



NDLERF

Development of a drink driving program for
regional and remote Aboriginal and Torres
Strait Islander communities

Final Report

Ms Michelle S Fitts and Dr Gavan R Palk

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Funded by the National Drug Law Enforcement Research Fund
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List of abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ARIA	Accessibility Remoteness Index of Australia
AUDIT	World Health Organisation's Alcohol Use Disorder Identification Test
ATC	Australian Transport Council
BAC	Blood Alcohol Concentration
CARRS-Q	Centre for Accident Research and Road Safety—Queensland
CRA	Community Reinforcement Approach
DOHA	Department of Health (formerly known as Department of Health of Ageing)
DTMR	Department of Transport and Main Roads
RTA	Roads and Traffic Authority
QUT	Queensland University of Technology
UTL	Under the Limit drink driving rehabilitation program

Executive summary

Background

Aboriginal and Torres Strait Islanders experience fatal traffic accidents at a greater rate than the general Australian population, with rates of serious injuries due to land transport 1.4 times higher than for the non-Aboriginal and Torres Strait Islander population. According to the latest five years of road injury statistics, the majority (70%) of approximately 450 fatal injuries and 60% of approximately 8,300 serious injuries were suffered by Aboriginal and Torres Strait Islander residents of 'outer regional', 'remote' and 'very remote' localities. Recent literature suggests that the road crashes contributing to these injuries are largely preventable. For instance, a review of Queensland (Qld) transport and police records found that alcohol was a key factor in serious and fatal road crashes in non-metropolitan areas (Siskind, Steinhardt, Sheehan, O'Connor, Hanks, 2011). Additionally, analysis of drink driving arrests in Western Australia indicates Aboriginal people are overrepresented (15%) compared with the proportion they comprise in the general population (3.5%) (Olney K, 2007).

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

In 2011, the Australian Transport Council released the National Road Safety Strategy (2011–2020). The initiative, with a strong focus on Indigenous road safety, made specific recommendations including the development and implementation of locally relevant and culturally appropriate Indigenous campaigns and programs that meet the needs of the linguistically diverse groups by 2014. Importantly, more research into Indigenous road safety generally has been conducted since the safety strategy was released. Still, little is known about what contributes to Indigenous drivers engaging in drink driving, where this knowledge could effectively inform future drink driving programs.

The Centre for Accident Research and Road Safety—Queensland was funded by the National Drug Law Enforcement Research Fund to explore the psycho-social, cultural and contextual factors contributing towards Indigenous drink driving. This report presents 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.

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 aimed 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 were 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 and undertaken with regard to cultural sensitivities. Indigenous persons familiar with the communities provided liaison support to the research team and helped identify volunteer participants. Participants were recruited by word of mouth using snowball sampling. This approach allowed for community members to become familiar and comfortable with the aims of the project and the researcher. Participants for the project were referred from a number of community organisations including: the Indigenous justice group, health services, as well as from key individuals in community groups (for example, the men's and women's groups). Approval to conduct the research was obtained from the QUT Human Research Ethics Committee, Queensland Corrective Service Research Committee.

A sample of 73 Indigenous participants with at least one drink driving conviction 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 that they no longer drive after drinking, protective factors that helped them to desist from further drink driving episodes were identified. Participants were also asked 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 regarding their views on the content of the program and the most feasible and effective process for delivering a culturally sensitive drink driving program.

In respect to phase 3, concepts from community reinforcement theory (Hunt & Azrin 1973) and findings from the earlier phases were used to inform the development of a drink driving program. The program was piloted in the Clarence Valley, North New South Wales and 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 quantitative research

Phase 1 – Drink driving conviction data (2006–2010)

- 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 over 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.
- The findings identify the Indigenous drink driving conviction rate to be 6 times that of Queensland.

Key findings of the qualitative research

Phase 2 – Interviews with drink drivers and program facilitators

- Participants reported a strong sense of 'family obligation' 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.

- 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.
- 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.
- 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.
- 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 drink drivers 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 areas, 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 of 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 drink drivers to avoid relapse. The following were considered important by participants:
 - Cultural relatedness through attending men's group and going to outstations.
 - Understanding that kinship obligations did not encompass alcohol and drink driving.
 - Kinship support through an agreed upon strategic plan between the offender and partner or family member.
 - Gaining insight into their offending and alcohol misuse in community-based alcohol treatment.
- Participants did not appear to understand what constituted a standard alcoholic beverage as defined by the Australian 'standard drink' guidelines.
- 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, preferably someone who identified as an Indigenous person.
- Participants wanted new initiatives that promoted understanding of their drink driving behaviour, as opposed to existing deterrence-based penalties. Participants reported that such penalties did not really assist with them desisting from drink driving.

Phase 3—Pilot of the drink driving program

The community reinforcement approach 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 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 and service providers.

Collectively, program participants reported feeling comfortable sharing their stories when they could identify with the stories and terminology presented. Another important aspect of the program delivery related to the location of the program. Participants reported feeling more comfortable in an environment they were familiar with and one that was non-threatening and conducive to 'group yarning'. It was also important to participants that the elders of the community played an integral part in the facilitation of the program. This process aided the community ownership of the program.

The majority of program participants recommended the development of a longer term program with the involvement of justice (probation and parole, police, justice group) and health services. Program participants also felt it may be useful if issues related to drink driving became a topic of ongoing discussion in weekly group sessions of men's business. Another issue identified by program participants related to involving local employers in the program so as to improve relationships and develop strategies to address alcohol and work environment. Another concern raised by participants related to a strategy of identifying and using sober licensed drivers as designated drivers. However, this option appears limited in remote communities. Furthermore, program participants who were now licensed drivers and non-drinkers reported being overwhelmed with the ongoing requests to drive those who had been drinking around. Participants also expressed a need for more information about the effects of prescription medication and cannabis use on driving to be included in the program.

Recommendations

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

- A community-wide approach, with the inclusion of family and other community members in the program to change community perception and attitude towards drink driving and the use of kinship pressure that encourages others to drink drive.
- Presence of community leaders and elders in the facilitation of the program.
- Multi-agency involvement in the delivery of the program. Primary facilitation by a local person(s) in conjunction with personnel from justice (police, probation and parole, and justice group) and health services at various parts of the program.
- Delivery of program material to be conducive to 'group yarning', with media and visual activities in an environment participants feel comfortable in, such as an 'outstation style' environment.
- It is highly recommended that there be little to no writing required by program participants, 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 regular community group meetings. It is believed this process 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 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.
- 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 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 drinkers' 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. These findings are consistent with the findings in other Indigenous populations, such as First Nation communities in the United States and Canada in which cultural factors have been identified as contributing significantly to the drink driving problem.

Akin to international programs that have large First Nation 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 reapply 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 arrest for unlicensed drivers and/or driving while disqualified, which often results in terms of imprisonment and over representation 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.

Chapter 1: Introduction

1.1 Background

Drink driving has been recognised at both national and state levels as one of the main reasons Indigenous Australians are more severely and fatally injured in transport crashes compared with the mainstream Australian population of drivers (ATC, 2011 RTA, 2008). Aboriginal and Torres Strait Islanders experience fatal traffic accidents at rates 2.9 times higher than the general Australian population, with rates of serious injuries due to land transport 1.4 times higher (Henley & Harrison, 2013). According to the latest five years of road injury statistics presented in Table 1, the majority (70%) of approximately 450 fatal injuries and 60% of the approximately 8,300 serious injuries during the period are suffered by Aboriginal and Torres Strait Islander residents of 'outer regional', 'remote' and 'very remote' localities.

Table 1: Fatal and serious land transport injury cases by sex, remoteness area of usual residence and Indigenous status, 2005–06 to 2009–10*

	Indigenous				Non-Indigenous			
	Males	Females	Persons		Males	Females	Persons	
	n	n	n	%	n	n	n	%
Fatal Injury								
Major cities	48	19	66	15	2,675	923	3,598	51
Inner Regional	40	23	63	14	1,442	532	1,975	28
Outer Regional	60	21	81	18	823	263	1,087	15
Remote	52	28	80	18	173	50	223	3
Very Remote	102	50	152	34	62	20	81	1
	301	143	450	100	5,261	1,838	7,099	100
Serious Injury								
Major cities	1,281	609	1,890	23	94,052	44,968	139,021	58
Inner Regional	1,139	462	1,601	19	40,498	17,745	58,244	24
Outer Regional	1,352	566	1,918	23	22,770	8,955	31,726	13
Remote	757	381	1,138	14	4,612	1,579	6,192	3
Very Remote	1,199	575	1,774	21	1,852	752	2,604	1
	5,735	2,594	8,329	100	163,977	74,094	237,075	100

*This Table was sourced from Henley & Harrison (2013)

Indigenous road safety research has been overshadowed by other equally important broader social and physical health concerns, making road safety an understudied area. The limited research in this field makes it unclear whether the factors identified as elevating the risk of drink driving offending in the general population are the same for Indigenous peoples. To date, Indigenous drink drivers have only been mentioned peripherally in road safety research. For example, a number of researchers have noted that being of Indigenous background has been found to be a predictor of drink driving recidivism (Trimboli & Smith, 2009). However, these studies do not investigate either the complex factors that contribute towards Indigenous drink driving or the characteristics of Indigenous drink drivers. Furthermore, anecdotal evidence suggests that there may be different cultural and lifestyle factors for Indigenous peoples, particularly in regional and remote areas, that impact on driver behaviour such as kinship obligations (Office of Road Safety, 2007). Such relationships

have been identified in international road safety research that focused on Indigenous youth and illegal road behaviour (Rothe et al., 2005). Anecdotal information also suggests the issue of Indigenous drink driving is complex and related to poverty, lack of public transport, a culture of alcohol misuse and loss of cultural identity. Overall, Indigenous drink driving is a major public health concern and countermeasures have largely been based on drink driving countermeasures developed for the non-Indigenous population. Hence, there is a need to consider the characteristics of Indigenous drink drivers, cultural issues and the complex factors associated with remoteness when designing drink driving countermeasures.

1.2 Current countermeasures

In Australia, the primary approach to reducing drink driving is grounded in deterrence, both specific and general, with an important component of specific deterrence involving the imposition of sanctions. The deterrence doctrine is based on the belief that humans are rational beings and make choices based on a cost-benefit analysis of specific situations (Gibbs, 1975). Furthermore, the theory suggests that individuals consider such factors as the likelihood of being caught, the odds that if caught they will be punished and that if punished, whether it will be severe. The majority of deterrence methods used with drink driving offenders include, but are not confined to, licence suspension or disqualification, fines, community supervision and prison. Sanctions such as licence disqualification have been shown to provide very limited effect on discouraging Indigenous drink driving (ATSB 2006; RTA 2008). Rather, these types of punishments often lead to further driving-related offences for Indigenous peoples, such as unlicensed driving. Moreover, the combination of sanctions and contextual factors can result in escalating involvement with the justice system for Indigenous drivers (e.g., prison sentences). For instance, 57% of Indigenous people in North Queensland prisons are solely or in part serving a prison sentence related to being apprehended for driving while unlicensed or disqualified (CARRS-Q & Qld Transport, 2003).

Drink driving programs have been instrumental in reducing the likelihood of drink drivers re-offending for the general population of drink drivers, particularly among repeat non-Indigenous drink drivers (Siskind et al., 2001). Many of these programs are informed by research that has identified contextual and psycho-social factors that facilitate drink driving for that particular population, which is largely a non-Indigenous Australian population. There are a variety of educational and/or therapeutic drink driving programs offered in Australia, with most designed to ensure they are sensitive to the needs of Indigenous participants, including literacy and numeracy needs (Dwyer & Mills et al., 2008). However, many programs are often developed for urban populations and do not communicate information in a culturally suitable manner, unlike the programs offered to native or Indigenous populations in other countries, which have been primarily based on group discussion or 'sharing circles' (Woodall et al., 2007). Currently, there is scant information in the literature to inform a drink driving program that could target Australian Indigenous drink drivers living in remote areas. This may be partly because injury prevention is a comparatively new issue on the Indigenous health agenda in Australia (Clapham et al., 2008) and has been somewhat overshadowed by the health issues related to alcohol misuse generally and the wider social concerns confronting Indigenous peoples.

Several reports have provided preliminary information about the context in which drink driving behaviour transpires among Indigenous peoples in Australia. One report found that there was often a 'group mentality' among Indigenous drinkers (Office of Road Safety, 2007). This results in a tendency to nominate the least intoxicated person or the person with the least number of prior convictions to drive the vehicle in order to avoid further fines or imprisonment, especially where there is a perceived risk of being caught (Office of Road Safety, 2007). Additionally, there is strong anecdotal evidence that indicates there are important characteristics associated with repeat drink driving offences in the mainstream community that may also apply to Indigenous drink drivers in Australia, including greater levels of risk taking, beliefs about being a capable driver even when alcohol impaired, and limited management and coping skills (Office of Road Safety, 2007). Other studies indicate that cultural norms may be influential. For instance, Indigenous peoples may drive unlicensed because of a norm that it is culturally inappropriate to refuse older family members' demands (Siegel, 2002). While these reports add important information to the discourse regarding the road behaviour of Indigenous

peoples and identify that differences exist when it comes to road behaviour for Indigenous peoples, there is little formal research available about contextual factors. One important cultural and contextual factor that may influence the way Indigenous drivers respond to pressures to drive after consuming alcohol relates to the motivations of Indigenous people to drink drive, which appear to be shaped by cultural and kinship attachments. Gathering detailed information about contextual factors and their relationship to drink driving in remote Australia will provide valuable information to inform the design and implementation of a culturally sensitive therapeutic drink driving program.

1.3 Current programs

The following section provides an overview of the content, delivery and evaluations of three separate programs offered to Indigenous drink drivers in a number of Australian jurisdictions and one Indigenous program in New Mexico, United States.

1.3.1 Queensland

The only program that is delivered through Queensland legislative provision is the *Under the Limit* (UTL) drink driving rehabilitation program. Drink drive offenders are referred to UTL when they appear for sentencing in court and voluntarily agree to undertake a probation order that includes a condition to complete the UTL program. The content and delivery process of the UTL program has been informed by internationally recognised evidence-based best practice. The program was developed by Mary Sheehan and her colleagues while based at the University of Queensland in the early 1990s. The program was initially trialled in regional Queensland and implemented in 1993. The program expanded statewide in 1998. By 2009, there had been 8,500 participants referred to the program. The UTL program, facilitated by the Centre for Accident Research and Road Safety—Queensland (CARRS-Q), is an 11 week drink driving prevention and rehabilitation program that uses a combination of court-based sentencing, which involves both punitive (loss of licence, probation supervision and monetary fees), as well as education and therapeutic approaches.

The education component provides drink driving offenders with an understanding of their individual behaviour within their cultural and social contexts. Participants also learn to separate their drinking episodes from driving through the acquisition of strategies gained through a better understanding of their alcohol consumption levels and peer processes to elicit change (Palk et al., 2006). An evaluation of the UTL program completed by Ferguson, Schonfeld, Sheehan and Siskind (2001) suggested that over time, the program did appear to impact on offenders' intentions to change their driving behaviours to avoid a future drink driving offence, with a subsequent decrease in self-reported drink driving being achieved among the UTL group relative to the control group. Importantly, the evaluation found that recidivist drink driving offenders who had been charged with a drink driving offence had accepted the possibility that they had an addictive problem and were motivated towards an action-based stage of change. The evaluation also found that the UTL did not impact on other lifestyle factors such as mental health, social support, knowledge, attitudes and alcohol consumption profiles. Hence, if there was need to improve other areas of a drink drivers' lifestyle, additional treatment components would be required.

