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Drink Driving Offenders in a Rural Community:

A Profile of Drink Driving Offenders in Regional Queensla

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Centre for Accident Research and Road Safety – Queensland Queensland University of Technology

COMMONWEALTH DEPARTMENT OF TRANSPORT AND REGIONAL SERVICES



Department of Transport and Regional Services Australian Transport Safety Bureau

Drink Driving Offenders in a Rural Community: A Profile of Drink Driving Offenders in Regional Queensland

PART OF THE EVALUATION OF THE 'UNDER THE LIMIT' DRINK DRIVING REHABILITATION PROGRAM

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Abstract

This study formed part of the evaluation of the "Under the Limit" drink driving rehabilitation program in regional Queensland. Face-to-face interviews were carried out with a sample of 149 offenders on the day they appeared in court on a drink driving charge. The interview schedule included measures identified in the literature as potentially contributing to recidivism – sociodemography, mental health status, alcohol consumption, social support and self-esteem, questions pertaining to knowledge, attitudes and drink driving behaviours, hearing outcomes of the offender's drink driving court appearance, and prior criminal and traffic history. Overall, the typology of the rural drink driving offender in Central Queensland is similar to typologies found in other jurisdictions. Offenders in this study generally had high BAC readings for their current drink driving offence, and many had an extensive history of criminal and traffic offences. Knowledge of legal BACs was fairly high among offenders, while knowledge of the number of drinks required to place an individual over this legal limit was quite low. Knowledge of the effects that alcohol has on the body was quite poor in some instances. The risk of alcohol problems within the offender sample was high with many offenders being at moderate-to-high risk of alcohol problems. In addition, offenders were more likely to want to change their driving habits as opposed to their drinking habits to avoid future drink driving episodes. In general, the level of social support experienced by offenders was high, with the highest level of support coming from family members.

Keywords

Drink driving, profile, lifestyle factors, histories, Mental Health Inventory, SSA, ISEL, AUDIT, Readiness to Change Scale

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(2) The views expressed are those of the author(s) and do not necessarily represent those of the Commonwealth Government.

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Executive Summary

Rationale for the resear

Drink driving remains a major health and economic problem for industrialised countries. Interventions and strategies developed for rehabilitation of drink drivers need to target the specific needs of this subgroup within the population.

Much work in this area has been conducted in United States and European jurisdictions in which the legal climate governing drink driving and its punishment differs from the rural Queensland perspective. This report presents a profile of drink driving offenders from the Central Queensland region. It establishes base-line data on socio-demographic and lifestyle characteristics, and measures of knowledge, attitudes and behaviours. It also provides baseline data for the measurement of the effectiveness of the "Under the Limit" (UTL) drink driving rehabilitation program.

The methodology

Face-to-face interviews were used to assess knowledge, attitudinal and lifestyle factors among drink driving offenders. Offenders who participated in this study were 149 drink drivers appearing before a Central Queensland court on a drink driving charge between January and September 1997. Offenders were interviewed on the day of thei court appearance in one of three courthouses located in the intervention region.

The interview schedule included measures identified in the literature as potentially contributing to recidivism. These were:

- socio-demography of the offender sample including age, gender, marital status, education, employment status, and licence type.
- hearing outcomes of the offender's drink driving court appearance suspension periods, fines, other offences heard on the same day, and the BAC reading for the drink driving offence.
- offenders' prior criminal and traffic history
- questions pertaining to knowledge, attitudes and drink driving behaviours
- alcohol consumption
- mental health status, social support and self-estee

Normative data for the Mental Health and Social Support scales was obtained b surveying a sample of TAFE students from the Central Queensland region.

Because gender is considered to be an important variable in drink driving behaviours, all analyses were examined for gender differences.

Socio-demographic Characteristics of Rural Offenders

Drink driving offenders had a mean age of 31 years, were mostly male and single, with a greater proportion being of Aboriginal and Torres Strait Islander background than in the regional population. Few offenders were educated beyond the Year 12 standard, with the majority having only completed the junior level of education.

At the time of their interview, the majority (58%) of offenders were employed and many of these were in full-time employment.

Their income distribution was bimodal with peaks at the 'less than \$12,000' and '\$20,001 to \$35,000' income levels. The majority of offenders were in the former income category, with most of those offenders being unemployed and/or on pensions. The latter income group represented the median income for offenders in paid employment.

Most offenders, at the time of their court appearance, were holders of an open licence.

The typology of the rural drink driving offender in Central Queensland is similar to typologies found in other jurisdictions. The rural Australian sample were somewhat more likely to be drawn from the older 25-34 year age group and to be unemployed and receiving a relevant pension.

Hearing Outcomes

Offenders in this study generally had high BAC readings for their current drink driving offence, with over one-third of the sample having a BAC reading above 0.15gm/100ml

Long licence disqualification periods (mean = 8.8 months) were administered for the drink driving offence with the longest periods being administered to offenders with higher BAC readings.

Offenders who undertook the UTL program as part of their rehabilitation generally had their fine waived or reduced. As a result, fines for this group of offenders were substantially lower than the fines administered to offenders who stayed within the mainstream sentencing procedures.

Traffic and criminal history

Offenders had an extensive history of criminal and traffic offences. Many offenders a the time of their court appearance were also appearing for offences in addition to the drink driving charge, mainly unlicensed or disqualified driving. Approximately one-fifth of the total sample had been charged for drink driving at least once in the 5 years prior to their interview.

One-quarter of offenders had also been charged for criminal offences in the 5 years prior to their interview, mostly "public order" and "offence against property" crimes.

Knowledge

While knowledge of legal BACs was fairly high among offenders, especially wit respect to open licensed drivers, **knowledge of the number of drinks required to place an individual over this legal limit was quite low**.

Inaccurate knowledge of the effects that alcohol has on the body appears quite high and indicates that inaccurate knowledge may be one contributing factor to the level o drink driving by this group.

Attitudes

Some offenders demonstrated deviant attitudes toward drink driving with man believing that drink driving behaviours are common. There was a strong belief that harsher laws against drink driving are not needed.

For many offenders, licence disqualification was considered a reasonable punishmen for drink driving offences, while jail terms were seen in a less favourable light.

Although many offenders believed there is no excuse for drink driving, approximately half the sample indicated that they would still drive after consuming enough alcohol t place them over the limit.

Many offenders believed that if they drove while over the limit they would be picked up for drink driving.

Behavioural Intentions

Many offenders indicated that they would adopt new drinking and driving strategies in order to reduce the likelihood of re-offending.

The sample as a whole indicated that "taking a taxi" and "having a driver that does no drink" were the most viable alternatives to drink driving in the future.

The offender sample were least likely to agree to "drink lite beer" and to "avoid shouts".

In general, offenders were more likely to prefer changing their driving habits to changing their drinking habits to avoid future drink driving episodes.

Self-report behaviours

Self-reported alcohol consumption levels within the offender sample were high, with the highest consumption over a weekend period occurring on Fridays and Saturdays.

The level of self-reported drink driving was high with over two-fifths of the sample reporting drink driving more than once in the last 6 months.

Mental Health and Social Support

The level of mental health experienced by offenders in this sample was high but did no differ to normative levels. Social support, as measured by the Social Suppor Appraisals Scale, for offenders in this sample was generally high. Male offenders reported receiving more support from friends than males in the normative sample.

Support from family members appeared greater than support from friends or others in the social network of an offender. Self-esteem support and tangible support received by the offender sample were high, but in most cases did not differ from the normative data.

Males in the offender sample were found to have higher self-esteem support than males in the normative sample. Differences in the variables that influence self-esteem suppor for the offender and normative samples may be the cause of the higher self-estee support experienced by male offenders. For offenders, Self-esteem Support scores were mostly related to support from others, while for the normative sample, mental health was the most important predictor of self-esteem support. That is, self-estee support appears to be related to extrinsic sources for offenders and intrinsic sources for the normative sample.

Risk of alcohol problems and readiness to change

The risk of alcohol problems within the offender sample was high with many offenders being at moderate-to-high risk of alcohol problems.

Compared to the regional population, the offender sample was at higher risk of alcohol dependence. Problems with alcohol are a central or defining characteristic of many o these drink driving offenders.

The number of offenders who indicated that they were in the process of changing their drinking habits was similar to the number of offenders who were denying a problem exists.

Many of the offenders who were classified as being most at risk of alcohol dependence were not aware of their alcohol problem and were not taking action to change it.

1 Introduction

1.1 Background

Drink driving remains a major health and economic problem for industrialised countries. In Australia in 1995, approximately 30% of all fatal road crashes where the driver/rider had been tested for alcohol, were associated with blood alcoho concentrations (BACs) above the legal limit for driving (ie 0.05gm/100ml or more; Single & Rohl, 1997). Ginpil and Attewell (1994) found that alcohol intoxication was more likely to be a contributing factor in fatal crashes caused by male drivers (37%) compared to fatal crashes caused by female drivers (16%).

Whilst the level of alcohol involvement in fatal crashes is quite alarming it highlights the extent of the drink driving problem and the need for countermeasures tha effectively target this behaviour within society. However, developing drink driving interventions that produce behaviour change is often a complex and difficult task. To optimally target drink driving behaviours within the community, a complete understanding of the characteristics of drink driving offenders must be sought. This is to ensure that interventions and strategies developed for drink drivers are tailored to the specific needs of this subgroup within the population. A comprehensive review o the most recent work in this area is presented in Ferguson, Sheehan, Davey and Watson (In Press).

1.2 Drink Driver Profiles

Over the last 20 years many researchers have attempted to define or profile drink driving offenders. Much of this research has focused on the predictors of recidivis and examined a range of socio-demographic and lifestyle characteristics. The research has consistently shown that drink driving and recidivist drink driving are associated with characteristics such as:

- Male
- Young age (generally between 18-24)
- Single or divorced
- Unskilled or blue collar occupation
- Low education/literacy leve
- •

(Hedlund, 1995; Macdonald & Dooley, 1993; Nickel, 1990; Peck, Arstein-Kerslake, & Helander, 1994; Sheehan, 1993).

Drink drivers also tend to have a more extensive history of criminal and traffic offences. Generally this has included more reckless driving convictions, more non-moving traffic convictions and more malicious behaviour convictions (Macdonald & Dooley, 1993; Peck et al., 1994). Drink drivers have also been shown to be more influenced by the legal consequences of drink driving and less fearful of the community

reaction, than the general population (Thurman, Jackson & Zhao, 1993). From their research, the authors concluded that "opinions which constrain the general (and mostly law-abiding) population from drunk driving . . . fail to do so effectively among the subsample of likely offenders for whom this behaviour might be considered more normative" (p. 261).

1.3 Applicability to the Rural Context

It should be noted that much of the work in the area of drink driving has been conducted in United States and European jurisdictions. However, the legal climat governing drink driving and its punishment within these jurisdictions differs from the Australian perspective, and more especially the Queensland perspective. In most US states the legal BAC is 0.10gm/100ml (Simpson & Mayhew, 1993) which is higher than the legal limit in Australia and may reflect differences in drinking culture and acceptance of drink driving behaviours. When differences, for example with lega limits, exist between jurisdictions it can often result in problems when applying research findings across jurisdictions.

