to be a belief that there are degrees of drunkenness and this corresponds to one's ability to drive the vehicle.

...Well whoever's going to pretty much sober... The other fella is drunk but not really, really drunk. He'll end up saying, 'I'm more straighter than you two, I think it's best if I drive.' But they're still in the risk anyway 'cause they're over the [legal] limit. (Male, age 28).

- Some drink driver participants said the **existing penalties were not generally a deterrent** because they provided the offender with limited understanding of their offending behaviour or strategies to avoid offending it.

Same with fines and jail. Most time guys don't learn why they are doing it (Male, age 34).
- Several drink drivers reported being exposed to drink driving during their childhood or adolescent years by older family members. Many drink drivers felt that it was important to implement drink driving education awareness from school age.
- There were many people drink driving who engaged in cannabis use before driving. While none of the participants were convicted of drug driving, some considered that it was also important to include a drug driving component in the program.
- In remote communities with alcohol restrictions, some participants considered the prohibition of alcohol that was introduced in some communities at the end of 2008 as a contributing factor for their offending. This was because people could no longer walk to a nearby facility or alcohol outlet to purchase alcohol and the only means to acquiring alcohol was by driving to neighbouring centres that still permitted the purchase of alcohol from licensed venues.
- Drink driving participants and program facilitators believed there was a strong binge drinking culture. Program facilitators considered there were a number of reasons for binge drinking including: a coping mechanism for grief and loss, and historical factors including the use of alcohol as payment for work-related services. Other contemporary factors for remote communities were also considered to contribute to this culture, including the alcohol restrictions.

- Re-connecting with family or developing new support systems was important for those drink drivers who were able to avoid relapse:
 - cultural relatedness through attending men's group and going to outstations;
 - understanding that kinship obligations did not encompass alcohol and drink driving; and
 - kinship support through an agreed upon strategic plan between the offender and partner or family member
- Participants did not appear to understand what constituted a standard alcoholic beverage as defined by the Australian 'standard drink' guidelines.

Phase 3—Pilot of the drink driving program

The community reinforcement approach (Hunt & Azrin 1973) and findings from phase 2 were used to inform the development of a four session (60–90 minutes per session) drink driving program. The program (developed by Ms M. Fitts) was conducted as a one day program in three sites, with a total of 19 program participants in the pilot. The four sessions had a focus on the impact of drink driving, family pressures, risk taking, pre-colonial Indigenous values, general alcohol problems, and alcohol and cannabis education.

The delivery of the content was through visual media, story-telling, yarning and interactive discussions among group participants without the need for writing. The intention of the DVD and other materials was to create a safe environment and encouraging program participants to share their story in the group. The material was delivered by a range of people, including government workers with experience in delivering Indigenous programs, local drug and alcohol workers, and community Elders. The invitation to attend as an audience member in the pilot was also extended to community members.

Collectively, program participants reported feeling comfortable sharing their stories when they could identify with the stories and terminology presented. In relation to delivery of the drink driving program, drink driver participants and program facilitators reported that community ownership was important and that participants have to be able to identify with the information and stories. It was also considered important for the program to be delivered by a facilitator within the community or someone closely connected to the community.

Recommendations

The findings of this research indicate that the delivery and content of the drink driving program should include:

- Community-wide approach, with the inclusion of family, other community members in the program to change community perception and attitude towards drink driving and the use of kinship pressure to encourage others to drink drive.
- Presence of community leaders and Elders in the facilitation of the program.
- Delivery of program material that is conducive to 'group yarning' with media and visual activities in an environment participants feel comfortable in, such as an 'outstation style' environment
- Little to no writing required by program participants (highly recommended), having regard to the fact that English is often their second language and education may have been limited.
- Concepts that foster confidence and self-esteem in learning.
- Strategies for issues related to drink driving to become an ongoing discussion in both women's and men's community group meetings, which occur regularly in the community. This process it is believed will assist in a gradual community cultural change towards safer driving habits.
- A discussion of pre-colonial kinship obligations and how these have changed to a culture that encourages drink driving and being a hero who takes risks for the group. It is envisaged that adopting pre-colonial kinship obligations will assist to encourage a healing process in which community members support one another to encourage safer driving and strengthen protective factors to desist from drink driving.
- Education on the impact of driving under the influence of alcohol, cannabis and other drugs, and prescription medication.
- Developing a relapse prevention plan and long-term strategy for the drink driver that includes a support person and Elder to encourage safer driving and the strengthening of protective factors. The drink driver should also be encouraged to connect with other existing support services such as the local men's/women's group and community-based drug and alcohol services.
- Successful completion of the program affords the drink driver the opportunity to reapply for a learner's permit.