1.3.2 New South Wales

The Sober Driver Program, which was developed in 2002, comprises educational components and elements of group cognitive behavioural therapy aimed at reducing recidivism, with the target of the program being adult repeat drink drivers. The program is managed and delivered by Community Offender Services (COS) and the New South Wales (NSW) Department of Corrective Services, and is delivered in conjunction with sanctions imposed by the court that require COS supervision (e.g. bonds and/or licence disqualification). The Sober Driver program was modelled on Queensland's UTL program and similarly, participants are referred to the Sober Driver Programme as a condition of a court order. The program is delivered in two

modes. The standard version consists of nine weekly sessions of 2 hours' duration. The condensed version was developed to address the needs of rural participants, with particular focus on issues of remoteness, Indigenous participants and small participant numbers. This version consists of 3 x 2 hour weekly sessions. There are no changes to the content of the program of the condensed version for Indigenous participants.

Mills, Hodge, Johansson and Conigrave (2008) evaluated the Sober Driver Program involving a comparison of recidivism rates over 2 years for program participants and a community control group of convicted drink drivers who received legal sanctions alone. Quantitative and qualitative surveys of program participants were also conducted before, immediately after and 4 months following completion of the program. The outcome measures included recidivism, change in participant knowledge and attitudes, self-reported behavioural intentions and skill development. Results suggested that participants demonstrated improved outcomes across a number of domains, which were sustained over time. Individuals who completed the program were half as likely to reoffend over the 2 year period when compared with a community control group (4.9% recidivism rate among SDP completers compared with 10.2% among community controls). SDP participants were 43% less likely to reoffend over 2 years compared with community controls who had received sanctions alone. Survey participants demonstrated improved knowledge, attitudes and skills regarding drink driving. The study concluded that the Sober Driver Program appears to be an effective intervention, demonstrating greater reductions in recidivism when compared with legal sanctions alone.

1.3.3 Northern Territory

The Drink Driver Education Course was established in 1995 and uses a systems approach, including punitive measures, social learning principles, harm minimisation, motivational interviewing and the trans-theoretical stages of change model (Dwyer & Bolton, 1998). The course consists of two education modules, one mainstream and one customised version for people from an Indigenous background, with differences in numeracy and literacy in the program content. Emphasis is placed on the provision of an optimum learning environment, which is non-threatening, non-judgemental, and participatory and that encourages responsibility (Dwyer & Bolton, 1998). Course facilitation provides research-based information and utilises the individual's life experience as a learning resource. Activities include identification of standard drinks, examination of the individual's alcohol experience, community drinking patterns, self-monitoring of drinking behaviour, and development and evaluation of alternative strategies to drink driving including controlled drinking strategies.

In 1998, an evaluation of the program was conducted, whereby records of 321 participants who completed the program in 1995 and 1996 were examined for further offences or licence disqualifications. Results reported that 41 participants had been reconvicted or had received an immediate suspension for a further drink driving offence. According to Dwyer and Bolton (1998), the rate of reoffending after successful completion of the Drink Driver Education program provided a baseline figure of 12.8% and indicated that drivers who were required to complete both modules, as a result of high BAC's or multiple offences, recorded a higher reoffending rate than those who were required to complete one module only.

1.3.4 United States

The San Juan County Detention Program is a 28 day program for first-time convicted drink driving offenders. The majority of offenders are from rural and tribal settings. The program blends a period of detention in a minimum security prison with other intervention components, including therapeutic and educational components, as well as aftercare. Components of the program include alcohol use, abuse and dependence; health and nutrition; psychological effects of alcohol abuse; drinking and driving awareness; stress management; goal-setting, whereby the client devises an action plan for their immediate future in reducing alcohol use; family issues and alcohol; domestic violence; and HIV/AIDS prevention. Behavioural change, including a reduction in drinking, is the primary aim of the treatment component. Other components of the program include sweat lodges, talking circles and group discussion in the local language. Participants are also required to undergo breath testing and attend Alcoholic Anonymous meetings. Following completion of the program, offenders are monitored for between 3 to 12 months, with the length tailored to the individual

as recommended by the course facilitator. The follow-up component also includes individual counselling and group programs.

An evaluation of the program found that participants who completed the program were less likely to reoffend (Kunitz et al., 2002). A second, more extensive evaluation of the program was completed by Woodall and colleagues (2007) who conducted a randomised trial to assess the effectiveness of the treatment program, with a sample comprising 76% American Indians. Woodall and colleagues (2007) found that for measures of alcohol use, the treatment group improved more than the participants in the control group. The treatment group improved by 110.3 drinks over the 90 days, compared with the control participants, who improved by 26.9 drinks over the 90 days. Drinking days over a 90 day period declined by 3.3 for control participants but by 11.6 for treatment individuals.

1.4 Theoretical background

The authors believe that the development of a culturally sensitive drink driving rehabilitation program should be guided by a combination of evidenced-based research and local community views, and underpinned by a theoretical framework. Traditionally, drink driving and alcohol misuse countermeasures have been informed by frameworks such as the deterrence model (Stafford & Warr, 1993), trans-theoretical stages of change model (Prochaska & DiClemente, 1992) and the emerging Health Action Process Approach (Schwarzer, 1992). Some of these approaches have been useful in guiding enforcement regulations and treatment programs to manage alcohol-related misuse and violence, as well as drink driving among non-Indigenous populations. However, these models have had limited appeal and impact among Indigenous groups due to their failure to account for cultural issues. To some extent, the Critical Race Theory (Denzin, Lincoln, & Smith, 2008) attempted to address some cultural concerns, particularly in relation to African Americans. However, generally, there has been negligible attention given to developing a culturally sensitive theoretical framework that might prove beneficial in guiding the development of culturally sensitive alcohol rehabilitation programs. One program in the United States, The San Juan program (Woodall et al., 2007), highlights the importance of including cultural and broader health components to address drink driving holistically and through a process of healing to reduce alcohol use among First Nation people. A model that the authors believe may be beneficial in guiding the development of Indigenous alcohol rehabilitation programs is the Community Reinforcement Approach (CRA) because it emphasises the importance of not only changing thinking and behavior, but also ensuring a sense of community support for the positive change (Miller et al., 1999).

It is not the aim of the current program of research to test the applicability of a particular theory to drink driving issues for Indigenous people in regional and remote communities. However, the development of a culturally sensitive drink driving program in this research will be informed by the community reinforcement approach discussed below.

1.4.1 Community Reinforcement Approach (CRA)

CRA is a comprehensive cognitive-behavioural program for treating substance abuse problems, through assisting people to rearrange their lifestyles so that healthy, alcohol and drug-free living becomes rewarding and thereby outweighs alcohol and drug use. The approach is underpinned by behaviourist Skinner's operant conditioning paradigm. Skinner (1974) considered punishment to be an ineffective method for modifying human behaviour. Research has shown confronting the problematic behaviour can be largely ineffective in decreasing alcohol and other substance misuse (Miller & Wilbourne, 2002).

Azrin and Hunt composed CRA treatment in the early 1970s. The program uses positive reinforcement at each treatment step and the facilitator of the treatment looks for every opportunity to reinforce this. The approach is based on the belief that environmental contingencies can play a powerful role in supporting or decreasing drinking or drug-using behaviour (Slesnick, et al. 2008). Therefore, programs framed using this approach utilise familial, social, recreational and occupational reinforcers to aid clients in the recovery process.

Rather than focusing specifically on discussing the behaviour, participants are encouraged to learn new skills and set various short and longer term goals. Other examples include learning assertiveness to improve self-esteem, or practicing interviewing skills in order to find employment.

CRA has been used successfully to treat alcohol misuse among American First Nation Indians (Miller et al., 1999). The success has been attributed to the approach's highly flexible treatment that allows the facilitator and clients to choose treatment options that meet the needs of the individual participant. When using this model to treat alcohol misuse, treatment professionals should work with both the family and community networks using traditional ceremonies and extended clan ties. CRA has also been applied to a variety of substance use disorders other than alcohol abuse and dependence, such as cocaine dependence and nicotine dependence. Multiple research reviews and meta-analyses of the treatment-outcome literature have shown CRA to be among the most strongly supported treatment methods (Finney & Monahan, 1996; Miller et al. 1995, 2003). More recent studies have been undertaken that evaluate the impact of case management and individual therapy via a drop-in centre for homeless youth (Slesnick, et al., 2008). Based on previous use and evaluations, CRA is considered to be the most appropriate framework to use to underpin the drink driving rehabilitation (healing) program.

1.5 Aims of the study

This study seeks to:

- Explore the attitudes to, and perceptions about, factors that influence behaviour and beliefs towards drink driving of Indigenous drink driving offenders in regional and remote areas.
- Explore the alcohol use of Indigenous drink drivers.
- Identify potential protective factors that support drink drivers to desist from future episodes of drink driving.
- Identify the type of information Indigenous drink driving offenders believe is useful to them in order to address their drink driving behaviour.
- Develop the most feasible and effective process of delivering the program to Indigenous offenders.

Chapter 2: Methodology

The research comprised three independent studies. Phase 1 was epidemiological in nature and examined the prevalence and characteristics of Indigenous drink drivers in Queensland using drink driving court conviction data. Phase 2 aimed to i) explore the interplay between factors that contribute to Indigenous drink driving and ii) identify culturally appropriate delivery methods for an offender-based program. This phase interviewed Indigenous people with a history of drink driving and employed semi-structured interviews to ensure this information was collected in a culturally sensitive manner.

The proposed aim of Phase 3 was to develop a program manual and guidelines for a culturally appropriate offender-based program for Indigenous drink drivers in regional and remote areas. The development of the program was guided by the CRA, as well as being informed by the findings of Phase 2. Upon development, the program was piloted in regional and remote Far North Queensland and Clarence Valley, Northern New South Wales. The pilot gathered feedback from participants and program facilitators in regards to the suitability of the content and the delivery process and any recommendations to improve the content and delivery process of the program.

2.1 Phase 1

2.1.1 Data supplied

De-identified data relating to arrests for driving under the influence of alcohol in Queensland for the period 1 January 2006 and 31 December 2010 were obtained from the Department of Justice and Attorney-General, Brisbane, Australia in August 2011. Variable data of interest provided included date of offence and conviction, sentencing court location, offence code, and sentencing description, as well as information on the offender including date of birth, gender and self-identified Indigenous status (Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander or neither). Using the Indigenous status field, all convictions for drivers who did not self-identify as an Indigenous person were removed. Evaluations of information collection for Indigenous status have noted some issues. These include limited understanding of the reasons for collecting data and the uses of data and lack of quality assurance measures (AIHW, 2012). Therefore, this conviction data may be an underestimation of the true drink driving convictions of Indigenous persons in Queensland.

2.1.2 Classification of court location

In 2006, the Queensland population included 146,400 Indigenous peoples or 3.5% of the state's total population (ABS 2006). The Australian Standard Geographical Classification (ASGC) was used to categorise court locations into five levels of remoteness, 'major cities', 'inner regional', 'outer regional', 'remote' and 'very remote' (AIHW, 2004). It is based on the accessibility remoteness index of Australia (ARIA+). The ARIA+ is based on the original ARIA, which was designed in 1997 to be an unambiguously geographical approach to defining remoteness not considering socioeconomic, urban/rural and population size factors and calculating remoteness on the basis of accessibility to some 201 service centres according to road distances. The ARIA+ has greater precision in its measurement of remoteness and has been used previously in road safety research (Steinhardt et al., 2009). For this research, ARIA+ was used to allow exploration of associations between remoteness and drink driving behaviour. As the majority of offences were dealt with by the court in a timely manner, the authors are confident that the large proportion of the offences were committed within the same region the sentencing court was located.

There were two reasons for using ARIA+. First, previous literature has identified a higher number of alcohol-related road crashes among Indigenous peoples occurring in remote areas by comparison with other areas

(Edmonston et al., 2008). Therefore, this may also be reflected in drink driving behaviour. Second, the authors believe that differences in the way that access to alcohol for Indigenous communities is managed across Queensland might affect drink driving behaviour. Over a decade ago, the 'Meeting Challenges, Making Choices' initiative was established, in response to the findings of the Cape York Justice Study, which was a review commissioned by the Queensland Government into the ongoing alcohol-related health harm among contemporary Indigenous peoples residing in remote communities in Queensland (Fitzgerald, 2001). As part of this initiative, in 2002 and 2003, Alcohol Management Plans (AMPs) were introduced with local community justice groups (statutory bodies consisting of Indigenous Elders and others), in partnership with government agencies (Department of premier and cabinet, 2002). The AMPs consisted of a three-tiered approach including supply reduction strategies in collaboration with demand and harm reduction strategies. Total alcohol prohibition commenced in some of these communities at the end of 2008, following a reduction in alcohol-related injuries (Margolis et al., 2011).

It is not the purpose of this study to investigate the effect of alcohol restrictions on drink driving. However, it is important to acknowledge the possible pressure the alcohol restrictions have placed on drinkers to access alcohol where private vehicles may be the only mode of transportation. The discourse by some observers on such alcohol restrictions indicates that driver responses to these restrictions may be seriously undermining their effectiveness. Evaluations of alcohol restrictions across Australia have found the creation of drinking camps on the outskirts of some remote communities, binge drinking, the breakdown of conventions that had existed to promote responsible drinking and the practice known colloquially as 'sly-grogging' (FAHCSIA, 2011).¹

2.1.3 Classification of BAC offence level and sentence severity for analysis

The legal blood alcohol limit for driving in Queensland is 0.00g/100ml for people on a provisional or probationary licence and between 0.00g/100ml and 0.049g/100ml for people on a full licence. Court records do not make provision for entering the specific BAC readings for which an offender is prosecuted. Rather, a drink driving charge is recorded instead. Therefore, the current study used the type of drink driving charge to categorise BAC at the time of the offence into ranges. Type of drink driving charge falls into three categories: above the zero limit (0.00-0.049g/100ml); above the general permitted alcohol limit (0.05-0.149g/100ml); and above the high alcohol limit (≥ 0.15 g/100ml). Since the data for this study was supplied the legislation for BAC limits has changed in Queensland to include a fourth category of BAC offence, referred to as mid-range (0.10-0.149g/100ml) (DTMR, 2012).

For the purpose of this study, penalties imposed at sentencing were coded by the most severe sentence. Supervised orders including probation, community service and intensive corrections were grouped into one category of 'community-based order'. The resulting six categories of sentences used in the analysis were convicted not further punished, other (e.g. victim compensation), monetary penalty, community-based order, suspended sentence and imprisonment.

2.1.4 Analysis

Data analysis was conducted in SPSS (Statistical Package for the Social Sciences, version 18). All drink driving offences that had fields of interest missing or did not result in a conviction were removed. Analyses of convictions were firstly conducted for males and females by level of remoteness. Convictions by level of remoteness were then compared with other variables (including age, BAC and sentencing severity) to identify interaction. Cross-tabulations with chi-squares were used to test these differences for both genders. To identify cell differences within the analyses, standardised adjusted residuals were calculated for each cell in order to determine cell differences that contributed to the chi-square test results. Values greater than 2.0 are reported on. Separate chi-squares were completed where necessary including age by BAC according to level

¹ Sly-grogging is defined as alcohol purchased from licensed takeaway outlets in towns where alcohol can be obtained legally and then sold illegally at inflated prices in areas that have alcohol prohibition (Hudson, 2011).

of remoteness, and age by outcome according to level of remoteness. The rate of convictions per 100,000 for Indigenous drink driving were calculated using population figures from Australian Bureau of Statistics (ABS, 2006).