Differences can also exist between rural and urban areas in the prevention, detection and intervention of drink driving (Harrison, 1996). For this reason, drink driving research conducted within urban or metropolitan jurisdictions may not be applicable t the rural case. There are many environmental and geographica factors which ensure that the experience of drink driving is different between rural and urban areas. Some of these factors include:

- The probability of detection in rural areas is low
- Rural communities tend to be smaller, close knit communities (ie they have high social cohesion)
- Rural regions tend to have fewer enforcement staff and environmental supports available
- Traffic law enforcement can be expensive on low traffic volume roads
- Available alternatives to drink driving (eg public transport) are limited in rura areas
- Rural drivers tend to travel greater distances to drinking establishments and have limited available routes on which to travel

(Elliott & Shanahan, 1983; Harrison, 1996; Travelsafe, 1999).

1.4 Focus of this Report

The current research develops a profile of drink driving offenders that focuses specifically on a rural Australian region. The region investigated was the Centra Queensland region, which is characterised by a young population with the majority o individuals being in the economically active age range (ABS, 1998b). The region has a strong industrial base with significant employment in agriculture, forestry manufacturing, wholesale and retail trade, and mining industry (ABS, 1998b). The car is the major form of transport in the Central region (Douglas, 1999), with the risk of

fatality in a road crash being higher in this region compared to metropolitan areas (Travelsafe, 1999). Further, the alcohol consumption per capita in Central Queensland is slightly higher than the state average (Sheehan, Schonfeld, & Davey, 1995).

This report establishes base-line data on measures of knowledge, attitudes and behaviours of rural drink drivers. It is based on the collection of baseline data used for an examination of the effectiveness of the "Under the Limit" (UTL) drink driving rehabilitation program that is being trialed in Central Queensland. The research projec was funded by the Federal Office of Road Safety.

2 Method

2.1 Procedure

Face-to-face interviews were used to assess knowledge, attitudinal and lifestyle factors among drink driving offenders. Offenders were interviewed on the day of their court appearance in one of three courthouses located in the intervention region (Rockhampton, Gladstone, or Yeppoon), between January andSeptember, 1997. Due to the nature of the legal system, the timing of offender interviews was scheduled to fit in with the offender's court appearance. As a result, some interviews were conducted prior to and some interviews were conducted immediately after the offender's court hearing. Offenders who completed the interview prior to their hearing agreed to supply data on the outcome of the hearing as they were leaving the court.

Participation in the study was voluntary and offenders signed a consent form indicating they understood and agreed with the conditions of the study prior to their interview. The interviews took approximately half an hour to complete. At completion of the interview, offenders were paid \$25 for their assistance.

2.2 Subjects

Offenders who were recruited for participation in this study were 149 drink drivers¹ appearing before a Central Queensland court on a drink driving charge between January and September 1997. Seventy-two percent of offenders in this study were interviewed at the Rockhampton court, 26% were interviewed at the Gladstone court, and 2% were interviewed at the Yeppoon court. These proportions reflect the size and jurisdictions of these courts (Queensland Police Service, 1997).

2.3 Content of Interviews

The interview schedule used in this study was designed to include measures identified in the literature as potentially contributing to recidivism (Ferguson et al., In Press) and factors previously raised as of potential importance in the design of the UTL rehabilitation program (see Sheehan, 1994). It included measures of socioeconomic status, mental health status, alcohol consumption, social support and self-esteem, al with questions pertaining to knowledge, attitudes and drink driving behaviours. The interview schedule is presented in full in Appendix 1.

Many of the measures and scales used in the interview schedule had never been reported on a sample of drink driving offenders. Consequently, normative data for these scales with respect to the drink driving population was not available. In order to provide comparable normative data, a sample of TAFE students from the target rural region were surveyed around the same time on several of the scales used in the

¹ The sample originally consisted of 150 drink driving offenders. However, it was found that one offender was a juvenile offender and this offender has been excluded from the data.

offender interview. Results from this normative sample, along with a description of the recruitment strategy, are presented in Appendix 2.

The interview schedule included questions on the following issues:

- Socio-demography of the offender sample. This included age, sex, marita status, education, employment status, and licence type. Age, sex, marital status and education level were also obtained for the normative sample.
- Hearing outcomes of the offender's drink driving court appearance included suspension periods, fines, other offences heard on the same day, and the BAC reading for the drink driving offence. Offenders' prior criminal and traffic histor was also collected.
- Knowledge questions focused on legal BAC levels, safe drinking levels, and factors that will reduce BACs.
- Attitudinal questions covered issues such as the perceived dangers of drink driving, appropriate penalties, and whether it is acceptable to drink and drive under certain conditions.
- Behavioural intentions examined alternatives to drink driving and assessed the likelihood that an offender would perform them in the future.
- Self-reported behaviours included measures of alcohol consumption and level of drink driving.
- Mental Health Inventory (Ware, Gandek, & the IQOLA Project Group, 1994) The Mental Health Inventory (MHI5) measures the level of subjective menta health or psychologica well-being experienced by an individual over the previous month. An example question is "How often during the last month have you fel downhearted and blue?" The scale is a 5-item measure scored on a 5-point scale. Negative items are reversed and the sum of the five items produces the scale score. Scores for the scale can range from 0 to 20, whereby a '0' indicates high mental health and a '20' indicates low mental health. The MHI5 has been used to detect depression among a general population sample and found to perform equally as well as the General Health Questionnaire and a longer 18-item version of the Mental Health Inventory (Berwick et al., 1991). Local normative data was obtained for this scale (see Appendix 2).
- Social Support Measures Two measures of social support were used in this study: the Social Support Appraisals Scale (SSA; Vaux, 1988) and the Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck, & Hoberman, 1985). Local normative data were obtained for these scales and results are presented in Appendix 2.
- a) Social Support Appraisals Scale The SSA measures the degree to which an individual is loved by, esteemed by and involved with others from their

social network. There are three subscales within the SSA: the 'Family' subscale (8 items); the 'Friends' subscale (7 items); and the 'Others' subscale (8 items). Example questions include "My family cares for me very much" (Family Subscale); "My friends respect me" (Friends Subscale); and "I feel valued by other people" (Others Subscale). Along with these three measures, a total scale score can be calculated. Items within the SSA are scored on a 4-point scale with negative items being reversed before summing to form the respective scales. Both the Family and Others subscales have a possible range of 8 to 32; the Friends subscale has a possible range of 7 to 28; and the total scale score can range from 23 to 92. A low score indicates high social support and a high score indicates low social support. The SSA has been shown to correlate with other measures of social support, for example, the Perceived Social Suppor Scale (r = .85), the Social Support Questionnaire (r = .46 to .57) and the Inventory of Socially Supportive Behaviours (r = .57; O'Reilly, 1995).

Interpersonal Support Evaluation List - Four subscale scores (Self-estee b) Support, Tangible Support, Belonging Support, Appraisal Support) and a total scale score can be calculated for the ISEL and are used to examine the functional aspects of social support. Items in the Belonging and Appraisal subscales were found to be inappropriate for the sample being examined, so only the Self-esteem Support and Tangible Support subscales were retained in the interview schedule. Self-esteem support examines the availability of a positive comparison when comparing oneself with others. An example question is "Most people I know think highly of me". Tangible support measures the degree to which the respondent believes they can find instrumental aid and support from those surrounding him/her at the time. An example question from the Tangible Subscale is "If I were sick, I could easily find someone to help me with my daily chores". The Self-esteem Support and Tangible Support Subscales are 10-item measures scored on a 4-point scale. Scores can range from 0 to 30 and are obtained by reversing negative items and summing the item values. A '0' indicates low social support and a '30' indicates high social support. The Selfesteem Suppor subscale has been shown to correlate with the Rosenberg Self-esteem Scale (r = .74, p< .001; Cohen et al., 1985). A negative relationship between the ISEL and both the Beck Depression Inventor and measures of psychiatric symptomatology have also been found (Cohen et al., 1985).

• Alcohol Use Disorders Identification Test (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) – The AUDIT is a series of questions that examine a person's drinking behaviours to determine if an alcohol problem exists. An example question is "How often do you have six or more drinks on one occasion?" Items are scored between 0 and 4 and summed to form the AUDIT score (range 0 to 40). Scores can then be re-coded into three levels of risk: no or low risk of harmful consumption, risk of harmful consumption, and risk of alcohol dependence.

Readiness to Change Scale (Heather & Rollnick, 1993) – The Readiness to Change scale is a measure of a person's position or readiness to change their drinking habits. Individuals rate a series of statements on a 5-point scale. An example statement is "I enjoy my drinking but sometimes I drink too much". The measure yields three scale scores and the scale with the highest score is taken as the person's readiness to change. The scales are Precontemplation, Contemplation, and Action and represent the stages in the Prochaska and DiClemente model of change (Heather, Rollnick, & Bell, 1993; Prochaska & DiClemente, 1986). An individual who falls into the Precontemplation group generally is not aware of their drinking problem and is taking no action to change it. An individual classified in the Contemplation category generally has accepted the presence of an alcohol problem, but once again is not in the process of changing their drinking habits. Finally, an individual who falls into the Action category has both accepted his/her alcohol problem and is taking action to change it. The readiness to change questionnaire is associated with measures o self-reported drinking behaviour (Rollnick, Heather, Gold, & Hall, 1992) and appears to predict changes in drinking behaviour over time (Heather et al., 1993).

2.4 Statistical Analyses

Statistical analyses carried out in this report were conducted using the Statistica Package for Social Sciences, Version 8 (SPSS Inc, 1998). Because of the large number of tests involved, the Type I error rate was set at p<.05.

3 Results – Sample Profile

3.1 Socio-demographic Characteristics

A range of socio-demographic variables was examined during the offender interviews. Gender differences were assessed for all variables and those variables where a significant difference was found will be reported.

3.1.1 Gender

Of the total sample of 149 offenders, 79.9% were male. Comparison of the offender sample with the normative sample of TAFE students (see Appendix 2) for gender showed a significant difference ($\chi^2(1) = 35.80$), with the offender sample having fewer females (20.1%) than the normative sample (51.5%).

3.1.2 Aboriginalit

Eleven percent of the offender sample was of Aboriginal or Torres Strait Islander background. Compared to population data which suggests that Aborigines and Torres Strait Islanders make up approximately 4.3% of the population in the region (ABS, 1998a), the offender sample appears to comprise a greater proportion of Indigenous people.