- A mandatory component in which convicted drink drivers are ordered by the court to participate in the program and attend the introductory day session and/or the 4–6 weekly sessions.
- The fee for Court mandated participation in the program should be similar to and in lieu of the fine they would receive for the drink driving conviction.
- Fees for voluntary non convicted drinker's participation in the program to be waived.

Discussion

The findings of this study clearly indicate that the best strategy for reducing drink driving in regional and remote Indigenous communities includes: a multipronged approach involving a combination of public education, media campaigns, community Elder support and a court-mandated culturally sensitive therapeutic drink driving program.

Second, in relation to program development, the findings are consistent with the findings in other Indigenous populations, such as First Nation communities in Canada, in which cultural factors have been identified as contributing significantly to the drink driving problem and subsequent treatment is through healing through cultural participation. Akin to international programs that have large First Nation and Native American drink driver participation, drink driving treatment should capture participants early in their offending trajectory, providing long-term treatment that covers various health, psychological, lifestyle cultural and contextual factors. Consideration must be afforded to providing drink drivers the opportunity to re-apply for a learners permit upon successful completion of an extensive treatment program, particularly in the 'very remote' region, where a driver's licence is a necessary requirement for access into the workforce. Alternatively, upon successful completion of the program, Indigenous people living in remote communities could be granted a restricted licence to drive within the Indigenous community. This would reduce the incidents of arrests for unlicensed and/or driving while disqualified, which often result in terms of imprisonment and overrepresentation of Indigenous people, particularly in regional prisons.

Future research should focus on the understanding the trajectory of drink driving among Indigenous people from their adolescent years, as well as exploring the extent of cannabis use and driving.

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References

- Australian Transport Council 2011. National Road Safety Strategy 2011-2020. Canberra (AUST): ATC. http://www.infrastructure.gov.au/roads/safety/national_road_safety_strategy/
- Dwyer B & Bolton A 1998. Dying for a Drink: Drink-Driver Education as Part of the Northern Territory's Response to Road Crashes involving Alcohol, *in proceeding of the Research, Policing and Education*, 16-17 November 1998.
- Fitts MS, Palk GR, Lennon AJ & Clough AR 2013a. Prevalence and characteristics of Indigenous drink-driving convictions in Queensland, Australia. *Road and Transport Research* 22(2): 40-51.
- Fitts MS Palk GR Lennon AL & Clough AR 2013b. Why do Indigenous Australians drink and drive? A qualitative exploration of self-reported influences on drink driving behaviours of Indigenous Australians from remote communities, *in proceedings of the Canadian Multidisciplinary Road Safety Conference Proceeding*: 26-29 May 2013.
- Gould L & Gould K 1992. First-time and multiple-DWI offenders: a comparison of criminal history records and BAC levels. *Journal of Criminal Justice* 20 (6): 527-539.
- Henley G & Harrison JE 2013. *Injury of Aboriginal and Torres Strait Islander people due to transport: 2005-06 to 2009-10*. Catalogue No.: INJCAT 161. Canberra (AUST): Australian Institute of Health and Welfare. <https://www.aihw.gov.au/publication-detail/?id=60129543939>
- Hennessy M 1998. *Process Evaluation of the Victoria Drink Driver Program*. A report prepared for the Drug Treatment Services Unit, Aged, Community and Mental Health Division, Department of Human Services. Melbourne (AUST): Department of Human Services.
- Homel R 1988. *Policing and Punishing the Drinking Driver. A study of General and Specific Deterrence*. Springer-Verlag: NY Inc.