2.2 Phase 2

2.2.1 Setting

Earlier studies indicated that drink driving was higher in regional and remote areas. Hence, the focus of this study was to obtain the views of Indigenous people living in these areas.

The study was conducted in Cairns Region and Cape York, Queensland and Clarence Valley, Northern New South Wales. The sites in Queensland were selected on the basis of court data obtained by the authors from the Queensland Department of Justice and Attorney General for the previous phase of the project. Findings from the previous study indicated that the remote communities approached to take part in the project had high rates of drink driving convictions between 2006–2010, when compared with the number of drink driving convictions in other remote communities.

Far North Queensland

Queensland, a state located in the North East of Australia has a population of almost 4.5 million people (ABS, 2011). Indigenous peoples make up approximately 3.5% of this population, but a large proportion resides in rural and remote areas when compared with the mainstream population.

Cape York Peninsula, Far North Queensland

Participants were recruited from two remote communities located within Cape York Peninsula, Queensland. Cape York covers ~128,000km² (7.4% of the total area of Queensland), with a population of approximately 13,000 Indigenous Australians. There are 12 small, self-governing communities ranging in size from clusters of <200 to 3,500 people with >95% being Indigenous (Treasury and Trade, 2012). The communities consist of many different clan and language groups. These communities are categorised as 'very remote', as they have limited access to services and goods (ABS, 2006) and are often characterised by comparatively high levels of socioeconomic disadvantage, as well as being under-catered for by facilities and professional services or practitioners. Most employed adults in the community are engaged in Community Development Employment Projects (CDEP), an Australian Government-funded initiative. Another major industry is mining, which recruits employees from across the 12 communities in Cape York Peninsula.

Figure 1: Map of Far North Queensland



Remote communities in the Cape York region have a history of high rates of alcohol-related injuries. After a government-commissioned report into this issue (Fitzgerald, 2001), a supply-reduction strategy consisting of a variety of alcohol sales and carriage restrictions was implemented in 2002–2003, as part of a broader three-tiered approach including demand and harm-reduction strategies. Following an evaluation that identified reductions in certain alcohol-related injuries after the implementation of the first wave of supply-reduction strategies, these alcohol restrictions were tightened in 2008 (Queensland Government, 2005). This involved prohibition of alcohol in some of the communities, which included the two study communities. Anecdotal reports from other jurisdictions with similar alcohol restrictions indicate such restrictions may be changing the relationship between drinking and driving in Indigenous communities, as well as altering the possible challenges for individuals who continue to drink but wish to avoid drink driving (FAHCSIA, 2010). It is not the purpose of this study to explore or draw conclusions about the specific effect the alcohol restrictions have had on drink driving behaviour in remote Indigenous communities in Queensland. However, it is important to place the participants’ stories in the appropriate context and acknowledge the additional pressures alcohol restrictions place on residents, both drinkers and non-drinkers.

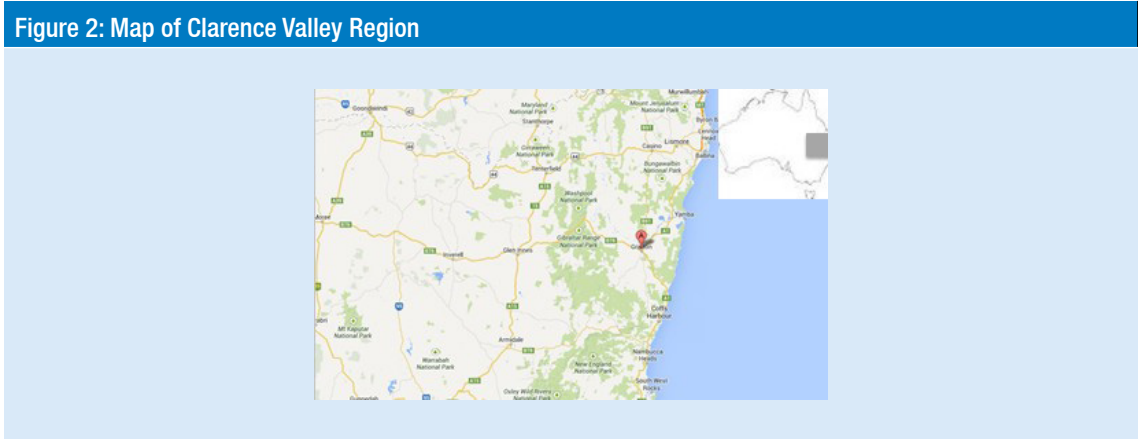
Cairns Region, Far North Queensland

Cairns is a major urban centre located on the north Queensland coast, with an estimated population of 224,000 people. The Indigenous population is approximately 23,121 (10%) people. Two neighbouring communities located approximately 50kms and 75kms from Cairns were also included in the project. Transport options between the communities and Cairns include bus, taxi and private vehicle.

New South Wales

In New South Wales, communities from the Clarence Valley were involved in the project. Prior to European settlement, the Clarence River marked the border between Bundjalung and Gumbainggir nations. The Yaelgl people are the traditional custodians of these coastal areas.

Transport options between the communities and regional centres in Clarence Valley are limited to a bus service, taxi and private vehicle.



2.2.2 Sampling and recruitment

Group 1 – Drink drivers

Research in Indigenous communities can be a sensitive exercise involving permission and cooperation from a wide range of groups including community Elders. Accordingly, consultation with key groups and individuals within the regional and remote Queensland communities commenced in 2011 and in the Clarence Valley

region in 2012, in order to establish contact and relationships, as well as gain permission for the study from local councils and justice groups. Advice from the community groups in rural and remote Queensland was that the researchers should not use audio recording for interviews with participants as there was concern that this type of information capture could be used in future court cases. Therefore, detailed notes were taken during the interviews instead. This method has previously been used in published research on other illegal behaviour in remote Indigenous communities including gambling (Breen, 2012). At all other regional New South Wales sites, participants were offered the option to have their interview audio-recorded.

For all regional and remote sites, identification of potential participants was undertaken via snowball sampling. This was decided upon as the best means of recruitment, given the illegal and potentially sensitive nature of the interview topic. Further, snowball sampling involves a form of personal endorsement that the researcher is trustworthy when a respondent gives consent for referrals to be contacted. Because snowball sampling can potentially result in a limited range of participants, for this study a number of different sources were used to make the initial contact with potential participants. It was desirable to include participants with recent convictions, as well as those with older convictions. This was to ensure a sample with a broad base of contextual factors contributing to their offending and to source a sub-group who had already had time to gain insight into their behaviour and/or seek treatment in order to identify protective factors that had enabled them to avoid drink driving since their last offence. The final sources included referrals from personnel in the justice group and health services, as well as from key individuals in community groups (for example, the men's and women's groups). In the Clarence Valley region, a drug and alcohol rehabilitation centre and minimal security prison were also accessed following recommendations from justice group leaders.

Multiple visits were made to each community during June 2012 and April 2013 in order to interview drink drivers. Eligibility criteria were that participants identified as being of Indigenous status (Aboriginal and/or Torres Strait Islander), over 18 years of age and had been convicted of at least one drink driving offence. Sampling continued until thematic saturation—the notion that it was unlikely that anymore new themes would arise and therefore further data collection would be unlikely to reveal additional information.

Group 2 – Program facilitators

Participants in this group were over 18 years of age and were selected on the basis of being facilitators of programs in one of the locations that took part in the project. A sample size of at least 10 facilitators was sought. However, as this is a qualitative study, the final number was also determined when it was believed thematic saturation had been achieved.

2.2.3 Ethics

The project was conducted within the framework of the National Health and Medical Research Council's (2003) Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (2003). Ethics approval for the study was provided by the Human Research Ethics Committee of Queensland University of Technology (approval no. 1100000636).

2.2.4 Interview schedule

The methodological section of phases 2 and 3 in this research are underpinned by participatory action research (PAR). Conducting the research in this paradigm gives voice and prominence to communities previously marginalised in research practices. PAR emphasises a collective process where people's experiences are shifted to the centre of the research and the tools of the research that produce the outcome are placed in the hands of the community. Thus, PAR frameworks involve three key features: first, a commitment to social transformation; second, a commitment to honouring the lived experience and knowledge of the participants and community involved; and third, a commitment to collaboration and power sharing in the research (Reason, 1994).

Group 1 – Drink drivers

The study used an interpretive, qualitative paradigm to document the participants' views about drink driving in Indigenous communities. Qualitative methods are a familiar and comfortable style for Indigenous peoples who feel included through talking and sharing, often referred to as 'research yarning' (Bessarab & Ng'andu, 2010). This method has been used previously by others to work across cultural barriers (Lee et al., 2009). It also allows for a good level of personal expression and individuality in the conversations and has the advantage of allowing unanticipated themes to emerge.

A semi-structured interview schedule was used with interview questions informed by the existing literature regarding Indigenous road safety behaviour. Participants were asked about the last time they were caught drink driving. Prompts were used where necessary to elicit further information. Participants were asked about drink driving offences prior to the last offence, if they were able to recall this information. To map out risk factors, participants were asked about the drinking patterns of their peers and family, as well as their own alcohol use. In regards to those participants who reported that they no longer drink and drive, probes were used to explore their perceptions of what had enabled them to refrain from further offending. Analysis of the interviews began with review of notes to identify themes early in data collection.

However, themes that emerged during the earlier interviews were not deliberately introduced into interviews with subsequent participants in order to avoid undue researcher influence. Issues related to drink driving in the community were only discussed if the respondent spontaneously raised these issues during the interview. Lastly, participants were asked for their views on program design. This took the form of asking participants what content they thought might be the most effective in order for an intervention to address any drink driving risk factors they had mentioned, as well as the most effective method to deliver this information in their communities.

The data collection instrument included the Alcohol Use Disorders Identification Test-C (AUDIT-C). The AUDIT-C is a screening instrument that measures frequency of alcohol consumption and drinking behaviour. The short-form tool is based on the Alcohol Use Disorders Identification Test (AUDIT), which focuses on identifying the preliminary signs of hazardous drinking, mild dependence and alcohol problems experienced within the last year. It is one of the most accurate alcohol screening tests available (Saunders et al., 1993) and was used to inform the Alcohol Treatment Guidelines for Indigenous Australians (DOHA, 2007). AUDIT-C has been validated in several studies, including against the AUDIT (Dawson et al., 2005). The instrument was conducted verbally by the interviewer with each participant.

Participants were also asked to explain what information would be useful to them and empower them to address their drink driving offending. In relation to the drink drivers who report they no longer drink drive and have not been convicted of drink driving in the last 12 months, they completed the same survey. Additionally, these participants were asked about the type of information that was important for them in addressing their drink driving behaviour.

Group 2 – Program facilitators

Facilitators were asked about i) the extent of their experience facilitating programs in rural and remote communities; ii) teaching techniques and tools effective in engaging participants in addressing antisocial behaviour and substance misuse in Indigenous specific programs; and iii) their understanding of drink driving issues for the community(s) they worked in and what they viewed as some of the risks that facilitated drink driving and the protective factors that prevented drink driving.

All interviews of the program facilitators except two were audio-recorded. Detailed, verbatim notes were taken during the two interviews not audio-recorded.

2.2.5 Analysis

Thematic analysis of the interview transcripts was conducted by the first author using an interpretive framework. This began by reading through all transcripts and identifying broad patterns of experience that appeared across the interviews both in relation to the specific research interests, as well as other, unanticipated or emergent issues. These were labelled the themes. Material, in the form of sentences and/or paragraphs, were then coded manually into the themes, with multiple codes being used if the text fit into more than one theme. This was in order to ensure that data and meaning were not lost.

Thematic analysis was then used to break down, examine and compare material within the themes (Braun, 2006). To ensure validity, the independent analysis of the material was carried out by the co-author and another CARRSQ senior researcher experienced in qualitative analysis and the content of the themes. Subsequent discussion among the authors clarified minor points and allowed for agreement on the labelling of the themes. In addition, the first author sought input on the interpretation of the culturally related themes from two other sources: an Indigenous academic with knowledge of the issues relevant to Indigenous drink driving in regional and remote communities, and senior, respected community members from the study communities.

2.3 Phase 3

2.3.1 Participants

During September and October 2013 the program was piloted with three groups of Indigenous community members with a history of drink driving. Eligibility criteria were that participants identified as being of Indigenous status (Aboriginal and/or Torres Strait Islander), over 18 years of age, resided in one of the two communities, and had been convicted of at least one drink driving offence. Recruitment of program participants was conducted using the same methods employed in phase 2. Program participants were recruited through justice groups, men's group and drug and alcohol services in the community.

2.3.2 Program development

The program was developed using the findings from phase 2 and underpinned by the CRA. The drink driving program content was guided by the CRA's 'functional analysis of substance use' (Meyers et al., 2011). The analysis explores the antecedent and possible negative consequences of a person's substance use. The content attempts to extract discussion from the group about the external and internal triggers of their drink driving and drinking behaviour. The content also aims for participants, particularly youth, to consider that while there are short-term positive consequences to drink driving such as being the 'hero', there are longer term negative consequences.

In relation to learning style techniques and delivery of content, the program primarily used interconnected pedagogies including narrative-driven learning and hands-on reflective activities and techniques. The program included role play such as drink as well as drink driving refusal, which aimed to help the program participants identify high-risk situations for each person in the group, as well as teaching assertiveness. The majority of the program was conducted within a 'Yarning Circle' framework. The initiative created discussion between peers or participants to exchange views, which encourages participants to speak without fear of repercussion and where the balance of power and expertise was balanced between both program participants and the facilitator.

2.3.3 Procedure

Following the development phase, components of the complete program were conducted in each of the three regions, Clarence Valley, Cairns Region and Cape York. The components were facilitated and delivered in a variety of locations, based on decisions made by local Elders and justice group members.

A multi-method review of the program was conducted to assess the content and delivery process. Firstly, a naturalistic process evaluation was employed to review the program manual and content. This type of evaluation relies on qualitative techniques of data collection and analysis. Studies have shown this to be a successful research evaluation when completed in a rigorous and sensitive manner (Barnes, 2000; Tsey & Every, 2000). In Australia, many reports recommend on-site visits, allowing observation of programs in action and discussions with participants for the most reliable and valid data (Tsey & Every, 2000). The research team conducted an on-site review of the program in action.

Secondly, feedback was collected from program participants, facilitators and other attendees through focus groups, interview or written responses in order to gather opinions on the methods used to deliver the program and recommendations for the future. Participants who undertook the program were also asked to share what were significant pieces of information that they did not know prior to the program and what information or strategies they can apply to their own life.

2.3.4 Analysis

The pertinent themes from the reviews were identified. The main themes determined from the reviews were considered for integration into the final development of the program.