<u>3.1.3 Age</u>

Table 1 shows the age distributions of the offender and normative samples. The mean age of the offender sample was 31.0 years (SD=11.2 years) with a median of 28 years. The most common age group was the 'less than 24 years' age group, with over threequarters of the offender sample being 34 years or less. As can be seen from Table 1, more offenders fell within the 25-34 years age group compared to the normative sample. However, comparison of the offender sample with the normative sampl showed no significant difference in age (t(349) = 1.41). The mean age for the normative group was 29.3 years (SD=12.0 years) with a median of 25.5 years.

	Offender Sample (%) Normative Sample	
Age Group:		
<24 years	36.2	48.5
25-34 years	31.5	19.8
35-44 years	18.8	18.3
45-54 years	10.1	10.4
55+ years	3.4	3.0
Marital Status:		
Single	60.4	46.6
Married	14.1	38.2
De facto	14.8	7.8
Divorced	4.0	3.9
Widowed	0.7	
Separated	6.0	3.4

Table 1 Age distribution and marital status of the offender sample (N = 149) and normative group (N = 204)

3.1.4 Marital Status

Over half (60.4%) of the offender sample were single whilst more than one-quarter (28.9%) were in a relationship at the time of the interview. This is markedly less than the number of students from the normative sample who were in a relationship at the time of the survey (46.1%). Table 1 shows the breakdown of marital status for both the offender and normative samples. A significant difference in marital status was found between the two samples ($\chi^2(5) = 27.54$). Respondents in the normative sample were more likely to be married and less likely to be single than respondents in the offender sample ($\chi^2(1) = 20.39$).

3.1.5 Education

The highest education level that was most commonly reported by offenders was the Junior (Year 10) level of education (51.4%). Only 14.9% of the offender sample had gone beyond a Senior (Year 12) standard of education, having completed either TAFE/apprenticeship or University/CAE. The distribution of level of education for the total sample (N=148) is presented in Figure 1.

Figure 1 Highest Education Level completed by Offenders



Comparison between the offender group and the normative sample on education level not surprisingly found a significant difference ($\chi^2(5) = 47.57$). Just above one-third (35%) of respondents from the normative sample had gone beyond a Year 12 standard of education. This figure is comparable to the Australian Bureau of Statistics data which indicates that approximately 35% of the region had attained an educational qualification above the Year 12 standard² (ABS, 1998b). However, the most common education level completed by the normative group remained the Junior (Year 10) leve by 30.9% of the sample.

In the 6 months prior to the first interview, 18.1% (N = 27) of the offender sample had begun or completed an educational course of some kind. Most commonly this was a trades course (48.1%), with the remaining courses being professional or university courses (25.9%), workforce or education re-entry courses (eg skillshare; 14.8%), the "Under the Limit" rehabilitation program (3.7%), or multiple courses (7.4%).

3.1.6 Employment

Approximately 42% of the offender sample were unemployed at the time of their court appearance. The employment characteristics of those offenders who were employed a this time (N = 86) are presented in Table 2. If employed, offenders were more likely to be employed in full-time work. However, females were less likely to be employed in full-time work and more likely to be employed in casual work than males ($\chi^2(2) = 6.23$). Females were also more likely to be employed in sales and para-professiona occupations and less likely to be employed in a tradesperson field than males ($\chi^2(7) = 1$).

² ABS data for education levels included individuals aged 15 years and above, whereas the samples used in this study included individuals aged 18 years and above. Compared to the samples in this study, ABS data for the region will therefore under-represent the percent of individuals who had attained an education level beyond the Year 12 standard.

23.63). Caution should be used when interpreting these results given the small number of females in this study.

Table 2

Employment characteristics of male offenders (N=71) and female offender (N=15) employed at the time of their interview^a

	Male Offenders (%)	Female Offenders (%)
Type of employment (hours)		
Full-time	73.2	46.7
Part-tim	8.5	6.7
Casual	16.9	46.7
Occupation ^b		
Manager	4.2	
Professional	10.0	
Para-professional	2.8	20.0
Tradesperson	42.2	13.3
Clerk		6.7
Salesperson	10.0	40.0
Machine Operator	4.2	
Labourer	23.9	20.0

^a Percentages may not add to 100 due to missing data.

^b Occupation was classified according to the 1991 Australian Bureau of Statistics census directory of classifications (Castles, 1991).

3.1.7 Pensions

Approximately half (48.0%) the offenders were receiving some form of governmen assistance or pension at the time of their interview. Table 3 shows the distribution o male and female offenders across pension type. Female offenders were more likely to be receiving a pension than male offenders ($\chi^2(1) = 4.45$), with the most common type of pension being the Sole Parent Pension. Males on the other hand most commonl received Newstart or Jobsearch allowances. Of the offenders who were receiving a pension at the time of the first interview (N = 71), 83.1% were unemployed.

Table 3

	Male Offenders (%)	Female Offenders (%)
Sole parent pension	11.5	36.8
Newstart allowance	32.7	10.5
Job search allowance	26.9	15.8
Family pension	1.9	
Parenting allowance		10.5
Disability pension	9.6	
AUSTUDY	5.8	
Aged pension	1.9	5.3
Service pension	3.8	
Sickness pension	3.8	5.3
Multiple pensions	1.9	15.8

Pension type for male offenders (N=52) and female offenders (N=19) receiving a pension at the time of their interview

3.1.8 Income

The median income category for the offender sample was \$12,001-\$20,000. Figure 2 shows the distribution of offenders across income categories. Approximately 44% o offenders had an income of less than \$12,000. Sixty-two percent of those offenders were unemployed *and* receiving a government pension. The median income categor for those offenders who were employed at the time of the first interview (N = 86) was '\$20,001 to \$35,000', while for those offenders who were unemployed (N = 62) the median income category was 'less than \$12,000'. The difference in income between the 'employed' and 'unemployed' groups was significant ($\chi^2(5) = 38.18$).



Figure 2 Distribution of Offenders across Income Categories

3.1.9 Type of Residence

The most common type of residence for offenders was the house (80.5%), with the remaining offenders residing in a flat (10.1%), a unit (3.4%), a caravan (3.4%), or some other form of accommodation (2.7%). On average, offenders lived with 2 other people with at least one of those being a family member.

3.1.10 Licence Status

Licence information was collected for 148 offenders with 56.8% holding an open drivers licence, while 12.8% were unlicensed or disqualified from driving prior to their interview. The remaining offenders held a learner's permit (6.1%) or a provisiona licence (24.3%).

3.1.11 Summary of Socio-demographic Characteristics of Rural Offenders

Drink driving offenders in this study had a mean age of 31 years, were mostly male and single, with a greater proportion being of Aboriginal or Torres Strait Islander background than in the regional population. Few offenders were educated beyond the Year 12 standard, with the majority having only completed the junior level of education. The tendency for the normative sample to have completed a higher level o education, compared to the offender sample, reflects the population from which the normative sample was drawn (ie TAFE students).

At the time of their interview, the majority (58%) of offenders were employed and tended to be in full-time employment. More females worked in sales while more males worked in trades. Their income distribution was bimodal with peaks at the 'less than \$12,000' and '\$20,001 to \$35,000' income levels. The former group represents the unemployed and those on pensions and included the majority of offenders, while the latter represented the median income category for offenders in paid employment. I receiving a pension, females were more likely to be receiving a Sole Parent Pension while males tended to receive a Jobsearch or Newstart allowance. Most offenders, a the time of their court appearance, were holders of an open licence.

The results presented here reflect the findings of similar studies examining the characteristics of drink driving offenders. These studies suggest that the predictors o drink driving and drink driving recidivism include: male, young age (18-24 years), single or divorced, low education level, and blue collar occupation (Hedlund, 1995; Macdonald & Dooley, 1993; Nickel, 1990). Most of these characteristics were found in the present sample of drink driving offenders, indicating that the typology of the rural drink driving offender in Central Queensland is similar to typologies found in other jurisdictions. In this rural Australian sample, drink drivers were somewhat more likely to be drawn from the older 25-34 year age group and to be unemployed and receiving a relevant pension.

3.2 Hearing Outcomes

Court hearing results were obtained for the offender sample and a range of variables were examined including blood alcohol concentration (BAC), size of fines, licence disqualification periods, the types of other offences heard in court on the day of the interview, and prior traffic and criminal convictions. Gender differences were examined for these variables and none were found to be significant.

3.2.1 Current Court Hearing

Of the 149 offenders interviewed, 74 had been placed on the "Under the Limit" (UTL) drink driving rehabilitation program and consequent probation as a result of their court hearing. The remaining 75 offenders opted against undertaking the UTL program as part of their rehabilitation.

Blood alcohol concentrations for the drink driving offence were examined for the tota offender sample. The mean BAC reading was 0.135 (SD = 0.051), with over one-third of the sample having a BAC reading of 0.150 or above. Figure 3 shows the distribution of offenders across BAC categories.

Length of licence disqualification was examined with the mean disqualification length being 8.8 months (SD = 6.4 months; Median = 7 months). One offender (0.7%) was given an absolute licence disqualification period. Restricted licences, or licences tha permit a driver to drive during specified times (eg work hours), were given to 8.8% o the offender sample. Overall, length of licence suspension was correlated with BAC and found to be significant (r(145) = 0.76), indicating that increased severity of the drink driving offence resulted in a longer disqualification period.





Fines for the drink driving offence ranged from \$0 to \$1,800. The mean fine was \$325.70 (SD = \$376.30; Median = \$250). It is important to note that offenders who undertook the UTL program as part of their rehabilitation were required to pay course fees and as a result generally had their fine waived or reduced. As a result of the reduction in fine for one half of the sample, results will be presented separately for offenders who undertook the UTL program and for offenders who did not undertake the UTL program. Table 4 shows the distribution of fines for the drink driving offence for each group. The average fine for the UTL offenders was \$109.70 (SD = \$255.30), while for the non-UTL offenders the average fine was \$535.80 (SD = \$356.55). The difference in fines between the two groups of offenders was significant (t(132) = 8.32, adjusted for unequal variances).

Table 4

Fine	UTL Offenders	Non-UTL Offenders	
	(%)	(%)	
Less than \$200	79.7	16.0	
\$201 - \$400	4.1	33.3	
\$401 - \$600	6.8	18.7	
\$601 - \$800	2.7	13.3	
\$801 - \$1,000	4.1	12.0	
\$1,001 and above	2.7	6.7	

Fines for the drink driving offence

Offenders who undertook the UTL program as part of their rehabilitation were also placed on probation as a condition of doing the program. Length of probation ranged from 6 to 36 months with a mean length of 14.5 months (SD = 5.3 months). For the remainder of the sample, who opted to stay within the mainstream sentencing procedures, it was not essential that they be placed on probation. As a result, of the offenders who did not undertake the UTL program, none were placed on probation.

Approximately 3% of the total sample served a jail sentence as part of their rehabilitation.

An examination of the other offences heard in court at the time of the current drink driving offence was also carried out. Approximately 30% of the sample were appearing in court for an offence in addition to the drink driving charge. Two-thirds o those offenders were appearing for one additional offence, one-quarter were appearing for two additional offences and the remainder were appearing for three additiona offences. Types of offences that were heard, in addition to the drink driving offence, are recorded in Table 5. Offenders were most likely to be appearing in court for an unlicensed or disqualified driving charge. The most common penalty given for the 'other' offences was a fine. On average this was \$477 (SD = \$478) and ranged fro \$40 to \$1,800.