Hunt GM & Azrin NH 1973. A community-reinforcement approach to alcoholism. *Behavior Research and Therapy* 11: 91-104.

Ivers R, Clapham K, Senserrick T, Lyford M & Stevenson M 2008. Injury prevention in Australian Indigenous communities. *Injury* 39 (5) Suppl 5: S61-S67.

Mazurski E, Withneachi D & Kelly S 2011. *The NSW Sober Driver program: recidivism rates and program parameters*. NSW (AUST): Road and Traffic Authority. <http://casr.adelaide.edu.au/rsr/RSR2011/6EPaper%20188%20Mazurski.pdf>

Moffat S & Poynton S 2007. *The deterrent effect of high fines on recidivism: driving offences*. Crime and Justice Bulletin no. 106. Sydney (AUST): NSW Bureau of Crime Statistics and Research. [http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/cjb106.pdf/\\$file/cjb106.pdf](http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/cjb106.pdf/$file/cjb106.pdf)

Mills KL, Hodge W, Johansson K & Conigrave KM 2008. An outcome evaluation of the New South Wales Sober Driver Programme: a remedial programme for recidivist drink drivers: *Drug Alcohol Rev.* 27 (1): 65-74.

National Crime Prevention Branch 2000. *Crime in Australia: A state by state comparison*. ACT (AUST): Department of Attorney-General.

Olney K 2007. Indigenous drink driving and licensing: Understanding the big picture and strategies for change in Western Australia, in *proceedings of the 8th International Council on Alcohol, Drugs and Traffic Safety Conference*: 26-30 August 2007 <http://icadts2007.org/print/47indigenous.pdf>

Palk GR, Sheehan MC & Schonfeld CC 2006. *Review of the under the limit drink driving rehabilitation program*. Brisbane (AUST): Centre for Accident Research and Road Safety – Queensland. <http://eprints.qut.edu.au/41648/2/41648.pdf>

Reason P 1994. Three approaches to participative inquiry., in N.K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage: 1st ed., 324-339

Ross HL 1982. *Detering the Drink Driver: Legal Policy and Social Control*. Lexington, Mass: Lexington.

Siskind V, Sheehan M, Schonfeld C, Ferguson M 2001. *The Impact of the Under the Limit Drink-Driving Rehabilitation Program on Traffic Safety*. Monograph Series CR186. Canberra (AUST): Australian Transport Safety Bureau. http://eprints.qut.edu.au/7947/1/Alc_Rehab_3.pdf

Sheehan M, Watson B, Schonfeld C, Wallace A & Patridge B 2005. *Drink Driver Rehabilitation and Education in Victoria*. RACV Research Report No 05/01. Melbourne (AUST): RACV. <http://www.racv.com.au/wps/wcm/connect/587774804da9bb83a2ecfa54a1b45993/RACV+Drink+Driver+Rehab+%26+Education+Report.pdf?MOD=AJPERES&CACHEID=587774804da9bb83a2ecfa54a1b45993>

Wells-Parker E, Bangert-Drowns R, McMillen R & Williams M 1995. Final results from a meta-analysis of remedial interventions with drink/drive offenders: *Addiction* 90(7): 907-926.

Woodall WG, Harold D, Kunitz SJ, Westerberg VS & Zhao H 2007. A Randomized Trial of a DWI Intervention Program for First Offenders: Intervention Outcomes and Interactions with Antisocial Personality Disorder Among a Primarily American Indian Sample. *Alcoholism: Clinical and Experimental Research* 31(6):974-87.

Author Details

Ms Fitts is a PhD Scholar at the Centre for Accident Research and Road Safety—Queensland, Queensland University of Technology, based in Cairns, Queensland, and a Senior Research Officer at the School of Public Health, Tropical Medicine and Rehabilitation Sciences, James Cook University.

Dr Palk is a barrister and forensic psychologist who is employed as a senior lecturer and researcher with the Centre for Accident Research and Road Safety—Queensland, Queensland University of Technology.