Chapter 3: Findings Phase 1

3.1 General results

Between 1 January 2006 and the end of December 2010, there were 9,323 drink driving convictions by persons who self-identified as Indigenous. The rate of drink driving convictions on a population basis for the Indigenous peoples in Queensland was 6,385 per 100,000. Calculating this rate by region identified an increase with remoteness. However, there was a decrease between the two remote ARIA+ categories. The rate of drink driving convictions per 100,000 by the ARIA+ categories was as follows: 'metropolitan' (4,873 per 100,000), inner regional (4,972 per 100,000), outer regional (6,967 per 100,000), 'remote' region (10,587 per 100,000) and 'very remote' region (7,406 per 100,000)

During the five year period, males accounted for over three-quarters of drink driving convictions 7,170 (77.5%). Tabulation by region and gender found this was not consistent across all five regions ($\chi^2(4) = 44.4$, $p < 0.001$). All ARIA+ regions, except the 'very remote' were similar (73.9–76.5%). However, in the 'very remote' region there were fewer females convicted of drink driving, with males accounting for four in five (83.1%) drink driving convictions.

3.2 Age at offence

The median age of male and female persons at the time of the offence was 28 years (range: 11–81) and 29 years (range: 12–65), respectively. Chi-square statistics were used to identify interaction between the age of the offender and location of drink driving offences for both males and females (see Table 2).

Region	Age at offence			TOTAL (100%)
	<25 years n (%)	25–39 years n (%)	40+ years n (%)	
Males				
Metropolitan	776 (56.7)**	341 (24.9)	251 (18.4)	1,368
Inner Regional	644 (57.9)**	266 (23.9)*	202 (18.2)	1,112
Outer Regional	1,355 (54.2)	695 (27.8)	448 (17.9)*	2,498
Remote	483 (51.6)	262 (28.0)	191 (20.4)	936
Very Remote	545 (43.4)*	356 (28.3)	355 (28.3)**	1,256
Females				
Metropolitan	237 (49.0)	145 (30.0)	102 (21.0)**	484
Inner Regional	178 (51.7)	101 (29.4)	65 (18.9)	344
Outer Regional	401 (52.3)	253 (33.0)	112 (14.7)*	766
Remote	167 (55.0)	84 (27.6)	53 (17.4)	304
Very Remote	118 (46.3)	85 (33.3)	52 (20.4)	255
TOTAL	4,904 (52.6)	2,588 (27.7)	1,831 (19.7)	9,323

In regards to convictions by males, there was a significant difference between age of the offender and the location of the offence conviction ($\chi^2(8)=90.8$, $p < 0.001$). Adjusted standardised residuals indicated a larger

proportion of convictions were for persons less than 25 years of age in 'metropolitan' (n=776, 56.7%) and 'inner regional' (n=644, 57.9%) areas. The strongest difference was in 'very remote' court locations, where convictions by males were more often for persons over 40 years of age (n=355, 28.3%), as opposed to less remote areas.

Completing the same comparisons for their female counterparts, the same trend was not identified. In respect to females, there was no significant link between the age of the offender based on the court location ($\chi^2(8)=14.2, p=0.76$).

3.3 Offence details

Table 3 presents the tabulation of BAC by level of remoteness for all convictions. Of the convictions for males, 3,001 (41.9%) were high range BAC ($\geq 0.15\text{g}/100\text{ml}$) convictions. The number of convictions for the BAC categories across the five levels of remoteness for males was found to be significantly different ($\chi^2(8)=168.4, p<0.001$). Further analysis of the adjusted standardised residuals showed males were more likely in 'remote' (n=437, 46.7%) and 'very remote' (n=688, 54.8%) locations to record a high-range BAC at the time of offence. Convictions in the 'metropolitan' and 'outer regional' courts were more often general range BAC (0.05-0.149g/100ml)—63.1% and 55.6% respectively.

Table 3: Blood alcohol concentration by remoteness and gender				
Region	Blood alcohol concentration			TOTAL (100%)
	<0.05g /100ml n (%)	0.05–0.149g /100ml n (%)	$\geq 0.15\text{g}$ /100ml n (%)	
Males				
Metropolitan	75 (5.5)**	863 (63.1)**	430 (31.4)*	1,368
Inner Regional	62 (2.3)**	610 (54.9)	440 (39.6)	1,112
Outer Regional	104 (4.2)	1,388 (55.6)**	1,006 (40.3)*	2,498
Remote	37 (4.0)	462 (49.4)*	437 (46.7)**	936
Very Remote	30 (2.4)*	538 (42.8)*	688 (54.8)**	1,256
Females				
Metropolitan	21 (4.3)	323 (66.7)	140 (28.9)	484
Inner Regional	20 (5.8)	215 (62.5)	109 (31.7)	344
Outer Regional	43 (5.6)	513 (67.0)**	210 (27.4)*	766
Remote	13 (4.3)	189 (62.2)	102 (33.6)	304
Very Remote	10 (3.9)	138 (54.1)	107 (42.0)**	255
TOTAL	415 (4.5)	5,239 (56.1)	3,669 (39.4)	9,323

* >-2 ** $>+2$

Of the 2,153 convictions for females, 668 (31.0%) were categorised as high-range BAC convictions. A similar pattern emerged for convictions of females when comparing BAC category by level of remoteness. A significant interaction in the proportion of high-range BAC offences was identified ($\chi^2(8)=22.5, p=0.004$). Adjusted standardised residuals showed the difference was in the convictions in the 'very remote' region, where almost half of offences were categorised as high-range BAC offences (42.0%). Again, 'metropolitan' and 'regional' centres showed lower proportion of high-range BAC offences, ranging from 27.4%–33.6%; however, the difference was identified in the 'outer regional' convictions (see Table 3).

Further analysis using chi-squares was conducted for each region to identify the age of offenders recording high-range BAC as opposed to a lower range BAC category ($<0.15\text{g}/100\text{ml}$) for both males and females in

each of the five levels of remoteness. As presented in Table 4, for males, there was significant interaction between the age of the offender and BAC category for each level of remoteness. Adjusted standardised residuals for 'metropolitan', 'inner regional', 'outer regional' and 'remote' analysis identified high-range BAC convictions were mostly recorded in 25–39 and 40+ years age brackets. For the 'very remote', it was only convictions from the 25–39 years age bracket most likely to record high-range BAC offences, as opposed to the other two age categorises.

In regards to females, the same trend was identified but not in all regions. In 'metropolitan' ($\chi^2(2)=15.7$, $p<.001$), 'outer regional' ($\chi^2(2)=13.9$, $p<.001$) and 'remote' ($\chi^2(2)=6.7$, $p=0.03$) areas, there were significant differences in the age of the offender who recorded a high-range BAC. Adjusted standardised residuals indicated that in 'metropolitan' and 'remote' areas, a larger number of convictions from the 40+ year age bracket were high-range BAC compared with younger counterparts. In the 'outer regional' areas, the difference was located with convictions from the 25–39 year age bracket only.

Table 4: Low versus high blood alcohol concentration by level of remoteness, age and gender

Region	Blood Alcohol Concentration				TOTAL (100%)	Chi-square χ^2		
	<0.15g/100ml		≥ 0.15g/100ml					
	15-24 years	25-39 years	40+ years	15-24 years			25-39 years	40+ years
Males								
Metropolitan	578 (61.6)**	208 (22.2)*	152 (16.2)*	198 (46.0)*	133 (30.9)**	99 (23.0)**	1,368	29.1
Inner Regional	429 (63.8)**	136 (20.2)*	107 (15.9)*	215 (48.9)*	130 (29.5)**	95 (21.6)**	1,112	24.6
Outer Regional	896 (60.1)**	363 (24.3)*	233 (15.6)*	459 (45.6)*	332 (30.0)**	215 (21.4)**	2,498	50.4
Remote	289 (57.9)**	126 (25.3)*	84 (16.8)*	194 (44.4)*	136 (31.1)**	107 (24.5)**	936	17.8
Very Remote	281 (49.5)**	131 (23.1)*	156 (27.5)	264 (38.4)*	225 (32.7)**	199 (28.9)	1,256	19.2
Females								
Metropolitan	187 (54.4)**	97 (28.2)	60 (17.4)	50 (45.9)*	48 (34.3)	42 (30.0)**	484	15.7
Inner Regional	128 (54.5)	68 (28.9)	39 (16.6)	50 (45.9)	33 (30.3)	26 (23.9)	344	NS
Outer Regional	314 (56.5)**	169 (30.4)*	73 (13.1)	87 (41.4)*	84 (40.0)**	39 (18.6)	766	13.9
Remote	121 (59.9)**	52 (25.7)	29 (14.4)	46 (45.1)*	32 (31.4)	24 (23.5)**	304	6.7
Very Remote	73 (49.3)	48 (32.4)	27 (18.2)	45 (42.2)	37 (34.6)	25 (23.5)	255	NS
TOTAL	3,296 (58.3)	1,398 (24.7)	960 (17.0)	1,608 (43.8)	1,190 (32.4)	871 (23.7)	9,323	

* > -2 ** > +2

Region	Sentencing Severity						TOTAL (100%)
	Convicted, not further punished n (%)	Monetary Penalty n (%)	Community-Based Order n (%)	Suspended Sentence n (%)	Prison n (%)	Other n (%)	
	Males						
Metropolitan	16 (1.2)**	1,076 (78.7)	111 (8.1)	33 (2.4)*	112 (8.2)	20 (1.5)	1,368
Regional	16 (4)	2,830 (78.4)**	297 (8.2)*	102 (2.8)*	308 (8.5)	57 (1.6)	3,610
Remote	5 (2)*	1,618 (73.8)	232 (10.6)**	103 (4.7)	209 (9.5)	25 (1.1)	2,192
	Females						
Metropolitan	1 (1.7)	430 (88.8)**	28 (5.8)*	8 (1.7)	9 (1.9)	8 (1.7)	484
Regional	2 (2)	943 (85.0)	101 (9.1)	16 (1.4)	29 (2.6)	4 (7)	1110
Remote	0 (0)	477 (85.3)	60 (10.7)	8 (1.4)	10 (1.8)	19 (1.4)	559
TOTAL	40 (4)	7,374 (79.1)	829 (8.9)	270 (2.9)	677 (7.3)	133 (1.4)	9,323

*->2 **->+2

3.4 Sentencing severity

As there were similarities between the two regional and two remote ARIA+ regions with interactions with BAC and again with age, these regions were pooled together to compare sentencing severity. Table 5 presents the sentencing severity for each conviction. The majority of convictions in all regions received a 'monetary penalty'.

For convictions of males, the majority from each region received a 'monetary penalty' (proportion ranging between 71.3–80.1%). For convictions of males, there was significant difference between the regions ($\chi^2(10)=51.9, p<0.001$). A further chi-square was conducted by age and outcome for males. It identified significant differences ($\chi^2(10)=56.6, p<0.001$), with adjusted standard residuals showing that the convictions of these aged 25–39 years of age were more likely to receive a 'suspended sentence' or 'imprisonment'. Convictions of persons under 25 years of age most likely received a 'monetary penalty' or 'other' penalty, while older offenders more likely received 'suspended sentence'.

The majority of females convicted from each region also received a monetary penalty (proportion ranging between 79.7–88.0%). However, the same association between female drink drivers and region was not identified ($\chi^2(10)=13.5, p=0.19$). It is worth noting 27 of the 48 persons who received a 'prison' penalty were under 25 years of age.

Chapter 4: Findings Phase 2

The following chapter reports on the findings from semi-structured interviews conducted with Indigenous drink drivers and program facilitators in Far North Queensland and Northern New South Wales. Phase 2 aims to i) explore the interplay between factors that contribute to Indigenous drink driving ii) identify protective factors that have assisted Indigenous drivers to desist from drink driving and iii) identifying content and culturally appropriate delivery methods for an offender-based drink driving program.

4.1 Demographics of drink drivers

First, the socio-demographics of the group were examined and the results are provided in Table 6. The analysis depicted in Table 6 indicates the majority of offenders in the sample from all three regions were male. The majority of drink drivers from all regions ceased high school education at the end of year 9. There was almost an even number of first time only and repeat drink drivers in all samples except for the Cairns sample, where most were repeat drink drivers.

Table 6: Demographics of drink driver participants			
	Cape York	Cairns Region	Clarence Valley
Gender			
Male	26 (90%)	17 (85%)	21 (87%)
Female	3 (10%)	3 (15%)	3 (13%)
Age groups			
>25	6 (21%)	4 (20%)	4 (17%)
26–39	14 (48%)	9 (45%)	14 (58%)
40+	9 (31%)	7 (35%)	6 (25%)
Highest level of education			
Year 7	0	1 (5%)	1 (4%)
Year 8	2 (7%)	1 (5%)	4 (17%)
Year 9	18 (62%)	14 (70%)	10 (42%)
Junior high school (Year 10)	7 (24%)	1(5%)	6 (25%)
Senior high school (Year 12)	2 (7%)	1(5%)	3 (12%)
Self-reported number of drink driving offences			
1 conviction	16 (55%)	1	14 (58%)
More than 1 conviction	13 (45%)	19	10 (42%)
Other driving offences			
Unlicensed driving	11 (38%)	6 (30%)	8 (33%)
Theft of a vehicle	6 (21%)	4 (20%)	7 (29%)

4.2 Interviews with drink drivers and facilitators

The following section covers the findings from interviews with drink drivers across Clarence Valley, New South Wales, and Cairns Region and Cape York, Queensland. A number of themes emerged in relation to participants' drink driving behaviour.

In the excerpts below, gender, age and location (remote or regional) of the respondent are given at the end of each quote, so that the reader can have a sense of the 'voice' of the respondent.

4.2.1 Motivations to drink drive

4.2.1.1 Being the 'hero'

The first and a predominant sub-theme that emerged during the interviews related to being labelled the 'hero'. In the material that was categorised under this theme, participants described that it was their choice to drive after drinking. In many cases, excerpts from the narratives of younger participants captured under this sub-theme talked about attempting to "show off" (Man, 28, remote) with an audience of peers while drink driving within the community only and without an intended destination to drive to. As one respondent explained:

Lot of people, most boys...some boys find it [drink driving] funny...Yeah well that's what the young generation here now do. They thinkin' yeah "the people [are] watching me. I go fly through the street. There's a bunch of young girls watching us, you know?" That's what's the thinking [is] today...[they are] showing off, styling up, being hero. Go on Facebook, you see it on Facebook. There's this fella around here who skids his car all the time. A lot of the young fellas doing it [driving recklessly after drinking] now. I used to be like that. That's why I was done [convicted for drink driving] the first two times (Man, 28, remote).

For some of these same participants who made the decision to drink drive for peer attention, a connected underlying motivation was to create some excitement, as participants reported they were bored and decided to drive for something to do. As illustrated above, social media appears to have become a tool to document and promote this behaviour among young adults and community members alike.

In regards to drink drivers being the 'hero' and driving outside the community, one of the main reasons for driving was to purchase alcohol, as the following quote reports:

I chose to drive. I do that and then I got caught. When you drink and drivin' you do a trip into the pub. Go out and go where the grog is...The other people around me would be finding it fun. Yeah like he... "He's a hero" (Man, 33, remote).

As alcohol was prohibited in both study communities, the two main methods to purchase alcohol are either to buy it at a licensed venue in another regional centre ("driving back from buying grog at the drive through" (Male, 24, remote)), or to obtain it through community members who were 'sly-grogging'.² Purchasing alcohol could occupy entire peer groups for hours or up to a full day, depending on which method they used to obtain it, as the licensed premises chosen to drive to could be several hours drive on unsealed road. Participants reported that money was commonly pooled together to purchase it. Another reason young Indigenous adults gave for driving while intoxicated was in order to get to a relative's home where they knew alcohol was present.