Table 5Types of offences other than the drink driving offence heard in court

Offence	Frequency	Percent ^a
Unlicensed / disqualified driving	25	41.7
Drink driving	11	18.3
Disobeying road rules	8	13.3
Obstructing / not cooperating with police	4	6.7
Unlawful use of a motor vehicle	3	5.0
Fail to comply with licence requirements	2	3.3
Dangerous driving / driving without due care and attention	2	3.3
Other offences	5	8.3

^a Values were calculated as a percentage of the total number of other offences heard (N=60).

3.2.2 Prior Criminal and Traffic Offences

Approximately 19% of offenders had been convicted of at least one other drink driving offence within the 5 years prior to their interview. Of those 29 offenders, 20.7% had been convicted of two drink driving offences in the 5 years prior to their interview.

The mean BAC reading for the most recent prior offence was 0.145 (SD = 0.060, N = 29) and this was significantly correlated with the BAC reading for the current offence (r = 0.59). The average fine for the most recent prior offence was \$696.80 (SD = \$390.15), with an average of 11 months licence suspension. Approximately 21% of the 29 offenders were charged with unlicensed or disqualified driving at the previous offence.

For those offenders with a second prior offence in the last 5 years (N = 6), the mean BAC reading for that offence was 0.151 (SD = 0.044). The average fine for this offence was \$840.00 (SD = \$251.00), with an average of 10.8 months licence suspension. One offender was charged with unlicensed / disqualified driving at the time of this earlier offence.

In addition to the unlicensed / disqualified driving charges that accompanied the drink driving charges described above, 7% of the sample had been convicted of driving without a licence in the 5 years prior to the interview. Loss of licence (eg through demerit points) occurred in 11.4% of the sample and over half (53.0%) the sample were convicted of some other traffic offence (eg speeding) within the 5 years prior to being interviewed.

Examination of offenders' criminal histories in the 5 years prior to the interview showed that approximately one-quarter (24.2%) of offenders had been charged with a criminal offence in the last 5 years, with 2.0% having served a jail sentence for those offences. Four percent of the offender sample had been convicted of offences agains another person (eg assault), 10.7% had been convicted of offences against property (eg arson), 16.1% had been convicted of public order offences (including breach o probation), and 10.1% had been convicted of offences involving drugs.

3.2.3 Summary of Hearing Outcomes

Offenders in this study generally had high BAC readings for their current drink driving offence, with over one-third of the sample having a BAC reading above 0.15gm/100ml Long licence disqualification periods were administered for the drink driving offence with the longest periods being given to offenders with higher BAC readings.

Fines were low for the majority of offenders who undertook the UTL program as part of their rehabilitation, while for offenders who did not undertake the UTL program, fines were much higher. However, caution should be used when interpreting these results as offenders who undertook the UTL rehabilitation program generally had thei fine waived or reduced. As a consequence, fines for this group of offenders will be under-representative of the fines administered for drink driving offences.

Many offenders at the time of their court appearance were also appearing for offences in addition to the drink driving charge. The majority of these offences were for unlicensed or disqualified driving. Approximately one-fifth of the total sample had been convicted of drink driving at least once in the 5 years prior to their interview. large proportion of offenders had also been convicted of criminal offences in the 5 years prior to their interview. These were mostly "public order" and "offence agains property" crimes.

The results presented here indicate that at least a quarter of offenders had an extensive history of criminal and traffic offences, and support other research which suggests tha prior convictions are a common characteristic of drink driving offenders (Macdonald & Dooley, 1993; Peck et al., 1994).

3.3 Knowledge

Offenders were asked a series of questions that ascertained their level of knowledge regarding the effects of alcohol. These questions focused on safe consumption level for driving, BAC limits, and ways to reduce BAC levels. Gender differences for these variables were examined and none were found to be significant.

3.3.1 Safe Alcohol Consumption Levels for Driving

Offenders were first asked about safe alcohol consumption levels for driving. These questions specifically inquired about safe levels for an adult man with an open licence, an adult woman with an open licence, and a provisional driver under 25 years of age. Table 6 presents the percent of offenders who correctly identified the number of drinks that could be consumed in one hour by each class of driver described above before they would be over the limit. Offenders' responses ranged from 1 to 12 drinks for 'an adult man' (Mean = 2.5; SD = 1.3), from 0.5 to 10 drinks for 'an adult woman' (Mean = 1.8; SD = 1.2), and from 0 to 5 drinks for 'a provisional driver' (Mean = 0.4; SD = 1.0). Clearly, many offenders are not aware of safe consumption levels for driving.

Table 6 also shows the percent of offenders who correctly identified the legal BAC for open licensed drivers and for provisional drivers under 25 years of age. In general,

offenders appear to have greater knowledge of the legal BAC for open licensed drivers than they do for provisional drivers (t(148) = 4.35).

Table 6

Offenders' knowledge of safe drinking levels, legal BAC limits and factors that will/will not reduce BAC levels

Knowledge Item ^a	Percent	Knowledge Item ^a	Percent
	Correc ^b		Correc ^b
Safe drinking levels for:		BACs can be reduced by:	
Adult man (2 drinks)	38.9	Milk (False)	80.5
Adult woman (1 drink)	38.9	Coffee (False)	76.5
Provisional driver (0 drinks)	72.5	Vomiting (False)	68.5
		Time (True)	85.2
Legal BAC limit for:		Taking a shower (False)	85.9
Open licence (0.05)	92.6	Exercise (False)	65.8
Provisional licence (0.00)	75.8		

^a Correct responses are presented in brackets; ^b N = 149.

A comparison was made between offenders' knowledge of safe drinking levels and their knowledge of legal BAC limits. Scores were summed for each offender for the items referring to 'safe drinking levels' and for the items referring to 'legal BAC limits'. After adjusting aggregate scores to account for the different number of items that make up each category, a Paired Samples *t*-test was conducted and a significant result emerged (t(148) = -11.17). Offenders appear to have more accurate knowledge of legal BACs than knowledge pertaining to alcohol consumption levels for driving.

3.3.2 Factors to Reduce BAC Levels

Offenders were also asked about the factors that would / would not help to reduce their BAC. These factors included milk, coffee, vomiting, time, taking a shower, and exercising and are presented in Table 6. Fewer offenders responded accurately to 'vomiting' and 'exercise'. Most offenders responded accurately to 'time' and 'taking a shower'. Further, when asked whether the effects of alcohol are the same for men and women, 66.4% of the sample correctly indicated 'No'. Clearly, many offenders are no aware of the ways in which alcohol can affect their body and the factors which will/will not reduce its impact.

3.3.3 Summary of Knowledge

While knowledge of legal BACs was fairly high among offenders, especially wit respect to open licensed drivers, knowledge of the number of drinks required to place an individual over this legal limit was quite low. Offenders may have become more aware of BACs and legal limits as a result of being breath tested and charged for a drink driving offence. However, this process may not have increased offenders' knowledge of the drinking levels required to stay beneath that BAC. That is, as a result of being breath tested, offenders may have learnt that the legal BAC is 0.05 for an adult driver (0.00 for a provisional driver) without learning that the maximum number of drinks in one hour for driving is approximately 2 drinks for an adult male (1 drink for an adult female, 0 drinks for a provisional driver).

Further, some offenders believed that factors such as drinking milk/coffee, vomiting, taking a shower, and exercising would reduce their BAC. Inaccurate knowledge of the effects that alcohol has on the body appears quite high in some instances and indicates that inaccurate knowledge may be one contributing factor to the level of drink driving. Previous research examining knowledge in drink driving offenders has shown similar results, demonstrating that drink driving offenders have less knowledge of safe drinking levels for driving than members of the general population (Macdonald & Dooley, 1993).

3.4 Attitudes

A range of attitudinal questions were rated on a 10-point scale where '1' indicated 'Strongly Disagree' and '10' indicated 'Strongly Agree'. The variables, their means and standard deviations are presented in Table 7. This table also presents the percen of offenders agreeing (ie giving a score of 6 or above) to each of the attitudina variables. Gender differences were examined and those variables where a gender difference was found will be reported.

Table 7

	Agreement	Mea	SD
	(%)		
There is no excuse for driving while drunk.	88.6 ^b	8.87	2.31
People who drink and drive should lose their driver's	78.5	8.05	2.50
licence.			
If I drive when I'm over the limit, I will get picked up fo a breath test.	77.2 ^b	8.32	2.47
Everybody drinks and drives once in a while.	77.2	7.66	2.56
My friends would think I was really stupid if I drove afte drinking.	71.1	7.63	2.84
I think it's okay if I drive after drinking X drinks in one	49.7	5.64	3.84
hour.			
I won't drive if I've had X drinks in one hour.	49.0	5.66	3.75
Drinking and driving is common in my community.	45.0	5.40	3.18
My community needs stricter laws against drunk driving.	36.2 ^b	5.05	3.17
It's okay to drive after drinking so long as you're not drunk. ^a	33.1 [°]	4.28	3.17
The dangers of drinking and driving are overrated.	30.9	3.93	3.51
The police spend too much time hassling drinking drivers.	25.5°	3.64	3.05
Most of my friends think it's okay to drink and drive.	24.2	3.89	2.70
Some people drive better after drinking.	14.8	2.46	2.54
It's okay to drink and drive so long as you don't get caught.	13.4	2.46	2.60
People who drink and drive should go to jail.	10.1	3.03	2.36

^a N = 148; ^b Females were significantly more likely to agree with this statement; ^c Females were significantly more likely to disagree with this statement.

3.4.1 Is it Okay to Drink and Drive?

Half the offender sample believe that "it is not okay to drive when over the limit", and of that 50.3%, only 65.3% said that they would not do it. Thirteen percent of the sample believe it is "okay to drink and drive so long as you don't get caught" and approximately 33% believe it is "okay to drive after drinking so long as you're not drunk". Females were less likely to believe that it's okay to drink and drive so long as you're not drunk (20.0%) compared to only 36.4% of males (t(54)) = 3.67, adjusted for unequal variances). The majority of respondents (88.6%) believe "there is no excuse for drink driving", with more females agreeing to this statement (96.7%) compared to male offenders (86.6%; t(90) = -2.43, adjusted for unequal variances).

3.4.2 Likelihood of Being Caught

More than three-quarters of offenders indicated they thought they would be picked up for a drink driving offence if they drove when their BAC was over the legal limit. Females were more likely to believe they would be picked up (t(57) = -2.49, adjusted for unequal variances), with 90.0% of females agreeing compared to only 73.9% o males.

3.4.3 Drink Driving in the Community

Approximately three-quarters of the sample believe that "everybody drinks and drives once in a while", and almost half the sample believe that "drink driving is common in their community". Disapproval for the behaviour among the friends of a drink driver was reported by the majority of offenders, but there was still a sizeable minority (30%) who believed that their friends would not consider them stupid if they drove while drunk. Another 24.2% of offenders indicated that their friends think it is okay to drink and drive.

3.4.4 Drink Driving and Enforcemen

Almost one-third of offenders thought the "dangers of drink driving are overrated" and one-quarter agree that "police spend too much time hassling drinking drivers". Females were less likely to believe that police spend too much time hassling drinking drivers (t(147) = 1.98), with 86.7% of females disagreeing with this statemen compared to only 71.4% of males. One in four offenders believe that drink drivers should not lose their licence and almost 90% of the sample believe that jail sentences should not be imposed. On the other hand, one-third of offenders believe that stricter drink driving laws are necessary. Female offenders were more likely to believe stricter laws are necessary (t(43) = -3.01, adjusted for unequal variances), with 56.7% agreeing compared to only 31.1% of males.

3.4.5 Summary of Attitudes

Previous research has found that convicted drink driving offenders are likely to have deviant attitudes toward drink driving behaviours (Hedlund, 1995). They are less likely to believe that there is no excuse for drink driving than the general population (Macdonald & Dooley, 1993). Offenders in the present study did show devian

attitudes toward drink driving with many believing that drink driving behaviours are common. There was a belief that harsher laws against drink driving are not needed. For many offenders, licence disqualification was considered a reasonable punishmen for drink driving offences, while jail terms were seen in a less favourable light.

Although many offenders believed there is no excuse for drink driving, approximately half the sample indicated that they would still drive after consuming enough alcohol t place them over the limit. At the same time, many offenders believed that if they drove while over the limit they would be picked up for drink driving. It is possible tha having already been detected for drink driving, offenders' awareness of police activity and the likelihood of detection may have increased, resulting in a strong belief that they would be picked up for future drink driving offences.

3.5 Behavioural Intentions

Offenders were asked a series of questions examining the behaviours they would change in order to avoid future drink driving offences. Offenders rated the likelihood of performing the behaviours on a 5-point scale where '1' indicated 'Yes – definitely', '3' indicated 'Unsure', and '5' indicated 'No – definitely not'. Table 8 shows the means and standard deviations for each of the behavioura intentions questions. Gender differences were examined for these items and none were found to be significant.

3.5.1 Intended Behaviours

Table 8 also shows the proportions of offenders who indicated that they woul perform these behaviours in the future. Offenders were most likely to indicate tha they would 'Take a taxi if they have been drinking' and 'Plan ahead that the driver w not drink'. Offenders were least likely to indicate that they would 'Drink lite beer if driving' and 'Avoid being involved in shouts'.

	Agreement ^a	Mea	SD
	(%)		
Take a taxi by yourself or with others if you have	93.3	1.43	0.73
been drinking			
Plan ahead that the driver will not drink	92.6	1.58	0.81
Plan ahead not to drink if you are going to drive	86.6	1.66	1.00
Stay away overnight if you have been drinking	82.6	1.70	1.00
Leave locked car where it was and not drive	81.2	1.81	1.02
Keep track of your drinks and stay under the	68.5	2.24	1.38
limit if you are driving			
Avoid being involved in 'shouts' to make sure	56.4	2.52	1.46
you drink less			
Drink lite beer if driving	47.0	3.08	1.57

Table 8Offenders' intentions to use alternatives to avoid drink driving

^a N = 149. Percentages are calculated on the number of offenders giving a response of '1' or '2' to the above variables.

3.5.2 Factors for Behavioural Intentions

A Principal Components Analysis was performed on the behavioural intentions questions. A 2-factor solution emerged after varimax rotation which explained 58.2% of the total variance. Table 9 shows the variable loadings for each factor. Factor 1 represents changes to *driving behaviours*, while factor 2 represents changes to *driving behaviours*. The Cronbach's alpha (reliability) for the *driving behaviours* factor was 0.80 and for the *drinking behaviours* factor was 0.56.

Factor scores were computed for each offender for both the *drinking behaviours* factor and the *driving behaviours* factor. A low score on each factor indicates a greater willingness to change those behaviours. After controlling for the number o items that make up each factor, a Paired Samples *t*-Test was conducted to determine if offenders were more likely to prefer changing one type of behaviour over the other. The results were significant (t(148) = -12.49), with the adjusted mean for the *driving behaviours* factor (Mean = 1.6; SD = 0.7) being less than the adjusted mean for the *drinking behaviours* factor (Mean = 2.6; SD = 1.1). Offenders were more likely to consider changing their driving behaviours to avoid future drink driving offences.

Table 9 Key alternatives to drinking and driving

	Factor 1	Factor 2
Driving Behaviours		
Take a taxi by yourself or with others if you have		
been drinking	0.79	
Plan ahead that the driver will not drink	0.83	
Plan ahead not to drink if you are going to drive	0.83	
Stay away overnight if you have been drinking	0.58	
Leave locked car where it was and not drive	0.62	
Drinking Behaviours		
Keep track of your drinks and stay under the limit		
if you are driving		0.71
Avoid being involved in 'shouts' to make sure you		
drink less		0.50
Drink lite beer if driving		0.82

3.5.3 Summary of Behavioural Intentions

Many offenders indicated that they would adopt new drinking and driving strategies in order to reduce the likelihood of re-offending. The sample as a whole indicated tha "taking a taxi" and "having a driver that does not drink" were the most viable alternatives to drink driving in the future. The least likely alternatives were to "drink lite beer" and to "avoid shouts". This suggests that they were more likely to prefer changing their driving habits to changing their drinking habits.

3.6 Self-reported Behaviours

Offenders were asked a series of questions pertaining to their personal alcohol consumption and drink driving behaviours. Gender differences for these variables were examined and found to be non-significant.

3.6.1 Self-reported Drinking

Offenders were asked how often in the last 6 months they would have drunk a glass or more of an alcoholic drink. All offenders reported drinking alcohol within the last 6 months, with responses ranging from 'a few times' to 'everyday of the week'. Figure 4 presents the distribution of offenders across alcohol consumption categories. The median level of alcohol consumption was '2-3 times a week' with almost three-quarters of the sample drinking alcohol on at least a weekly basis.



Figure 4 Level of Alcohol Consumption in the Last 6 Months
Offenders were asked how many alcoholic drinks they consumed last Friday, last Saturday, and last Sunday. Figure 5 shows the consumption levels for these three days. The distributions for both Friday and Saturday appear U-shaped with many offenders reporting drinking no alcohol and many offenders reporting drinking more than 10 drinks. The distribution of scores for 'last Sunday' is more positively skewed. The median consumption level for both Friday and Saturday was '3-4 drinks', while on Sunday it was 'no drinks'. Alcohol consumption levels appear lower on Sunday than any other weekend day (F(2,145) = 37.39).



Figure 5 Alcohol Consumption over a Weekend Period

3.6.2 Self-reported Drink Driving

Offenders were also asked how often in the last 6 months they had driven on a publi road after drinking enough alcohol to place them over the limit. Responses ranged from 0 to 50 times (one offender was excluded from the analysis as they were a univariate outlier with a response of 84). The mean level of drink driving was 3.9 times (SD = 8.2; Median = 1). Over two-fifths (41.3%) of the sample indicated tha they had driven on a public road more than once in the last 6 months when they believed their BAC was over the legal limit. Approximately 7% of the sampl indicated that they did no know how many times in the last 6 months they had driven on a public road when their BAC was above the legal limit.

3.6.3 Relationship between Drinking and Drink Driving

A one-way Analysis of Variance was performed to determine the relationship between self-reported drink driving and self-reported alcohol consumption. Results were significant (F(5,132) = 3.51), with offenders who consumed alcohol more regularly (ie 4-5 times a week or more) having the highest frequency of drink driving. Table 10 shows the average number of times offenders in each alcohol consumption group had driven on a public road after drinking in the last 6 months.

Table 10Mean number of times driven after drinking for each alcohol consumption group

Number of times driven after drinking in the last 6 months	Rate of alcohol consumption in the last 6 months								
	A few	Once	Once a	2-3	4-5	Everyday			
	times	every 4	week	times a	times a				
		weeks		week	week				
Mean number of times driven									
after drinking	1.4	1.1	3.0	3.9	10.3	11.3			
Number of offenders	21	16	30	42	16	14			

3.6.4 Summary of Self-reported Behaviours

Alcohol consumption by the offender sample was frequent, with the majority of offenders consuming alcohol on at least a weekly basis. Consumption over a weekend period was highest on Friday and lowest on Sunday. Levels of alcohol usage have often been considered as one of the major lifestyle characteristics that define drink driving offenders (Hedlund, 1995; Holubowycz, Kloeden, & McLean, 1994; Macdonald & Dooley, 1993). The present study supports this and particularly identifies high frequency of drinking as a risk behaviour. Given that driving is an everyday event, combining alcohol with driving may be an inevitable outcome of the high alcohol consumption levels found in this offender group. In fact, those offenders who reported drinking more frequently than other offenders, also reported drink driving more frequently. The self-reported level of drink driving was quite high.

3.7 Mental Health

3.7.1 Mental Health of Offenders

Offenders' scores on the MHI5 ranged from 0 to 20 with scores being spread throughout the entire range available (see Figure 6). The Cronbach's alpha (reliability) for the MHI5 was 0.81 (N = 149). No significant gender difference for the MHI5 was found (t(37) = -1.96, adjusted for unequal variances). Results indicate a high level o mental health among the offender group as 81.2% of the sample had a mental health score of 10 or less (Mean = 6.8; SD = 4.1; Median = 7).

3.7.2 The Normative Sampl

Comparison between the offender sample and the normative sample showed no significant difference (t(286) = 0.61, adjusted for unequal variances). Similar results emerged when differences between the offender sample and normative data were assessed for males and females separately.

Figure 6 Mental Health reported by Offenders



3.8 Social Support

The three subscales (Family, Friends and Others) and the total scale score derived fro this measure were tested for gender differences and none were found to be significant. Results for the SSA scale and its subscales will therefore be discussed for the entire sample of offenders.

3.8.1 Family Subscale

The Cronbach's alpha for the Family subscale was 0.90 (N = 149). In general, scores for this subscale were clustered at the low end of the spectrum with 80.5% of the sample having a score of 16 or less, indicating that offenders in this study were receiving a high level of support from their family (Mean = 13.3; SD = 4.2; Median = 13). The distribution of scores for this subscale is presented in Figure 7.





Comparison between the offender sample and the normative group showed no significant difference (t(337) = -0.17). A similar finding was evident when differences between the offender group and the normative sample were assessed for males and females separately.

3.8.2 Friends Subscale

The Cronbach's alpha for the Friends subscale was 0.93 (N = 148). Once again, offenders' scores were clustered at the low end of the spectrum, indicating high socia support from friends. A distinct peak was found at a score of 14 with 33.1% o offenders having this score. Further, 85.1% of the sample had a score of 14 or less (Mean = 12.3; SD = 3.8; Median = 13). Figure 8 shows the distribution of offender scores for this subscale.