In the case of being the 'hero' and drink driving outside of the community to access alcohol, this behaviour was seen as being "brave." (Man, 33, remote) The narrative below by the same respondent also indicates that being under the influence of alcohol and cannabis contributed towards a sense of invincibility and bravado among young adults in the community:

You just willing to get the grog and go back when you feel brave...That's when you feel brave to come in [drive to licensed premises in the regional town]...Once the alcohol hit your system you want to [be] drivin' drivin' drivin' drivin'...Hero mean that's when you're drunk and stoned [under the influence of cannabis], that's when you're [a] hero and you're brave and all that...and you start feeling strong and you risk it in. You not scared of police [being apprehended] (Man, 33, remote).

The sense of invincibility in terms of being brave, as well as being able to avoid apprehension was also expressed by two other participants, "alcohol makes you strong and invisible" (Man, 30) and "It's just like

² Sly-grogging is defined as alcohol purchased from licensed takeaway outlets in towns where alcohol can be obtained legally and then sold illegally at inflated prices in areas that have alcohol prohibition.

when you drinkin' you think there's no cops around" (Woman, 26). The routine behaviour of drink driving without apprehension was often perceived by some participants as making others feel that there was a low risk of being caught by authorities:

"They [friends] think "[He] got in and out [without being apprehended by police] so I'll do it too." So it's a cycle that goes around" (Man, 28, remote).

The phenomenon of drink driving in this manner therefore appeared to be a communal activity because of the connection to alcohol, with most participants consuming alcohol with friends or family members prior to engaging in drink driving. This was illustrated in accounts of where participants consumed their last drink prior to apprehension, with some participants drinking at home or at a licensed premises with peers prior to driving, or drinking takeaway alcohol, purchased from the licensed premise in the vehicle while driving to return to the community, as reported by one respondent: *"I was driving back in here. We were drinking in the car on the way back"* (Man, 24, remote).

Being the 'hero' appeared to create social cohesion and a sense of belonging in the community for young adults. Participants who had driven after drinking without being apprehended reported that they would talk to others about their experiences of drink driving the following day. One respondent reported that she would discuss with other friends or interested community members the methods used to avoid police apprehension including the route taken back from the regional centre to the community and identifying whether police were enforcing drink driving laws, as illustrated here:

the other guys might think she know how it 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 deleted]...they ask how you guys come down. They ask us "any [police] road blocks?" Sometimes when I see people drink driving they go to the police station to see how many cops there [police vehicles]...like if there's all of the cops there and then they [know they can] just make it down (Woman, 26, remote).

Another dimension of the phenomenon of being the 'hero' was where some participants, perceived drink driving as a reciprocal arrangement, whereby if others had driven their friends home previously, the "favour" (Man, 28, regional) should be returned. This behaviour was also noted in the first author's field notes, as the following extract illustrates:

Spoke with a man from the community outside the regional court, awaiting his court matter (not drink driving related). The man was 24 years of age...aware of being the 'hero' when referred to drink driving and had previously engaged in drink driving. He reported that people his age take turns at drink driving when in a group "if I don't do it, [someone else in the group] will"...Taking turns was sometimes to avoid the harsher penalties he says, including jail. People know how many convictions they have. Sometimes drink driving was to do a 'favour' for a friend, "he can ask me cause he done it for me before."

Being the 'hero' sometimes also included payment from someone. This was sometimes in the form of alcohol, "they say I give you a bottle you drive me in" (Woman, 26, remote), or for monetary gain as described below:

I was having a couple of drinks. One guy he was looking for a driver. I had some alcohol. I acted like the hero that night. He told me to stay at my sister-in-law's place in town until the police had finished for the night then meet him in at the pub. We did...me, my brother and the other guy who asked me to drive were in the car. He was looking for a driver. He said he'd give us \$60.00 and drive his car. I don't know what happened after that. He spend the \$60.00 on the pokies and we had no way getting back. We thought we were using his car. I drove anyway. He said to me I should go the back street but I didn't. He said to me I should have listened when I got caught. The police took his car key and he was angry 'cause he didn't get his car back straight away (Woman, 26, remote).

Although only mentioned by a small number of participants, there were also instances where participants who drove while drunk when they had alternative options and did not necessarily feel they were being the 'hero'. These participants stated that at the time of the offence, when asked if they were okay to drive or another person offered to drive, the participant refused and decided to be the one to drive. In regards to these participants, this behaviour was not described as a planned behaviour, as outlined below:

We had left a nightclub. My cousin said he would drive but I chose to. We went to the [gas/petrol station] on the highway. I saw the cops from there, and we drove off. The police pulled me over. When they got out of the car, I just put my foot down and drove off. I knew I was over [the legal alcohol limit]. I went home but then that's when they got me. They took me to the [police station] (Man, 34, remote).

I was driving from the service station back to the pub. I had the family in the car. Someone suggested they drive but I said "nah. I'm fine" (Man, 42, remote).

4.2.1.2 Obligations to kin

The second sub-theme discerned in the accounts related to participants who described being pressured by members of their extended families to drive after drinking, as illustrated by the following excerpt: "both friends and family have put pressure on me to drive after we [have] been drinking" (Female, 23, remote). This sub-theme has been labelled "obligations to kin". In this sub-theme, the underlying responsibility for transporting family members appeared to be difficult to avoid. Participants felt that they were unable to refuse family members demands to drive and they described this as the primary reason they drove after drinking:

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

My aunty told me to drive in to pick my uncle at the [licensed premises] you know. He didn't have transport to get back out to the outstation. So my aunty told me [to drive] so I drink and drive in. So when I drive in I was half shot, I was drunk...Then pick up my uncle and then went to [another licensed premises, name deleted] and buy some grog then straight back to bush, to outstation. We get pulled over at the outstation...They [police] breath test me again and I was over the limit...To please them [family] you don't want to say no (Man, 33, remote).

I was leaving the [licensed premises, name deleted]. I was drinking with family and I drove the car. Some of my family asked me to. You can't say no (Man, 37, remote).

Participants who received this pressure, often described drinking alcohol with their families at a licensed venue prior to the commencement of the pressure they described; for example,

I was driving back from the pub to home. It was me and my uncle. We got caught. The police pulled me over. They were doing random breath tests. Not sure of my BAC. I think it was pretty high. He [uncle] asked me to drive (Man, 33, remote).

It appeared that demanding the younger family member drive everyone home often afforded others the opportunity to continue drinking on that occasion. There were no descriptions of planning for one person to be the designated driver for an occasion. Rather, arrangements for home travel appeared to be left until after everyone had already been drinking.

In some situations, the offer to pay any potential penalties was used in conjunction with pressure from family members or peers as method to persuade people to drink drive, as one respondent reported:

Sometimes when you're all drinking they want you to drive. Friends are the worst. They push you to drink and to keep everyone happy you do. They say "if you get caught we'll help you pay your fines." But they don't (Male, 29, remote).

Even after being convicted of drink driving, some participants continued to receive pressure from family members trying to persuade them to drive while intoxicated. One respondent recalled being asked to drive after he had been drinking on the evening of the day he had received a period of parole at sentencing from his most recent drink driving offence:

Only the day when I finished court [appearance], straight that night they ask me to drive. I said to them "no I'm not driving". They ask me about four times I said "no". We were supposed...we were over [at] relatives house and supposed to come back home where we supposed to grab something. I said "nah, I just finished my court". Oh they just said "come on there no cops." I said "nah." (Man, 28, remote).

While some participants were able to refuse kin demands on some occasions, others gave descriptions of being afraid of refusing to transport family member home because of the possible consequences. Exclusion from peer or family networks was a common occurrence for participants who had refused family member demands. One respondent spoke about how she had been previously requested by her older sister to drink drive to purchase alcohol. She refused to drive her sister, which resulted in, “she [sister] didn’t speak to me for weeks” (Woman, 26, P18).

Emotional coercion by family members was also used to influence people to drink and drive, as the same respondent recalls:

The car was at my place. She came up the morning ask “do me favour”. [I said] “I don’t want to go in and get you some grog”. She don’t like doing the same and getting booked [being charged with drink driving]. It is fair and square. When it comes to my turn for me to ask she won’t do it. She be angry and grumpy. If you don’t do it for them, they say they might hurt themselves, stress. Say they going to do something bad or be grumpy with me. “You can do it for other people but you can’t do it for us and show your love (Woman, 26, remote).

The respondent indicated her older sister would be anxious or would threaten self-harm if her demands were not fulfilled. Family pressure, driven by the need to purchase alcohol, was also expressed by another respondent who reported the frustration he felt because of the continual requests for him to transport family for the purchase of alcohol or cigarettes after everyone had been drinking:

Sometimes my family, they want grog and all that or cigarette. But I just walked away now to take my anger somewhere else down there [to the beach] you know, instead of standing there, I just going to hit them (Man, 33, remote).

Although not necessarily a target of the pressure themselves, this demanding behaviour had been mentioned in interviews with eight other participants (aged between 23–48 years), who perceived ‘family pressure’ as one of the reasons for drink driving in their community and as something that needed to be overcome to address the behaviour.³ One respondent, who had been convicted of drink driving on several occasions, recalled being an observer to a number of situations where there was constant pressure to drink drive. His perception was that family pressure to drink drive was having an impact at a community level. He believed that having a licence made people targets for such demands and reported that people in the community went to great lengths, including not applying for drivers’ licenses, in order to avoid being pressured:

I have seen other families fighting over drink driving. Some people are pressured to drive. They say no. But that whole ‘family responsibilities’ [aspect] comes into it. You can’t say no. They drive then they get caught. Some people are avoiding getting their licenses so they don’t get that family pressure. [if they don’t have a licence] they won’t be asked to drive (Man, 42, remote).

The situation whereby the person with the licence was pressured appeared in the regional setting also, as the following quote illustrates:

I was the only one with a licence. I got pressured to do it...no one else had a licence (Man, 45, regional).

There was, however, an opposing view regarding the criteria for which people were most likely to be pressured to drink and drive. Another respondent believed that people with a valid licence in the community targeted unlicensed friends and family to drive the vehicle home in order to avoid detection themselves, as reported below:

I think people who are pressed into drink driving are...they usually the ones without a licence. People who have a licence don’t want to lose it and use it against people who don’t have a licence (Male, 29, remote).

³ The authors acknowledge that this account was not about the speaker’s own behaviour and so may not have aligned with what the driver in the situation may have thought.

4.2.2 The attitude factors that influence drink driving among Indigenous drink drivers

4.2.2.1 We can do it – management of the risks

Generally drink driving was considered to be a dangerous road practice by participants with many suggesting drink driving contributes towards ‘accidents’ and that the behaviour was ‘dangerous’. However, most participants expressed the view that driving while intoxicated was the only option to reach the intended location at the time. At the same time, the risks directly related to drink driving were perceived by some participants as able to be managed. For example, one respondent described collective decision making whereby the ‘safest’ person in the group was nominated to drive. According to this respondent, the group makes this assessment by identifying the person who has had the least amount to drink. It appears that such decision processes may also be based on beliefs that there are degrees of drunkenness and that these correspond to one’s ability to drive the vehicle. Alternatively, a group member may self-identify as feeling the most sober to drive, as described by the respondent below:

Well whoever’s going to be pretty much sober, like say three of them, two of them are rotten drunk. 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. But there is no rule like that. But that is what the thinking is like, from a sense of safety, but it doesn’t matter because they over the limit. That’s what happens [though], whoever is pretty much sober or hasn’t had much to drink usually drives (Man, 28, remote).

You might be sittin’ around havin’ a drink and a vehicle parked at the front...there could be a number of people. And I’ve been there. One of ‘em will put their hand up and they’re...Most of them- they’re all over the limit. They don’t really- really um...worry about it you know. So it’s just- I guess, the last person that’s who’s least drunk, drives? Or the person- just whoever puts their hand up...it’s everybody. Everybody... mouths off, “Oh come on. You’ve only had a couple (Man, regional).

The respondent from the remote region above acknowledged that it didn’t matter who from the group drove, as it was likely that all group members would be over the legal blood alcohol limit. However as this quote illustrates, the group were still interested in the notion of travelling safely.

Another apparent strategy adopted in an attempt to have some control over the situation was cautious driving such as travelling at a reduced speed, as highlighted in the following quote:

When I was driving back from [community name] was when I got caught. I was driving below 80km/h when I was intoxicated but I was driving safely (Man, 30, remote).

4.2.3 The environmental factors that influence drink driving among Indigenous drink drivers

4.2.3.1 Youth learning from older role models

Within the narratives, some participants reported observing older family members’ drink driving practices. There were reports of intervening in this behaviour at times in the name of safety of others. For instance, the following respondent recalled an occasion where he was in a motor vehicle with other children and his uncle, who was driving under the influence of alcohol. The respondent reportedly took over the responsibility of driving for his uncle as the following quote outlines:

I was 13 when I learn to drive...I told him [uncle] “you pull over, we got kids on board”...He was drunk coming from [community name] to here. I told him “Look, can I drive?”...So he didn’t listen to me. I put

my hand, and turned the ignition off and took the key. I told him "you better get at the back there or in the passenger seat and I'll drive (Man, 38, remote).

It appeared from this, nominating oneself to drive in the name of safety although unlicensed and not of legal driving age was learned at a young age.

[I learnt to drive at]...like thirteen [and] always been around drinkers...around drink driving a bit yeah (Man, 30, regional).

While not directly commenting on their own behaviour, other drink driving participants were of the opinion that drink driving behaviour and alcohol misuse was precipitated by the exposure to such behaviour by parents or adult figures during formative years:

But it come[s] down to role models too. The parents drink and drive and the young ones see that...it normalises drink driving (Man, 42, remote).

...children witness their parents being alcoholics all their life, so they grow up the same way. They witness their parents drink driving, they do the same thing (Man, 35, remote).

4.2.3.2 Changes in community circumstances: Alcohol restrictions

Although specific questions about alcohol management plans were not asked in the interview schedule, it was evident in the narratives that participants were angry about the perceived impact the alcohol management plans had on their behaviour. Some participants alleged their drink driving behaviour only commenced after the introduction of the alcohol restrictions and as a direct result of it. One participant was of the opinion that people who previously used to walk to the tavern to drink and were therefore not engaging in drink driving were now having to drive to obtain alcohol and thus being apprehended for drink driving, as illustrated by the following quotes:

I didn't start getting caught for drink driving until 2008 when this community become dry [alcohol free] (Man 29, remote).

For some participants, the alcohol restrictions had changed the location where they had consumed alcohol, including the outskirts of town. However a large proportion (68%) of participants reported drinking at home remained one of the places they regularly consumed alcohol.

4.2.3 Strong binge drinking culture

From the narratives regarding alcohol use, it was evident that there was "a real binge drinking culture" (Facilitator 2). When discussing their drink driving behaviour, participants reported consuming large quantities of alcohol as the following quotes illustrate:

We started drinkin', me and a mate of mine like we had thirty, we bought a thirty pack of cans. And we had fifteen each over the whole day. And then I went mid-range cos' I was still over the limit from the night before (Man, regional).

Facilitators expressed a view that the culture of binge drinking in the remote setting was more prevalent compared with regional areas and that this may help to explain the higher range blood alcohol concentrations recorded for drivers apprehended:

Rather than perhaps say more in the Cairns area, where someone will go to the pub, have a few more than what they should have and then get picked up by the police. These guys [in remote areas], if they are driving, are going to be max high rather than just high (Facilitator).