Comparison between the offender sample and the normative data showed no significant difference between the groups (t(343) = -1.63). Due to the significant gender difference found for this scale in the normative data (see Appendix 2) and the unequa gender split in the offender sample, differences between the offender sample and the normative data were assessed for males and females separately. A significan difference between the two samples was found for males only (t(213) = -2.20), suggesting that gender masked the difference in scores between the offender and normative samples for thi subscale. Results indicate that males in the offender sample were receiving a higher level of social support from their friends (Mean = 12.5, SD = 3.7) compared to the normative sample (Mean = 13.6, SD = 3.8).

3.8.3 Support from Others

The Cronbach's alpha for the Others subscale was 0.88 (N = 149). As can be seen from Figure 9, scores on thi subscale are mainly clustered around the value of 16, indicating that offenders were receiving a mid-to-high level of social support fro 'others' in their social network (Mean = 15.0; SD = 3.7; Median = 16).

Comparison between the offender sample and the normative data showed no significant difference in the level of support from others (t(337) = -1.52). Similar results were obtained when differences between these two samples were assessed for males and females separately.





3.8.4 Comparison of Family, Friends and Others Subscales

After adjusting scores on the Family, Friends and Others subscales to account for differences in the number of items that make up each scale, a repeated measures ANOVA was conducted to determine if offenders were receiving a greater level o support from any one of the subgroups within their social network. A significan difference was found between scores on the three subscales (F(2,146) = 27.04), with support from family being higher than support from friends (F(1,147) = 7.32) and support from friends being higher than support from others (F(1,147) = 24.06). similar relationship between the three subscales was found in the normative data (see Appendix 2).

3.8.5 SSA Total Scale

The Cronbach's alpha for the total SSA scale was 0.96 (N = 148). This scale represents the summation of scores from the previous three subscales. Scores on this

scale can range from 23 to 92, with offenders' scores ranging from 23 to 73. The mean score was 40.6 (SD = 10.6; Median = 42). The distribution of scores for the total SSA scale is presented in Figure 10. As can be seen from this figure, scores tended to cluster around the mean. Scores for a small group of offenders tended to cluster in the very low end of the spectrum, indicating that support obtained from the entire social network (ie family, friends and others) for these offenders is extremely high.

Comparison between the offender group and the normative sample showed no significant difference on total SSA scores (t(324) = -1.14). When differences between the two samples were assessed separately for males and females, a similar result emerged.



Figure 10 Total Social Support reported by Offenders

3.8.6 Summary of Social Support Appraisals Scale

Social support for offenders in this sample was generally high for all scales and subscales of the SSA. Although high, the social support received by offenders did no differ from the normative data in most cases. However, male offenders appeared to be receiving more support from friends than males in the normative sample. The higher level of support from friends experienced by male offenders may result from the likelihood of these offenders being involved in a subculture that accepts drinking and driving (Macdonald & Dooley, 1993). Research suggests that peers of a drink driving offender may be highly encouraging and supportive of that offender since the peers themselves are likely to hold similar drink driving values (Thurman et al., 1993). The subculture, therefore, not only permits the acceptance of drink driving behaviours, bu also the valued acceptance of the convicted drink driver.

Support from family members appeared greater than support from friends or others in the social network of an offender. This is expected given the immediacy of familia relationships, compared to the immediacy of relationships with others. Overall, two clusters of scores were evident for the total SSA scale. These were in the very high support end of the spectrum and the mid-to-high- support end of the spectrum, suggesting that the former may be due to social desirability responding.

3.9 Interpersonal Support Evaluation List

Gender differences for both the Self-esteem Support Subscale and the Tangible Support Subscale were examined and found to be non-significant. Results of these scales will therefore be discussed for the entire offender sample.

3.9.1 Self-esteem Support Subscale

Cronbach's alpha for the Self-esteem subscale was 0.74 (N = 149). Offenders' responses ranged from 11 to 30 out of a possible range of 0 to 30. Figure 11 shows that scores for the Self-esteem subscale are clustered in the high end of the spectrum, indicating that self-esteem support for the offender group is high. The mean score for this subscale was 21.6 (SD = 4.3; Median = 21) with 67.1% of offenders having a score in the top 1/3 of the range (ie a score of 20 or above).

Comparison of the offender group with the normative sample showed a significant difference on the self-estee subscale (t(328) = 3.61). The offender sample had a higher mean score for this scale compared to the normative sample (Mean=19.8; SD=4.6; Median=20), indicating that the offender group were receiving higher self-esteem support from their social network compared to the normative sample. Due to the unequal gender split in the offender sample, comparisons between the offender sample and the normative data were also performed for males and females separately.





A significant difference between the samples was found for males only (t(198) = 3.59), indicating that males in the offender group had higher self-esteem support (Mean = 21.5, SD = 3.9) than males in the normative group (Mean = 19.3, SD = 4.9).

3.9.2 Predictors of Self-esteem Support

Standard multiple regression analyses were performed with Self-esteem Support scores as the dependent variable. MHI5, Family, Friends and Others scores were entered as independent variables to determine the influence of mental health and social suppor subgroups on self-esteem support. The regression analysis was performed on the total offender sample and on male offenders separately. The analysis was not performed on female offenders due to the small numbers in this sample. Full summary tables fro the regression analyses are presented in Appendix 3.

For the total offender sample, the multiple *R* was .719 with the model accounting for 51.7% of the variance in Self-esteem Support scores. The multiple *R* was found to be significantly different from zero (F(4,143) = 38.26), with the largest contributors t Self-esteem Support scores from the model being mental health ($\beta = -0.243$) and support from others ($\beta = -0.481$). Results indicate that support from others was the most important predictor, being nearly 2 times as important as mental health.

For male offenders, the model accounted for 46.7% of the variance in Self-estee Support scores (R = .683; F(4,113) = 24.73). Once again mental health and suppor from others contributed significantly to prediction of Self-esteem Support scores, having standardised regression coefficients of $\beta = -0.190$ and $\beta = -0.516$, respectively. Results indicate that for male offenders, support from others is approximately 3 times as important as mental health in the prediction of Self-esteem Support.

The regression results described above for both the total offender sample and mal offenders show similar trends. Support from 'others' in the social network of an offender appears to contribute the most to self-esteem support, with mental health being the second most important predictor. These results differ to those found in the normative data (see Appendix 2), where mental health was the biggest contributor to self-esteem scores for both the total normative sample and normative males only. Self-esteem Support does not appear to be influenced by the same variables in the offender sample as it is in the normative sample.

3.9.3 Tangible Support Subscale

The Cronbach's alpha for the Tangible subscale was 0.82 (N = 147). Figure 12 shows the distribution of offender scores for this scale. The Tangible subscale is negatively skewed with scores ranging from 4 to 30 out of a possible range of 0 to 30. Most o the offender sample had high tangible support, with 83.0% having a score of 20 or higher (ie in the top 1/3 of the distribution). The mean score for this subscale was 24.7 (SD = 5.1; Median = 26). A comparison of the offender sample with the normative data showed no significant difference (t(343) = 1.73), indicating that the level o tangible support received by the two samples was similar. When differences between

the offender sample and the normative data were assessed for males and females separately, no significant differences were found.



Figure 12 Tangible Support reported by Offenders

3.9.4 Predictors of Tangible Support

Standard multiple regression analyses were performed with Tangible Support scores as the dependent variable. MHI5, Family, Friends, and Others scores were entered as independent variables to determine the influence of mental health and social suppor subgroups on tangible support. The regression analyses were performed on the total offender sample and on males only. A regression analysis was not performed using female offenders due to the small number in this sample. Full summary tables from the regression analyses are in Appendix 3.

For the total offender sample, the multiple *R* of .547 was significant (F(4,141) = 15.02). The model accounted for only 29.9% of the total variance in Tangible Suppor scores. Of the four independent variables entered into the regression analysis, suppor from friends was the only variable found to be a significant predictor of Tangible Support scores ($\beta = -0.636$).

A similar result was found for the regression analysis using male offenders only. The model accounted for only 22.7% of the total variance in Tangible Support scores. The multiple *R* was .477 and was found to be significant (*F*(4,111) = 8.16). Support fro friends was the only significant predictor of Tangible Support scores (β = -0.622).

The results of the regression analyses described above suggest that support from friends is better able to predict the variance in tangible support than support from other subgroups (eg family/others) in an offender's social network. These results are similar to those found for the normative sample (see Appendix 2) where support from friends was also the most important predictor. However, unlike the offender sample, the

variance in Tangible Support scores for the normative sample could also be predicted by mental health, indicating that tangible support is not entirely influenced by the same variables in the offender sample as it is in the normative sample.

3.9.5 Comparison of Self-esteem and Tangible Support

A Paired Samples *t*-test was performed on the Self-esteem Support and Tangibl Support Subscales to determine if offenders were receiving one form of support more than the other. Results of the test were significant (t(146) = -8.16), with the mean o Tangible Support (Mean = 24.7) being higher than the mean of Self-esteem Suppor (Mean = 21.6). Offenders in this sample were receiving more tangible assistance than self-esteem support from their social network. These results are similar to those found in the normative sample (See Appendix 2).

3.9.6 Summary of Interpersonal Support Evaluation List

Self-esteem support and tangible support received by the offender sample were high, but in most cases did not differ from the normative data. However, males in the offender sample were found to have higher self-esteem support than males in the normative sample. Differences in the variables that influence self-esteem support for the offender and normative samples may be the cause of the higher self-esteem suppor experienced by male offenders. For offenders, Self-esteem Support scores were mostly related to support from others, while for the normative sample, mental health was the most important predictor of self-esteem support. That is, self-esteem support appears to be related to extrinsic sources for offenders and intrinsic sources for the normative sample. Tangible support, however, was mostly influenced by support from friends for both the offender and normative samples. Overall, offenders were receiving more tangible support from their social network than they were self-esteem support, with results being similar to those found in the normative sample.

3.10 Alcohol Use Disorders Identification Test

Cronbach's alpha (reliability) for the AUDIT was 0.72 (N = 148). Scores on the AUDIT ranged from 2 to 34 out of a possible range of 0 to 40. Gender differences were assessed and none were found to be significant. (The AUDIT does no differentiate between levels of risk for males and females and as such the following analyses involving the AUDIT are not broken down by gender.) The mean AUDIT score for the offender sample was 12.3 (SD = 6.1; Median = 11.0).

3.10.1 Risk of Alcohol Problems

AUDIT scores were recoded into one of three levels of risk of alcohol problems. Table 11 shows the percent of offenders in each category. Approximately 80% of the total sample (80.7% males and 75.9% females) were consuming alcohol at a rate consistent with a moderate-to-high risk of alcohol problems (ie harmful consumpti or alcohol dependent). The level of risk of alcohol problems within the offender sample is much higher than the regional population. Regional data on alcohol consumption rates show that only 30.7% males and 8.1% females from the general population are at moderate-to-high risk of alcohol problems (Davey, 1995).