There was evidence from the respondent narratives that drinking alcohol was a regular activity, consuming large periods of time and was often part of normal activities, as illustrated by following participants:

We go to one house and drink all day and someone there is looking for transport... Then maybe they find a way in [to regional centre with licensed venue] and come back with the grog and then we still there. Then the grog finish we move from house to house. Then we just go ask family for loan and all that, for just another drink. We just keep going and going and going (Woman, 26, remote).

4.2.4 Protective factors

4.2.4.1 Connecting with new support systems

Kinship support

The provision of family support was pivotal to avoiding further offending and was identified by almost all participants who self-reported no longer engaging in drink driving. The support from family was offered through various strategies. On some occasions, this included an agreed upon strategic plan between the respondent and one or more family members or friends. The strategies often involved surrendering the motor vehicle or the keys to the respondent's support person, in order to avoid temptation while drinking. Selling the vehicle was another measure for habitual offenders.

Agency support

Some participants were of the opinion that external agencies such as Alcohol Tobacco and Other Drug Services (ATODS) had been beneficial in assisting them to abstain from drink driving. From the narratives, community-based drug and alcohol counselling services offered participants an environment to learn alcohol education and to explore potential underlying reasons for excessive alcohol use. The agencies also provided long-term emotional and motivational support as the following quotes highlight:

ATODS really got stuff outta me. I shared my story. I go to ATODS anytime I can. I been talking about why I was drinking so much. But they taught me about how drinking harms you and damages your health... I went to ATODS after I was done for drink driving. I sometimes still go. Just now and then for like top ups (Man, 49, remote).

...the change of attitude I got [was] from seeing a psychologist... she makes you work out how it's affecting other people in your family... (Man, P21, regional).

Agency support was sometimes vital after participants were convicted. Being caught was sometimes a catalyst for contemplating changing offending behaviour and access to services assisted with this.

Participants also found the supervision they received under Probation and Parole valuable. Being kept accountable for their behaviour appeared to be one of the reasons why this support was valuable after being apprehended and convicted for drink driving as the following quotes highlight:

I'm on probation at the moment. They are alright. Checking up on me (Man, 29, remote).

Probation is good. I was on probation. It kept me out of trouble when I was going straying (Woman, 23, remote).

4.2.4.2 Alcohol no longer has control

Participants who self-reported that they had been able to avoid drink driving reported that abstaining or reducing the level of their drinking had enabled this change. The following quotes demonstrate this:

I certainly pulled down, I have slowed down very much, slow down big time. I slow down big time... Never feel like I want to touch it again (Man, 51, remote).

I change the way I drink now (Man, 42, remote).

4.2.5 Content recommendations

4.2.5.1 Give us the skills to avoid it

Participants who had reformed were of the opinion that knowledge they didn't have while drink driving was imperative to understanding the effect of drinking on their driving and regaining control over their drinking behaviour in order to make an informed decision on when it was safe and legal to drive.

After being apprehended, some of the participants were court ordered to complete treatment with community-based drug and alcohol counselling services, while others nominated to attend rehabilitation centres in regional centres for a period of months. It was in these environments that participants' alcohol knowledge improved, including learning the concept of a standard drink and the process of alcohol breakdown in the body. Some participants believed this had assisted them in reforming as they now appeared to have greater control of their drinking and were able to make an informed decision about what effect drinking had on their body and also their driving safety and recommended that these concepts should be included in the content of the program for their community, as the following quotes demonstrate:

After I found out about ATODS...I talk to them...I found out something new that our teachers never taught us. Maybe how alcohol affected you...Not many understand about these little pictures...what's all this...talking about standard drinks. I tried drinking in standard drinks. I started eight standard drinks for a bit. I didn't wake up with a hangover. That's how I count drinks now...They should talk me about this. Sharing...just talking about it (Man, 51, remote).

Teach people about what alcohol does to your reaction time and that when it's in your system. And how you can make more mistakes on the dirt and hit animals if you are drink driving (Man, 36, remote).

Standard drinks was a real insight for me. I tried drinking standard drinks for a while there. Teach you about your health and what this substance does. I think to myself 'wow I been over pouring, not like standard drinks' (Man, 51, remote).

For some participants, access to drug and alcohol services or rehabilitation was the first opportunity they had had to learn about the effect of alcohol on driving. Some participants had the perception that this limited understanding existed because of people never holding a licence or having any formal road safety education:

People haven't held licenses. They drive with never holding a licence. They have never sat a test so they never learn all this stuff about alcohol and driving. Teach them about how alcohol affects driving (Man, 26, remote).

Facilitators were also of the opinion the older attitudes supportive of drink driving still exist in the community as the following quotes illustrate:

We have a generation out there that was from the old school where back in the days, it was okay to drink drive. You know, um, it was okay to drink and then drive, uh, and then all of a sudden what's happened is that the law has enforced these rules but they're still used to that old rules, so- so in saying that, like, you'll still have those people from that generation where they grew up knowing that it was okay to drink drive (Facilitator).

As mentioned in the quote below, teaching planning ahead strategies would be worth considering. Some participants had not or did not have the ability to put these plans into action. However, they did attribute this as to why they may have been caught in the first place:

Teach people how to find someone to drive people around and plan early. Plan ahead and get a sober driver (Man, 28, remote).

We had like a sober bob thing here which was pretty good. The guy that ran it though, his name was bob so he changed it to sober pete. It taught people how to organise a sober driver prior to going out drinking and how to stick to the plan. It is all about sticking to the plan. That worked well (Man, 51, remote).

Make sure people have plans, make sure they have sober people around, that they have a designated driver. Make sure they have left their keys with someone else (Man, 20, remote).

If they do drink, teach to give someone the keys, don't put that temptation on you. If they go to the pub, teach 'em to leave their car there and catch a taxi (Man, 29, remote).

The majority of participants reported that existing deterrence-based countermeasures offered offenders little insight into the context of offending. Drink driving participants were of the opinion that these penalties did not teach offenders why they were drink driving or how to reduce future opportunities to offend as the quotes below demonstrate:

Jail works for some people. But others come back and drive again. They don't learn anything...how to stop (Man, 42, remote).

Same with fines and jail. Most the time guys don't learn why they are doing it (Man, 34, remote).

Community service and jail doesn't help. People come back to the community after jail and get back in the cycle (Man, 37, remote).

Them other things, community service, don't teach people anything (Man, 36, remote).

Jail isn't going to stop people. You in there a few months then come back out but people don't learn why they drink drive (Man, 32, remote).

Completing some form of rehabilitation or drug and alcohol treatment in prison was also not sufficient to encourage some participants to abstain from alcohol use. Some of the participants' narratives indicated that rehabilitation was futile if the respondent was returning to an environment with family or friends who were abusing that particular substance:

Except I found it hard cos' I was goin' back out to a family and uhh, goin' back out to friends that use drugs. I didn't have support. So you know, that's how I reckons a big thing too in rehabs and boys coming in – get clean and sober, their family and friends are still drinking. So they're goin', they're coming in and getting clean and sober and getting fit and healthy, but going back to the same situation (Man, 30, regional).

You got to address alcohol and give strong support. There's no follow up when you come out of prison. No contact to see how you're doing. There are some programs in Lotus but they aren't useful. Then when you get out, you get into the same cycle again. I had to look at my family and get them to help me (Man, 42, regional).

4.2.5.2 Information on cannabis use and driving

Information on how alcohol and driving reaction time was not the only information participants suggested. Some participants also reported that education on cannabis and driving as also important as the following quotes illustrate:

Gunja is also a problem. They should be taught about gunja and driving (Man, 37, remote).

Information about the message that it's like you drink drive when you are under the influence on drugs (Man, 29, remote).

Chapter 5: Findings Phase 3

The following chapter discusses the process evaluation related to piloting the Indigenous drink driving rehabilitation program. A summary of the content of the developed program manual is provided, as well as the delivery process.

This chapter also discusses the feedback and recommendations resulting from focus groups and individual interviews with drink drivers. The focus groups used program facilitators who assisted in delivering the pilot program community members and participants in the pilot program. The program was piloted in the Clarence Valley, Northern New South Wales, as well as Cairns Region and Cape York, Far North Queensland.

5.1 Program outline

The findings of the current research, coupled with evidence-based best practice supported the development of an Indigenous drink driving rehabilitation program that should be undertaken in a cultural setting and comprised of a number of components. The components include a 4–6 hour session that could be conducted over a day or across 4 weekly 60–90 minutes sessions. Upon completion of the program (developed by Ms M. Fitts), participants are encouraged to attend weekly meetings of a men's or women's group in which issues related to drink driving are discussed on a regular basis and support provided to adopt safer driving habits. The program's key focus is on the impact of drink driving and issues relating to family pressures, risk taking, pre-colonial Indigenous values, general alcohol problems, and alcohol and cannabis education. Components of the program were piloted in a one day session in a number of Indigenous communities situated in Clarence Valley, New South Wales as well as Cairns Region and Cape York, Queensland.

The delivery of the content was undertaken in a cultural setting and made use of visual media, storytelling, yarning and interactive discussions among group participants without the need for participants to engage in writing. A DVD was developed from stories of people in the study communities who volunteered to be videoed while discussing their drink driving behaviour and the impact of drink driving on themselves and family members. The main purpose of the DVD and other materials used in the program was to create a safe environment that encouraged program participants to share their story within the group. The program material was delivered by a range of people, including the government workers with experience in delivering Indigenous specific programs, local drug and alcohol workers, and community Elders. Importantly, the program was delivered by people known by community members and/or identified as an Aboriginal and/or Torres Strait person. An invitation to attend the pilot was extended to community members, service providers and people with a history of drink driving. For more specific details of each site, see below.

As the organisation of the program was conducted locally by the justice group coordinator or the community elders, the program was piloted in different locations and varied in the number of facilitators. A brief summary of the location of each is described below:

5.1.1 Site 1

This program was delivered in an outdoor area that could be utilised by the local Indigenous community and was within walking distance to the local Indigenous community. The outdoor area was among the rainforest. Some of the community members who attended hung up artwork among the trees and pathways that had been completed by community members and Elders about drink driving. The group sat in a circle and the group members were able to move freely when needed. Catering was delivered early in the program and afforded the opportunity for discussion to continue while having lunch. The delivery of the program was

conducted by the Elders and the research team. At the end of the program, the Elders and community members had organised for some art time, whereby each member of the group painted their hand and left a print on the canvas to remember the occasion.

5.1.2 Site 2

The program was delivered in the local regional town. It was intended to be delivered in the local Indigenous community to minimise the transport needs of program participants. However, all facilities within walking distance of the Indigenous community were not available on the dates local community organisations were available to deliver the program. The program was, therefore, delivered in the regional centre. The program was facilitated by the justice group coordinators in the region, in conjunction with a NSW Roads and Maritime Services worker and Indigenous drug and alcohol clinician, both experienced in delivering Indigenous programs. There was a core group of participants who stayed for the full day. However, there were some people who stayed for a few hours and left for other commitments. Morning tea and lunch were provided, and there were regular breaks throughout the program. Again, program participants and other attendees were able to come and go outside throughout the program sessions when needed.

5.1.3 Site 3

Components of the program were delivered in a remote setting. The location was a local building used for programs in the community. This location was within walking distance of the program participants' residences. Materials were delivered informally, with participants and facilitators in a yarning style circle.

5.2 Characteristics of drink drivers who completed the program

Feedback about the content and best delivery approach of the pilot program was obtained from program participants and facilitators, as well as other community members who attended. A list of the attendees is presented in Table 7.

Table 7: Characteristics of individuals who provided feedback on the pilot program	
Cairns Region	No of participants
Program participants	8
Elders	5
Community Members	3
Cape York	
Program participant	9
Facilitator	1
Clarence Valley	
Program participants	2
Service providers	7
Elders	2

Table 8 provides information about the characteristics of the programs participants who provided feedback. The majority of the program participants were male and were not currently the holder of a valid driver licence. The majority of program participants were 40 years of age or older.

Table 8: Age, gender and driver licence status of program participants

Participants	Cape York	Cairns Region	Clarence Valley
Age			
>25	2 (22%)	1 (12%)	0
26–39	0	5 (62%)	0
40+	7 (78%)	2 (26%)	2 (100%)
Gender			
Male	9 (100%)	8 (100%)	1 (50%)
Female	0 (100%)	0 (100%)	1 (50%)
Driver licence status			
Yes	3 (33%)	1 (12%)	2 (100%)
No	6 (67%)	7 (88%)	0 (100%)

5.3 Feedback from participants and facilitators

At the completion of the pilot, feedback from program participants, facilitators and other attendees was sought through the completion of focus groups, individual interviews and written responses.

In the excerpts that appear below, gender, age and location (remote or regional) of the respondent are given at the end of each quote, so that the reader can have a sense of the ‘voice’ of the respondent.

5.3.1 Identifying with the information

Program participants reported they were able to identify with the information including the circumstances the drink drivers on the DVD spoke about, as well as the terminology used. The ability to identify with the reasons why the drink drivers depicted in the DVD drove while intoxicated was perceived as one of the most important strengths of the program as the following quotes illustrate:

Better listening to our own mob than listening to the Northern Territory all the time. [We were able to] talk about our own problems here in Cape York (Man, 51, remote).

Some program participants reported that listening to how others were able to learn from their drink driving experience encouraged them to consider the same strategies in their life and community, as the following quote illustrates:

It was good...You could have a conversation after hearing [about other drink drivers] experiences... putting solutions in about what you had listened to for your own life...if it's working for those guys, their solutions could work here (Man, regional).

The research team also noted that program participants remarked about knowing the landscape of where the interviews with DVD drink drivers was taken; that is, on the river of a particular community.

The content of the stories between regional and remote communities, covering being the ‘hero’, family pressure and risk taking to access more alcohol resonated with program participants in all settings. However, some program participants found the DVD with the remote drink driving stories difficult to understand and recommended that there should be subtitles.

5.3.2 Community ownership

5.3.2.1 Safe environment: My country

The location to deliver the program was chosen by organisations or community people; that is, the Elders or the justice group of each community. For one community, it was decided that because of the sensitive nature of the program, delivery should be undertaken outside ‘on country’ as this would be considered a safe environment. The majority of participants reported that they were comfortable in this environment and felt culturally safe, as the following quotes illustrate:

It was my land, my place, my backyard. At least I know I can do anything in my backyard. It is where my ancestors are (Man, 38, regional).

It was a peaceful place, no interruptions. Everyone had turns in speaking (Man, 37, regional).

At the same pilot site, community members and Elders included the opportunity for participants to create an artwork at the end of the program. Elders asked each person who attended to paint their palm and leave a hand print on one of two canvases. It appeared that completing the artwork symbolised the ownership Elders and community members had in the project. Additionally, for the group, the pilot of this program was the start of the development of other road safety strategies as the following quote demonstrates:

I think incorporating the artwork as well, all the participants having their hand prints there. That is something that's connecting us all. So that's something that will, something that we can all look at in the future as well. So we are reminded how important today (Community Member, regional).

5.3.2.2 Learning from my Elders

The Elders had a prominent role in facilitating the program in all three communities, particularly the second session. The Elders were also able to be referred to, to answer questions and provide guidance where necessary in relation to the cultural values of the kinship system.

Knowledge acquired from the Elders through storytelling appeared to be a beneficial way for participants to connect to information about drink driving and the risks involved engaging in the behaviour, as the following quotes demonstrate:

*Yeah I was listening to the elders, the way [the elder] was talking, he was talking the truth...and it touched me. It's not worth it getting behind the **way** when you're pissed (Man, 48, regional).*

I felt comfortable having the elders. Making them tell their stories, how I could use that information to help me and my brothers when they are going to get in the car driving drunk (Man, regional).