Table 11 Level of risk of alcohol problems among drink driving offenders

	Percent
Low or no risk of harmful consumption	20.3
Risk of harmful consumpti	37.2
Risk of alcohol dependence	42.6

3.10.2 Relationship with Other Measures of Alcohol Consumption

Relationships between the AUDIT and other measures of alcohol consumption used i the offender interview were examined. AUDIT scores were correlated with offenders' BAC and the correlation was found to be significant, although relatively low (r(145) = 0.27). A significant relationship was also found between level of alcohol problems and frequency of alcohol consumption in the last 6 months ($\chi^2(10) = 28.13$). Table 12 shows the frequency of alcohol consumption in the last 6 months for offenders classified as 'No Harmful Consumption', 'Harmful Consumption', and 'Alcohol Dependent' by the AUDIT, with emphasis on median rate of consumption for each risk group. The rate of alcohol consumption in the last 6 months is higher for the 'Alcohol Dependent' group than either of the 'No Harmful Consumption' or 'Harmful Consumption' groups. That is, there appears to be a positive relationship between risk of alcohol problems and frequency of self-reported alcohol consumption.

Table 12

Frequency of alcohol c	onsumption in t	the last 6 months	for each risk	category of
the AUDIT				

Frequency of alcohol	AUDIT Categor							
consumption in the	No Harmful	Harmful	Alcohol					
last 6 months	Consumpti ^a (%)	Consumpti ^b (%)	Dependent ^c (%)					
A few times	23.3	20.0	6.3					
Once every 4 weeks	16.7	16.4	3.2					
Once a week	33.3	16.4	20.6					
2-3 times a week	16.7	34.5	33.3					
4-5 times a week	6.7	9.1	15.9					
Everyday	3.3	3.6	20.6					
Median rate of								
alcohol consumption	Once a week	Once a week	2-3 times a week					
ant on hat ff Cat	()							

 $^{\text{a}}$ N = 30; $^{\text{b}}$ N = 55; $^{\text{c}}$ N = 63

Relationships were also found between AUDIT scores and level of alcoho consumption on a Friday ($\chi^2(10) = 32.20$), and Saturday $\chi^2(10) = 25.02$), but not

level of alcohol consumption on a Sunday ($\chi^2(10) = 17.82$). Table 13 shows the level of alcohol consumption on Friday and Saturday by AUDIT risk group and indicates the median level of alcohol consumption for each risk category. Those with 'Harmful Consumption' and 'Alcohol Dependence' tended to consume alcohol in greater quantities on Friday than on Saturday, with offenders at risk of alcohol dependence consuming the most amount of alcohol overall. That is, the amount of alcohol consumed on both Friday and Saturday increased with increasing risk of alcohol problems.

Table 13

	AUDIT Categor							
	No Harmful	Harmful	Alcohol					
	Consumpti ^a (%)	Consumpti ^b (%)	Dependent ^c (%)					
Friday								
No drinks	60.0	38.2	23.8					
1-2 drinks	13.3	3.6	3.2					
3-4 drinks	6.7	14.5	3.2					
5-6 drinks	10.0	9.1	6.3					
7-9 drinks		5.5	11.1					
10+ drinks	10.0	29.1	52.4					
Median alcohol								
consumption for Frida	No drinks	3-4 drinks	10+ drinks					
Saturday								
No drinks	66.7	43.6	29.0					
1-2 drinks	13.3	9.1	3.2					
3-4 drinks	6.7	10.9	6.5					
5-6 drinks	3.3	7.3	8.1					
7-9 drinks		9.1	8.1					
10+ drinks	10.0	20.0	45.2					
Median alcohol								
consumption for Saturday	No drinks	1-2 drinks	7-9 drinks					

Alcohol consumption on a Friday and Saturday for each risk category of the AUDIT

^a N = 30; ^b N = 55; ^c N = 63

3.10.3 Summary of AUDIT

The risk of alcohol problems within the offender sample was high with many offenders being at moderate-to-high risk of alcohol problems. Compared to the regional population, the offender sample was at higher risk of alcohol dependence. These findings are in line with previous research which suggests that problems with alcohol are a central or defining characteristic of drink driving offenders (Holubowycz et al., 1994; Peck et al., 1994).

Further, the AUDIT showed significant relationships with other measures of alcohol consumption. Risk of alcohol problems appeared to increase with increasing levels of self-reported alcohol consumption. This relationship extended not only to amount o alcohol consumed per drinking occasion, but also frequency of occasions when alcohol is consumed. That is, offenders who were at risk of alcohol dependence tended to

consume alcohol more frequently and in greater quantities (especially on Fridays and Saturdays) than did offenders with a lower risk of alcohol problems.

3.11 Readiness to Change Scale

Cronbach's alpha (reliability) for the Readiness to Change scale was relatively low (r = 0.56; N = 149). Gender differences were examined for the Readiness to Change Scale and found to be non-significant.

3.11.1 Offenders' Readiness to Change

The distribution of offenders across the three stages of change is presented in Table 14. In general, spread of offenders across the three categories was fairly even indicating that the number of offenders who were in the process of changing their drinking habits (Action Stage) is similar to the number of offenders who were denying a problem exists (Precontemplation Stage).

Table 14

The readiness of drink driving offenders to change drinking patterns

Stage	Percent
Precontemplation	38.3
Contemplati	26.2
Action	35.6

3.11.2 Readiness to Change and AUDIT

An examination of the relationship between the Readiness to Change Scale and the AUDIT was conducted and a significant result emerged (F(2,145) = 13.71). Table 15 shows the distribution of offenders from each AUDIT risk group across Readiness to Change stages. Fifty-four percent of the offenders who were most at risk of alcohol problems (ie alcohol dependence) were in the Precontemplation stage of change. It appears that with increasing risk of alcohol problems there is a greater likelihood tha the offenders are unaware or denying that the problem exists. That is, many of the offenders most at risk of becoming alcohol dependent were not aware, or were denying their alcohol problem and were therefore not considering taking action to change it.

 Table 15

 Relationship between offenders' readiness to change and level of alcohol dependency

Readiness to Change Stage	AUDIT Risk Categor							
	No harmful consumpti ^a	Harmful consumpti ^b	Alcohol dependent ^c					
Precontemplation Contemplati Action	13.3 50.0 36.7	32.7 29.1 38.2	54.0 12.7 33.3					
Median stage of change	Contemplati	Contemplati	Precontemplation					

^a N = 30; ^b N = 55; ^c N = 63

4 Summary Profile

Offenders in this study were mostly male and single, with a greater proportion being o Aboriginal and Torres Strait Islander background than is found in regional population statistics. Offenders most commonly lived in a house with at least one family member. The education level of offenders was quite low, with only a minority being educated beyond a year 10 standard. Unemployment was high and as a result many offenders who were receiving some form of government assistance/pension. For those offenders who were employed, they were mostly employed in blue collar occupations with an annua income of between \$20,001 and \$35,000. These findings appear consistent with previous research examining characteristics of the drink driver (see Hedlund, 1995; Macdonald & Dooley, 1993; Nickel, 1990).

The hearing results of offenders' court appearance showed that many offenders had high BAC readings for their drink driving offence. As a result, they also tended to receive long licence disqualification periods. Fines for the drink driving offence were less consistent due to half the offender sample undertaking the "Under the Limit" rehabilitation program as part of their sentencing. Overall, it appears that man offenders had extensive histories of traffic and criminal offences and these results are in line with other studies which suggest that a history of prior convictions is a defining characteristic of the drink driver (Macdonald & Dooley, 1993; Peck et al., 1994).

In general, offenders had fairly accurate knowledge of legal BAC limits. This may be a result of the breath testing procedure, where offenders learn that they were driving with a BAC above the legal limit. At the same time, many offenders had poor knowledge of safe alcohol consumption levels for driving. Many offenders also mistakenly believed that factors such as exercising and vomiting would reduce their BAC level. Poor knowledge of safe consumption levels, along with inaccurate knowledge of ways to reduce BAC levels, may be one contributing factor to the amount of drink driving.

Many of the offenders believed that drink driving is common in their community with social disapproval especially from friends being perceived as low. Many offenders also believed that the dangers of drink driving are overrated and that police spend too much time hassling drink drivers. However, when asked, many drink driving offenders indicated that they would still drive after consuming enough alcohol to place them over the limit, even though there was a fairly strong belief that they would be picked up for a drink driving offence.

Self-reported alcohol consumption levels among the offender sample were high. Over a weekend period, alcohol consumption was highest on a Friday and lowest on a Sunday. The majority of offenders reported drinking alcohol on at least a weekly basis, with those offenders who consumed alcohol more regularly having the highes level of self-reported drink driving. Alcohol was a major feature of their lives and in order to avoid future drink driving offences, offenders indicated that they would be more likely to change their driving behaviours (eg take a taxi) than change their drinking habits (eg avoid being involved in shouts). The level of alcohol problems seen among the offender sample was high with many offenders being at risk of harmful alcohol consumption or alcohol dependency. As the risk of alcohol problems increased so t did the frequency and quantity of alcohol consumption. That is, offenders with the highest risk of alcohol problems consumed alcohol more frequently and in greater quantities (especially over a weekend period) than did offenders with a lower risk. Further, many of those offenders classified as a risk of alcohol dependence were not aware of their alcohol problem and were therefore not attempting to change their drinking habits. Overall, offenders displayed a higher risk of alcohol dependence than did a population sample taken from the region (Davey, 1995).

The level of mental health or psychologica well-being reported by the offender sample was high. They also reported high levels of social support as measured by the ISEL and the SSA scales. Although high, levels of mental health and social support within the offender sample did not differ from local normative data in most instances. Differences were found between males in the offender sample and males in the normative data for "support from friends" and "self-esteem support". Male offenders tended to report experiencing higher levels of support in both instances. Support fro friends may have been higher in the offender sample due to the offender's possible involvement in a subculture that accepts drink driving. That is, the social status or acceptance of a convicted drink driver may be high among his/her circle of friends because his/her friends may hold similar values toward drink driving. In general, however, the level of support received by the offender sample appeared to be highes from family members and lowest from "others" in the offender's social network. This finding appears to represent the immediacy of relationships between offenders and their family, friends and others, whereby familial relationships are in general more immediat and closer than relationships with friends and others.