The creation of the community ownership and the empowerment of the Elders to facilitate the program led to the notion of creating longer term support by the Elders during the program and continuing with the momentum present at the program:

The last thing that was talked about was that support group and I'm all for it...You know it sort of brings us back all together as a family thing you know. That we know that there is some help amongst us (Elder, regional).

In respect to the delivery of one of the pilot programs, due to time constraints and the manner in which issues were discussed by group members, it was not possible to cover the whole content of the program. However, it is important to note that not being rigid about adhering exactly to the program schedule and allowing the natural progression and discussion of the information appeared to resonate with the majority of participants:

And everybody had their say which is a good thing (Elder, regional).

I think everybody had respect for each other because there were a lot of personal stories shared today and it would have been very difficult to share those (Community person, regional).

This was also evident in other areas where the program was piloted and material was not covered thoroughly due to time restraints:

I think the discussion, 'cause there were a few things that were skipped over a bit too fast and I don't know if that's because it got a bit too long and then have to cut segments out. I found that at the end, we sort of had to rush a little bit (Man, 51, regional).

5.4 Recommendations from participants and facilitators

5.4.1 Delivery considerations

5.4.1.1 Sensitivity issues

Some program participants reported they were not prepared for the local stories related to drink driving fatalities that appeared on the DVD. The following program participant recalled as the quote below illustrates, he believed the program would be mainly educational and found it difficult to listen to the stories from his community:

Tell you the truth, it was supposed to be about drunk driving, but everything got emotional that's why I walked off...my expectation was that we just talk about drunk driving (Man, 48, regional).

This participant left during the midpoint of the program. He didn't return and was debriefed by a drug and alcohol clinician from the community. At a follow-up after the program, he recommended that during recruitment to the program, program participants should be strongly advised the program is not only educational, but also includes some information and material that can be emotionally distressing.

5.4.1.2 Involvement of local services

Program participants from both regional and remote pilot sites recommended representatives from other agencies who have direct contact with drink drivers in the justice, health and employment services should be present during segments of the program. It appeared the underlying motivation for this recommendation was different for each agency. Program participants recommended the health and justice systems to be included so that they could support the program participants through education and counselling. Organisations with employment opportunities were also recommended to be involved to provide new training opportunities and employment positions at the end of the program with the intention of encouraging program participants to maintain their driver licence:

I would have liked the justice group to be there (Man, regional).

Should be a police officer here, to encourage us not to drink drive, to be safer on the road. They are only doing their job. And from the health services to learn about alcohol and drugs and all that (Man, regional).

Say royal flying doctors, and the mining company to encourage the men to keep their licences...I was thinking of...once they finish with that they could get some kind of award for appreciation, that will make them feel, like being a new beginning for them. Build up their confidence (Man, 54, remote).

In the remote setting, several program participants recommended a representative from the police would be important to include as a guest speaker. It appeared this was to improve the relations with police and the community. Some of the program participants expressed that they felt the relationship had been comprised because of the enforcement of alcohol restrictions:

It would be important to have the police come, to close the gap between us and the police (Man, 21, remote).

The police are pushed into a corner to by the government. But they've got to [do] their job (Man, 51, remote).

5.4.1.3 Broader community approach

In the circumstances leading up to their last drink driving offence, a number of program participants, as mentioned earlier (see section 4.2.1.2) were pressured to drive by older family members. Some of these program participants considered that a program addressing drink driving only would not be a successful option to reducing drink driving behaviour as the original motivator, the kinship pressure, would continue. Rather, program participants recommended a small leadership group would support the drink driver in high-risk situations to enable the drink driver to build confidence in saying no:

It was an elder that put pressure on me. They put pressure on you. You can't say no. If you're being a leader or if you're protected by a community leader, a leadership group, then you can say no (Man, 37, regional).

Other program participants recommended the inclusion of program components that provide the opportunity for the program participant to confront the family member who was applying pressure in safe environment:

Tell them, the ones that are pressuring what it's been like, and have a yarn with them and let them know how you feel (Man, 50, remote).

5.4.2 Content considerations

5.4.2.1 Just part of a broader program

The content of the program included information about alcohol and cannabis. Program participants recommended more discussion on health and psychological aspects in the program. Additionally, it appeared that participants required information about the factors that facilitated alcohol misuse and impeded a healthy lifestyle.

Health needs to be promoted more, people are stressed out. They have financial, hardship, family pressure, community pressure. Need to get more into nutrition...I think that will make it a good process, more with the health [focus] (Man, 54, remote).

There are other things that 'cause that drink driving like jealousy and because of relationships...[and] alcohol is not the main problem it's their mind and they need help. I think that is why sometimes they, the young ones go off. It's anger, it's about anger management. That's what they need (Man, 51, remote).

Some program participants indicated that they wanted a greater understanding about what constituted the offence of drug driving and the effects of drug driving:

More information about drug driving...and what's the criteria of being charged with drug driving and what constitutes the charge (Man, regional).

I worry about other stuff, I think it could already be here, and mixed with alcohol and marijuana (Man, 51, remote).

5.5 Similarities and differences between Queensland and New South Wales

It is also worth noting that there were some similarities and differences regarding the delivery style and content of the discussion during the pilot of the program in Queensland and New South Wales. In relation to delivery, the programs were all delivered in a relaxed and casual environment, with a yarning-style discussion whereby group members were able to get up and move around freely. In respect to the observations made during programs, as well as the positive feedback at the completion of the program, it was confirmed this was the preferred method to deliver the content in at all sites.

There were some differences noted in the discussion of factors related to drink driving between the two locations. In Queensland, discussion was primarily focused on the effect of kinship pressure, as well as the perceived effect alcohol restrictions and subsequent police enforcement of these restrictions have on drink driving in regional and remote communities. For both of these issues, there was a lot of anger, as well as resentment towards family members. In New South Wales, kinship pressure was discussed. However, a greater range of issues were covered in this program including 'bravado' mentality of among youth, as well as the perceptions and attitudes of drink drivers, and the effect of alcohol on the body. The relationship between drink driving and alcohol access was discussed, but not in the same context. For example, transport is required to drive from isolated communities to the regional centre to access alcohol from a licensed venue and this has reportedly contributed to drink driving in the region.

Chapter 6: Discussion

This chapter summarises the main results from each phase of the project and the implications of the findings for the development of an Indigenous drink driving rehabilitation (healing) program. The chapter concludes with recommendations for the development of a mandated drink driving program for Indigenous offenders, with directions for future research.

6.1 Prevalence and characteristics of Indigenous drink driving convictions

The findings from this project whereby five years of Indigenous specific drink driving conviction data was examined indicated that the drink driving conviction rate for Indigenous people in Queensland is 6 times that of the general Queensland drink driving conviction rate (DTMR 2011). There were 9,323 convictions, of which the majority were for male persons (77.5%). Half (52.6%) of the convictions were of persons <25 years of age. The age of the drink driver was significantly different across the five regions for males only, with a larger number of convictions in the 'very remote' region of persons over 40+ years of age. In regards to the data analysed, increased remoteness was found to be linked with high-range BAC ($\geq 0.15\text{g}/100\text{ml}$) convictions for both males and females. The large proportion of high-range BAC offences was not only a concern in more remote areas, with over 40% of convictions from all regions (except metropolitan) falling into the high-range BAC category.

Monetary penalties were the primary sentence received in all regions. It is difficult to estimate with certainty whether monetary penalties were a deterrent, as the drink driving histories of individuals were not analysed to identify if monetary penalties had an impact on future drink driving behaviour. However, with a high rate of drink driving convictions for Indigenous peoples across Queensland, it is reasonable to conclude that the existing penalties do not significantly deter drink driving for a large percentage of Indigenous drink drivers. Community-based orders were only used in 5–10% of cases, as a sentencing outcome for Indigenous drink drivers. In regards to the qualitative findings in Study 2 (see section 4.2.4), long-term support from probation supervision was a key aspect of assisting drink drivers to desist from the behaviour. More could be done to harness this, through the use of community-based orders, combined with drink driving programs to address drink driving behaviour.

In relation to imprisonment, the average proportion of female and male drink drivers who received a prison sentence at sentencing was 2% and 8% respectively. It is expected that this is an underestimation of the number of Indigenous peoples spending time in a correctional centre for drink driving-related matters. Other evidence suggests original penalties such as unpaid fines led to imprisonment for a high number of Indigenous drink drivers (ATSB, 2006). Additionally, there is also evidence that suspension or disqualification of a driver licence because of drink driving can often lead to further driving-related offences including unlicensed driving (ATSB, 2006; RTA, 2008).

6.2 Psycho-social, cultural and contextual factors for drink driving in Indigenous regional and remote communities

The findings from interviews with drink drivers and program facilitators suggest there is a complex interplay of social and cultural factors that influence the drink driving behaviour of Indigenous peoples in regional and remote communities in Australia.

Drink driving was associated with family or communal activities and socialising, with participants describing situations where they were at licensed venues with family members or drinking with a group and driving to purchase more alcohol prior to being apprehended. There appear to be social consequences for community members who resist the kinship values. These consequences noted in the current study described by some participants include family friction, isolation and feelings of marginalisation. The unique cultural context; that is, the entrenchment of drink driving behaviour through a reciprocal values system is similar to kinship values assigned to other Indigenous road behaviours including unlicensed driving in Australia (Siegel, 2002) and drink driving in First Nation communities in Canada (Rothe et al., 2005).

The interviews from the current research revealed that there appears to be a culture of 'bravado' connected to drink driving, particularly among the younger cohort. In this regard, Indigenous persons have similar motivations to those of drink drivers in the general population (Leung & Starmer, 2005). Most of the Indigenous drink drivers described drink driving as dangerous and acknowledged the influence it has on the risk of being in a road crash. For some drink driver participants, the ability to drive was assessed based on their physical attributes and their self-assessment of their level of drunkenness and ability to drive (i.e., ability to walk). Furthermore, many drivers held the belief their driving actions; that is, driving carefully and slowly, could mitigate any additional risks their intoxication could cause to the probability of a road crash. The literature indicates that a false belief about one's ability to drive while intoxicated is often due to a limited understanding about the impact of BAC levels on driving, a misunderstanding about what BAC level constitutes a standard drink and how to decide if they are within the legal BAC driving limit.

Some drink driver participants self-reported that they continue to drink drive. The primary difference between these participants and those who self-reported that they no longer engaged in the behaviour was their alcohol consumption. Participants who no longer drove after drinking were abstaining or reducing their alcohol consumption, engaging in healthy lifestyle choices and had new behavioural and cognitive skills including assertiveness and decision making. Conversely, alcohol use played a large part in the lives of participants who were continuing to drink drive. Alcohol use in the narratives of self-reported drink drivers was often described in an environment where there was boredom and other drug use including cannabis. In this study, a high number of participants in remote communities admitted to being cannabis smokers. A proportion (20%) of the remote participants recalled driving under the effect of both alcohol and cannabis. However, none of the participants recalled being randomly drug tested by authorities. The content of the program must have a broader approach rather than focusing on drink driving alone. Participants require new behavioural and cognitive skills, as well as setting short and longer term goals to produce behavioural change.

The aim of the current study did not directly examine the impact of alcohol restrictions on the prevalence of drink driving. Nevertheless, it became evident in the narratives of Indigenous people in remote communities with a history of drink driving that alcohol restrictions may compound the drink driving problem. The challenges drinkers face in identifying legal transport to access alcohol and the related pressure this places on them and their extended family to drink drive are evident in the transcript recordings (See section 4.3.3). Some drink driver participants perceived their personal involvement in drink driving as being enhanced or as direct result of the introduction of total alcohol prohibition at the end of 2008.

Overall, the findings from Phase 2 identified key components of the program: it must address kinship pressure, as well as the 'bravado' mentality among younger drink drivers through an informal 'yarning circle' environment where participants are afforded the opportunity to learn how other people from their own community were able to overcome the pressure from others to drink drive. Education on alcohol and cannabis was also considered important in order for participants to understand alcohol and cannabis, and their effects on the body and driving.

6.3 Pilot testing of the program in regional and remote communities

In the research process, an important feature was the acknowledgment of the political and cultural differences of each community site where the pilot program was conducted. This led to the organisation of delivery location and coordination of facilitation to be decided by community Elders, justice groups or other locally coordinated groups. By organising the program in this manner, there was greater community ownership of the program and empowerment over the issue of drink driving being the responsibility of the community as opposed to outsiders ('the research team'). Moreover, including local personnel in the organisation of the program afforded the opportunity to ensure local language was used for the terminology of key words such as for substances (alcohol and cannabis) in the delivery material.

In all program pilot sites, program participants were able to identify with the information, concepts related to the motivations to drink drive and the attitudes towards drink driving risk. Program participants were able to identify with the key terms, namely 'being the hero', 'standing straighter' and kinship pressure. Therefore, program participants also indicated they were able to identify with the stories of the drink drivers in the DVD and found the suggested drink driving prevention strategies to be of value. The footage on the DVD of vision of community people and landscapes ('country') that program participants could identify with appeared to make program participants comfortable and maintain interest in the material during each session. The positive feedback received has been attributed to the community control over the program's conceptualisation and development (see section 5.3.2).

Yarning Circles were conducted in a friendly and appropriate manner, with sharing of stories during the program, encouraging free and open dialogue, being flexible; that is, the inclusion of artwork in one of the regional programs and respecting the experience and expertise of Indigenous program participants. However, there were differences in the timing of the program. For example, in some instances, this was the first opportunity for program participants to share their story and the effect drink driving had had on them, that is, imprisonment or death of a family member. This resulted in some content not being covered in the pilot, including the information on standard drinks. In another pilot, all the material was covered; however, some program participants remarked that they would have liked more time to discuss some of the more important things like strategies for people to avoid drink driving. In the design of the program, consideration must be given to appreciating that there is a substantial amount of community grief and loss is associated with the implications of drink driving and appropriate time must be afforded to this in each session.

In summary, during the program sessions, there was an opportunity to discuss the physical, emotional, social and cultural dimensions of drink driving. Participants seemed to find it helpful to talk about how drink driving and problems with alcohol impacted on their life, as well as learning the new behavioural, cognitive and lifestyle changes other drink drivers had made to refrain from drink driving. This positive feedback, as well as the program recommendations from program participants, gives credence to the benefit of underpinning the program using the community reinforcement approach (Meyer et al., 1995). This model is primarily focused on discouraging drinking and alcohol-related behaviour through familial, social and recreational reinforcers and exercising new communication skills drink driving and driving refusal and problem solving. Most importantly, the model is adaptable and can be made culturally appropriate to meet the needs of the target audience (Miller et al., 1999).

6.4 Recommendations for a drink driving program in Indigenous regional and remote communities

The pressure to drink drive in a culture that emphasises group identity and belonging and additionally, where alcohol is a shared commodity and consumption is communal in nature, requires a shift in focus to viewing

the environment of drink driving among Indigenous peoples as a collective, as opposed to an individual phenomenon. While existing mainstream drink driving programs primarily focus on the individual (Dwyer & Bolton, 1998; Mills, et al., 2008), a worthwhile approach for a drink driving program targeting Indigenous populations may be to focus on the extended family or community and its role for the individual convicted of the offence. A program with a family-centred component could attempt to explore the kinship value system and its effect on maintaining unhelpful behaviours. Indeed, the importance placed on the wellbeing of family among Indigenous Australians (Penman, 2006) provides a valuable chance to engage all parties in prevention.

The findings of the current research indicates that a multipronged approach is necessary, combining public education, media campaigns and court-mandated therapeutic drink driving programs in order to reduce drink driving behaviour in the future.

In relation to the mandated drink driving program, the following recommendations are made:

- 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.
- Multi-agency involvement in the delivery of the program. Primary facilitation by a local person(s) in conjunction with personnel from the justice (police, probation and parole and justice group) and health services at various parts of the program.
- Delivery of program material to be conducive to 'group yarning' with media and visual activities in an environment participants feel comfortable in.
- It is highly recommended there is little to no writing required by program participants having regard to the fact that English is often their second language and their education standard may have been limited.
- Concepts that foster confidence and self-esteem in learning.
- Outstation-style setting with the introductory session occurring over one day (4–6 hours). This should be followed by a number of weekly sessions (60–90 minutes duration) for a period of 4–6 weeks. These sessions will expand on the issues covered in the day introductory session.
- It is recommended that strategies be developed for issues related to drink driving to become an ongoing discussion in both women's and men's regular community group meetings. It is believed this process 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 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 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, which 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 2 hourly 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 condition.
- Fees for voluntary non-convicted drinkers participation in the program to be waived.

6.5 Recommendations for future research

This is one of the first studies of its kind to explore in-depth the psycho-social, cultural, social and contextual factors of Indigenous drink driving in outer regional and remote Australia. The findings reported here have several implications for further research. First, it is recommended that similar research be conducted to replicate findings. Indigenous communities comprise unique and diverse groups. There may be other variables that contribute to drink driving behaviour or different delivery methods recommended.

Second, over the course of the project, some of findings in study 2 were outside the scope of this project and require further exploration. For example, other drug use including cannabis was also mentioned in the narratives and the context of driving. There is limited understanding of the attitudes held among Indigenous people towards drug driving. It is recommended more research be undertaken to explore what type of attitudes and knowledge Indigenous drivers have in regard to drink driving-related issues. Lastly, it was noted that some drink driver participants in the remote communities believed that the prohibition of alcohol restrictions in their community influenced them to drink and drive. Hence, the issue of alcohol management plans and their possible impact on drink driving requires further research.

6.6 Limitations

A number of limitations in regards to this research are worth noting. For example, the current program of research was based on self-reports from a small sample of Indigenous residents convicted of drink driving from regional centres in Clarence Valley, Northern New South Wales and regional and remote communities in Cairns Region and Cape York, Far North Queensland, as well as program facilitators and community members. Studies incorporating in-depth qualitative interviews of this kind usually employ small samples because the focus is to understand the rich detail of people's experience rather than obtaining population estimates. In each region, thematic saturation (the notion no new themes arise and therefore data collection is completed) was reached. Thus, there it was considered additional interviews would not have revealed other risk or protective factors.

Another limitation that impeded the collection of information related to language and cultural differences between the researcher and participants. In respect to the interviews conducted in Far North Queensland, English was sometimes not the language used at home. Furthermore, English can often be a third or fourth language with participants fluent in several dialects of the local tribal language. If the interviews had been conducted in a local dialect, this may have produced more in-depth responses. Although participants were asked if they would prefer to complete the interview in their local language with the assistance of an Elder to translate, all participants decided to complete the interview in English. To a large extent, the limitations related to language and culture were overcome through utilising the support of people well known by the community.

Of the interviews conducted in remote Cape York, Far North Queensland, only four interviews were audio-recorded. Recording the interview content by hand may have impacted on the accuracy of the material transcribed. However, it was the authors' intention to ensure that collection of information, which might be quite sensitive, was carried out in an appropriate manner. There was an initial reluctance among some drink drivers in the remote communities to complete an audio-recorded interview. Some potential participants were concerned about what the information would be used for. As mentioned (section 2.2.2), community spokespeople had advised that the first round of interviews should be completed by hand. At the end of the interview, the responses were reiterated to the participants to ensure accuracy of terminology and that the transcript was accurate. It was not until the first author believed she had built sufficient trust with community members that some participants were asked if the conversations could be audio-recorded.

6.7 Conclusion

The current program of research is one of the first of its kind in Australia and offers preliminary findings that shed light on the social, cultural and contextual factors, as well as the motives that influence drink driving behaviour in regional and remote Indigenous communities in Australia. The findings have been beneficial in guiding the development of a culturally appropriate drink driving (healing) program to reduce drink driving and hence reduce the high fatality and injury rate associated with this behaviour. The current research is an early step and an essential one to understanding the factors related to drink driving in Indigenous communities and how best to address them.

The current research indicates that there is a need for the development of multi-layered and multi-agency preventive and treatment measures in order to address injury issues in remote Indigenous communities. With respect to the issue of road-related deaths and injuries, there is a specific need to address this issue in culturally sensitive ways that will encourage community members to progress from the culture of accepting that one is a hero if he/she takes the risk to drive after drinking to a culture of being healed from unsafe driving practices. The findings of this study indicate that alcohol and unsafe driving issues should be a matter for ongoing discussion in community groups to assist the community to adopt safer driving practices. Unless safer driving practices can be achieved, injuries and deaths in regional and remote communities will remain high and largely associated with drink driving.

References

- Australian Bureau of Statistics. 2011. *Australian Demographic Statistics*. Cat No. 3101.0. Canberra: ABS.
- Australian Bureau of Statistics 2006. *Population Distribution, Aboriginal and Torres Strait Islander Australians*. ABS cat no. 3238.0 Canberra: ABS.
- Australian Institute of Health and Welfare. 2004. *Australia's Young People 2003: Their health and wellbeing*. Cat No. PHE 50. Canberra: AIHW.
- Australian Institute of Health and Welfare 2004. *Rural, Regional and Remote Health: A Guide to Remoteness Classifications*. Rural health series no.4. Cat. no. PHE 53. Canberra: AIHW.
- Australian Institute of Health and Welfare 2012. *Juvenile Justice in Australia, 2010-2011*, Cat no.. JUV 10. Canberra: AIHW.
- Australian Transport Council (2011). *National Road Safety Strategy 2011-2020*. Canberra: ATC.
- Barnes, H.M. (2000). Collaboration in community action: a successful partnership between indigenous communities and researchers. *Health Promotion International*. 15(1), 17-25.
- Bessarab, D., & Ng'andu, B. (2010). Yarning about yarning as a legitimate method in Indigenous research. *International Journal of Critical Indigenous Studies*. 3(1), 37-50.
- Breen, H. (2012). Risk and Protective Factors Associated with Gambling Products and Services: Indigenous Gamblers in North Queensland. *International Journal of Mental Health and Addiction* 10 (1), 24-38.
- Centre for Accident Research and Road Safety – Queensland and Queensland Transport. (2003). *Indigenous Licensing Project: Research Report*. Brisbane: CARRS-Q.
- Clapham K, Senserrick T, Ivers R, Lyford M, Stevenson M 2008. Understanding the extent and impact of Indigenous road trauma. *Injury* 39 Suppl 5, 19-23.
- Dawson D, Grant B, Stinson F, Zhou Y 2005. Effectiveness of the Derived Alcohol Use Disorders Identification Test (AUDIT-C) in Screening for Alcohol Use Disorders and Risk Drinking in the US General Population. *Alcoholism, clinical and experimental research* 29 (5), 844-854.**
- Department of Families, Housing, Community services and Indigenous Affairs. (2011). *Northern Territory Emergency Response: Evaluation Report 2011*. Canberra: FAHCSIA.
- Department of Families, Housing, Community services and Indigenous Affairs. (2009). Report on the Northern Territory Emergency Response Redesign Consultations. Canberra: FAHCSIA.
- Department of Health and Ageing (2007). Alcohol treatment guidelines for Indigenous Australians. Canberra: DOHA.
- Department of the Premier and Cabinet 2002. *Meeting challenges, making choices: the Queensland Government's response to the Cape York Justice Study*, Brisbane: Queensland Government.
- Department of Transport and Main Roads 2012. *Department of Transport and Main Roads Annual Report 2010-11*. Brisbane: DTMR.
- Department of Transport and Main Roads (2011). *Drink driving in Queensland: A Discussion paper*. Brisbane, DTMR.
- 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. Paper presented at the Paper presented at Road Safety Conference 1998 - Research, Policing and Education, Wellington, New Zealand, 16-17 November 1998.
- Edmonston, C., Steinhardt, D & Siskind, V. (2008) The role of 'context' in understanding and preventing Indigenous road trauma in rural and remote areas: "It's not all black and white...". Presentation to Fourth Indigenous Road Safety Forum, Cairns, Queensland, 29-31 October 2008.
- Ferguson, M, Schonfeld, C, Sheehan, M & Siskind, V. (2001). *The impact of the "Under the Limit" drink driving rehabilitation program on the lifestyle and behaviour of offenders*. ATSB Monograph, CR187. Commonwealth of Australia, Canberra.
- Finney, J.W. & Monahan, S.C. (1996). The cost-effectiveness of treatment for alcoholism: A second approximation. *Journal of Studies on Alcohol* 57 (3), 229-243.
- Fitzgerald, T. (2001) *Cape York Justice Study*. Brisbane, Queensland Government.
- Gibbs, J. Crime punishment and deterrence. New York: Elsevier, 1975.
- 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, J.E. (2013). *Injury of Aboriginal and Torres Strait Islander people due to transport: 2005-06 to 2009-10*. Injury research and statistics series 85. Cat. no. INJCAT 161. Canberra: AIHW.
- Helps, Y. & Moller, J. (2007). *Aboriginal People Travelling Well Literature Review: Driver Licensing Issues, Seat Restraint Non-compliance, Aboriginal Health, Aboriginal Disability*. Australian Transport Safety Bureau, Canberra.
- Hudson, S. (2011). *Alcohol Restrictions in Indigenous Communities and Frontier Towns*. New South Wales, The Centre for Independent Studies.
- Kunitz SJ, Woodall WG, Zhao H, Wheeler DR, Lillis B, Rogers EM 2002. Re-arrest rates after incarceration for DWI: A comparative study in a South-western. *American Journal of Public Health* 92(11): 1826-1831.
- Lee, K.S.K., Conigrave, K.M., Clough, A.R., Dobbins, T.A., Jaragba, M. J. Patton, G.C. (2009). Five-year longitudinal study of cannabis users in three remote Aboriginal communities in Arnhem Land, Northern Territory, Australia. *Drug Alcohol Review* 28 (6), 623-630.
- Leung, S., & Starmer, G. (2005). Gap acceptance and risk-taking by young and mature drivers, both sober and alcohol-intoxicated in a simulated driving task. *Accident Analysis Prevention*, 37 (6), 1056-1065.
- Margolis, S.A., Ypinazar, V.A., Muller, R., & Clough, A. (2011). Increasing alcohol restrictions and rates of serious injury in four remote Australian Indigenous communities. *Medical Journal of Australia* 194 (10), 503-506.
- Meyer, R.J. & Smith, J.E. (1995). *Clinical Guide to Alcohol Treatment: The community reinforcement Approach*. New York: Guilford Press.
- Miller, W.R. & Willbourne, P.L. (2002). Mesa Grande: A methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction* 97 (3), 265– 277.
- Miller, W.R., Brown, J.M., Simpson, T.L., Handmaker, N.S., Bien, T.H., et al. (1995). What works? A methodological analysis of the alcohol treatment outcome literature. In Hester, R.K. & Miller, W.R. (Eds.), *Handbook of Alcoholism Treatment Approaches: Effective Alternatives. 2nd Ed.* (pp. 12-24). Boston, MA: Allyn & Bacon.
- Miller, W.R., Meyers, R.J., & Hiller-Sturmhöfel, S. (1999). The community-reinforcement approach. *Alcohol Research & Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism*, 23(2), 116-121.
- Mills, K.L., Hodge, W., Johansson, K., Conigrave, K.M. (2008). An outcome evaluation of the New South Wales Sober Driver Programme: a remedial programme for recidivist drink drivers. *Drug Alcohol Review* 27 (1), 65-74.
- Meyers, R.J., Roozen, H.G., Smith, J.E. (2011). The Community Reinforcement Approach: An Update of the Evidence. *Alcohol Research and Health* 33(4), 380-8.
- National Health and Medical Research Council (2003). *Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research*. Canberra: NHMRC.
- Office of Road Safety. Indigenous Drink Driving and Licensing Strategy: Final Strategy Report. Perth: Office of Road Safety. 2007. (unpublished)
- 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, G. R., Sheehan, M. C., & Schonfeld, C. C. (2006). Review of the under the limit drink driving rehabilitation program. Centre for Accident Research and Road Safety – Queensland. Brisbane, Queensland.
- Penman, R. T. (2006). The 'growing up' of Aboriginal and Torres Strait Islander children: A literature review, Occasional Paper No.15. Canberra: Department of Families, Community Services and Indigenous Affairs.
- Queensland Trade and Treasury. (2012). Queensland Regional Profile for Cape York Region. Brisbane: Queensland Government.
- Queensland Government (2005). Meeting challenges, making choices, Evaluation. Brisbane: Queensland Government.
- 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., pp. 324-339
- Road and Traffic Authority (2008). *An Investigation of Aboriginal Driver Licensing Issues*, Sydney, New South Wales Government, RTA.
- Rothe, P., Makokis, P., Makokis, L., Steinhauer, S., Aguiar, W & Brereton, G (2005), *Drinking and driving in horizon: A holistic description through the lens of a community talking circle*. Alberta, Centre for Injury Control and Research.
- Saunders, J.B., Aasland, O.G., Babor, T.F., de la Fuente, J.R. and Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction* 88 (6), 791-804

- Siegel, N. (2002). Is White Justice Delivery in Black Communities by "Bush Court" a Factor in Aboriginal Over-representation Within Our Legal System?. *Monash University Law Review* 28 (2), 268-298.
- Siskind, V., Steinhardt, D., Sheehan, M., O'Connor, T., Hanks, H., (2011). Risk factors for fatal crashes in rural Australia. *Accident Analysis and Prevention* 43 (3), 1082–1088.
- Slesnick, N., Kang, M. J., Bonomi, A. E., & Prestopnik, J. L. (2008). Six- and Twelve- Month Outcomes among Homeless Youth Accessing Therapy and Case Management Services through an Urban Drop-in Center. *Health ser res.* 43(1), 211-229.
- Skinner, B.F. (1974). *About Behaviourism*. New York: Knopf.
- Stafford, M.C., & Warr, M. (1993). A reconceptualization of general and specific deterrence. *Journal of Research in Crime and Delinquency* 30, 123-135
- Steinhardt, D.A, Sheehan, M., & Siskind, V. (2009) The effectiveness of using a simple ARIA based geographical classification to identify road crash patterns in rural and urban areas of Queensland. Paper presented at Road Safety Research, Policing and Education Conference, Sydney, New South Wales, 24-26 September 2009.
- Trimboli, L & Smith, N. (2009). *Drink-driving and recidivism in NSW*, *Crime and Justice Bulletin* no. 135, Bureau of Crime Statistics and Research, New South Wales.
- Tsey, K., & Every, A. (2000). Evaluating Aboriginal empowerment programs: the case of Family Wellbeing. *Australian NZ Journal of Public Health* 24 (5), 509-514.
- Woodall, W.G., Delaney, H.R., Kunitz, S.J., Westerberg, V.S, & 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), 974-987.