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Appendix 1: Interview Schedule

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SURVEY FOR DRINK DRIVING

Date of hearing _____

We'l won talki	I begin the interview now. The first few questions are just about yourself. I' 't be able to identify you by this information, but it will help me to see if I'm ng to a wide variety of people.	Circle - don't as
1	Sex	
1.	Male 1	
	Female	
2.	Could you tell me your date of birth?	
3.	What about your marital status, are you:	Read categories
	Single 1	
	Married 2	
	De facto 3	
	Divorced	
	Widewad 5	
	w laowed	
	Separated 0	
4	Could you tell me how many people you live with?	Record as '0' if live
		Make sure their answer does not include themselves.
	How many of them are family?	Don't ask i previous question = 0
5	Where abouts do you live for example in a house or a unit?	Don't read
5.	House 1	<u>otogorios</u>
	Touse	categories
	1 ownnouse	
	Unit	
	Flat 4	
	Caravan	
	Other (<i>Please specify</i>)	
6	Do you consider yourself to be an Aboriginal or Torres Strait Islander?	Don't ask if ATSI
0.	Yes 1	descent is obvious
	No. 2	ucscent is obvious
	NO 2	
7.	What is the highest level of education you have finished?	Don't read
	Primary 1	categories
	Junior (Grade 10)	6
	Senior (Grade 12) 3	Code the highest
	TAFE/Tech College/Apprenticeship 4	lovel they've
	Глі L/Teen Conege/Appronucesnip	actually completed
	$Other (Plage Snach) \qquad \qquad$	actuary completed.
	Outer (<i>i tease specify</i>) 0	

8.	In the last 6 months have you started or completed any courses or education	
	programs? For example, skillshare, adult education at the local school,	
	TAFE courses.	
	No 0	Record verbati
	Yes - Ask - What course was that?	response
9.	Do you have a job at the moment?	If more than one job
	No 0	- ask about the
	Yes 1	position in which
	What do you do?	they work the most
	Is that full time/part time/casual?	hours.
		But, record that
Tap		they hold more that
If Pa	rt time or Casual then ask -	
	How many hours would you work a week?	
	Do you know how much you would get an hour?	
10	Are you receiving any pensions or government assistance?	
10.	No	
	Vec. (Ask) Could I get you to look at could A and tell me	SHOW CADD A
	what sort of assistance that is	SHOW CARD A
	Sole Parent Pension 1	Read categories
	Newstart Allowanc 2	Read categories
	Tob Search Allowanc 3	
	Youth Training Allowanc 4	
	Family Payment 5	
	Parenting Allowanc 6	
	Other (Please specify) 7	
	S mer (1 rease speenty)	
11.	Do you know how much you would earn a year?	
	Yes – Can you look at card B and tell me the number besid the	SHOW CARD B
	amount you would earn:	_
		Responses range
	Don't kno	from 1-6. (Make
	No answer	sure they do not
		give a response
		category)
12.	Do you have a driver's licence at the moment?	Don't read
	No	responses
	Yes - (Ask) what sort of licence do you have?	
	learner's permit 1	If interviewing after
	provisional licenc	sentencing then ask:
	restricted licenc	"Did you hold a
	open licenc 4	licence before your
		court hearing"

In this next section I would li feeling about your life in gen	ke to ask yo eral.	u some q	uestions a	bout how	you are	
 Using card C, from whic 'very often', or a 'great d 	SHOW CARD C					
	Not At All/Never	Occas	Often	Very Often	Great Deal	
Felt calm and peaceful	0	1	2	3	4	
Felt downhearted and blu	0	1	2	3	4	
Been a happy person	0	1	2	3	4	
Been a very nervous person	0	1	2	3	4	
Felt so down in the dumps						
that nothing could cheer						
you up	0	1	2	3	4	
I'd now like to ask you some	questions at	bout the e	effects alco	ohol can l	have on	
people.						Write in the number
14. In terms of the number are over the limit for d	of drinks so riving:	meone ca	an have in	one hour	before they	
(a) What do you think an a	average size	d adult m	an with ar	open lice	ence could	
have in one hour before	e he was ove	er the lim	it?			
Response		•••••	••••••	• •••••• –	8	
	•••••	••• ••••		•••••	0	
(b) What about an average s	sized adult w	oman wi	th an oper	licence?		
Response		•••••	•••••	• •••••• _		
Don't kno	•••••	••••			8	
(c) What about someone on Response	a provisiona	al or learr	ner's licen	e who is	under 25?	
Don't kno	•••••••••••••••••••••••••••••••••••••••			· ·····		
15. Can you tell me what the	he legal Blo	od Alcoho	ol Limit w	ould be f	or:	If the respondent does not understand
(a) People with an open lic	ence?					BAL, explain that it
Response						is the reading yo
Don't kno					888	get if you blow into
(b) People younger than 2:	5 with a lear	ner's or p	provisiona	l licence?		a Di camaiysti.
Response			•••••			Write in the number
Don't kno		••••			888	(3 digits)
						1

16. Could you think about the following statements and answer TRUE or FALSE for me.											
Your Blood Alcohol Level may be reduced by:											
		T	rue			Fa	alse		Do	n't Kn	0
Drinking milk		•••	1			2				3	
Drinking Coff		•••	1			2				3	
Vomiting	•••••	••••	1			2				3	
Time		••••	1			2				3	
Having a cold shower	•••••	•••	1			2				3	
Exercising			1			2				3	
I would like you now to think how much you agree or disagree with the following statements. Using card D, you can give a number from 1 to 10 to show how much you agree with each statement. As you can see from card D, a '1' would mean you Strongly Disagree and a '10' would mean you Strongly Agree.							SHOW CARD D				
Remember, you can give a score anywhere beiv	veen		ли	10	•						
	Str Dis	rong sag	gly ree					St	troi Ag	ngly gr	
 17. I think it's okay if I drive after drinking (Ask) 1 drink (if provisional) 2 drinks (if female) 3 drinks (if male) in one hour 18. I won't drive if I've had (Ask) 1 drink (if provisional) 2 drinks (if female) 3 drinks (if female) 3 drinks (if male) in one hour 	1	2	3	4	5	6	7	8	9	10	
19. If I drive when I'm over the limit, I will get picked up for a breath test	1	2	3	4	5	6	7	8	9	10	
20. Do you think the effects of alcohol are the same for males and females if they are the same size and weight? Yes						If they respond using the above answer categories say - "This question is just a yes/no question"					

21. Next is a list of statements which may or card E, I would like you to answer definit	SHOW CARD E				
true, or definitely true, to the following sta	atements Def.	Prob.	Prob.	Def.	
	False	False	True	True	
If I needed help fixing an appliance or repairing my car, there is someone who would help me	0	1	2	3	
Most of my friends are more interesting than I am	0	1	2	3	
There is someone who takes pride in my accomplishments	0	1	2	3	
Most people I know think highly of me	0	1	2	3	
If I needed a ride to the airport very early in th morning, I would have a hard time finding some to take me	on 0	1	2	3	
I think that my friends feel that I'm not very goo at helping them solve their problems	od 0	1	2	3	
If I were sick and needed someone (friend, family member, or acquaintance) to take me to the doctor, I would have trouble finding someone to go with me	0	1	2	3	
If I needed a place to stay for a week because of an emergency (for example water or electricity of in my apartment or house), I could easily find someone who would put me up	out 0	1	2	3	
If I were sick, I could easily find someone to hel me with my daily chores	p 0	1	2	3	
I am as good at doing things as most other people are	0	1	2	3	
If I needed an emergency loan of \$100, there is someone (friend, relative, or acquaintance) I could get it fro	0	1	2	3	
In general, people do not have much confidenc in me	0	1	2	3	
Most of my friends are more successful at making changes in their lives than I a	ng 0	1	2	3	
If I had to go out of town for a few weeks, it wo be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.)	ould 0	1	2	3	

	Def.	Prob.	Prob.	Def.	
I am more satisfied with my life than most peop	Faise	Faise	1 rue	1 rue	
are with theirs	0	1	2	3	
If I was stranded 10 kilometres from home, ther	e is				
get me	0	1	2	3	
It would be difficult to find someone who would	1				
lend me their car for a few hours	0	1	2	3	
I am closer to my friends than most other people	e		_	_	
are to theirs	0	1	2	3	
If I needed some help in moving to a new hous					
someone to help me.	0	1	2	3	
I have a hard time keeping pace with my friends	0	1	2	3	
22. The next few questions look at how your	persona	<u>lly</u> feel a	bout you	r drinking	SHOW CARD
right now. I will read each statement an	d you c n card	an tell m F The c	e how mi	uch you	
Strongly Disagree, Disagree, Unsure, A	gree, ar	nd Strong	gly Agree		
	S D	D U	A	S A	
I don't think I drink too much	1	2 3	4	5	
I am trying to drink less than I do	1	2 3	4	5	
I enjoy my drinking but sometimes I drink too much	1	2 3	4	5	
Sometimes I think I should cut down on	1	2 3	· ·	5	
my drinking	1	2 3	4	5	
It's a waste of time thinking about my	1	n 2	4	5	
Libere just recently showed my drinking	1	2 3	4	5	
habits	1	2 3	4	5	
Anyone can actually talk about wanting to					
do something about drinking, but I a doing something about it	.1	2 3	4	5	
I am at the stage where I should think					
about drinking less alcohol	1	2 3	4	5	
My drinking is a problem sometimes	1	2 3	4	5	
There is no need for me to think about changing my drinking	. 1	2 3	4	5	
I am actually changing my drinking habits					
right now	1	2 3	4	5	
Drinking less alcohol would be pointless					

for me	1	2	3	4	5	
23. Looking at card G, how often do yo	ou have	a drink	containin	ig alcoh	ol?	SHOW CARD G
Never					1	
Monthly or less					2	
2 to 4 times a month						
2 to 3 times a week					4	
4 or more times a week					5	
Can you look at this card. This tells you	what a	standar	d drink i.	s. It ba	sically	HAND OUT
just says that a standard drink is a pot of	beer, o	r a nip c	of spirits,	or a gl	ass of	GREEN CARD
wine, or a can of light beer, or a glass of	port. I	'll give y	you a mir	ute to		
familiarise yourself with it.						Ensure they
						understand what a
24. Looking at card H, how many 'stan	dard' d	rinks coi	ntaining a	alcohol	do you	'standard' drink is
have on a typical day when you drin	nk?		C C		•	
1 or 2					1	SHOW CARD H
3 or 4					2	
5 or 6					3	
7 to 9					4	
10 or more					5	
25. For the next few questions I would like	ke you t	o use ca	rd I. Th	is card	has	
answer categories ranging from neve	r to less	s than m	onthly, n	nonthly,	weekly,	SHOW CARD I
daily or almost daily.				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
	Never	Less	Monthly	Weekl	Daily/	
		Than			Almost	
		Monthly			Dail	
How often do you have six or mor			_		_	
drinks on one occasion?	1	2	3	4	5	
How often during the last year hav						
you found that you were not able to			_		_	
stop drinking once you had started?	1	2	3	4	5	
How often during the last year hav						
you failed to do what was normally						
expected from you because of drinking?	1	2	3	4	5	
How often during the last year hav						
you needed a drink in the morning to						
get yourself going after a heavy drinking						
session?	1	2	3	4	5	
How often during the last year have you						
had a feeling of guilt or remorse after						
drinking?	1	2	3	4	5	
How often during the last year have you						
been unable to remember what happened						
the night before because you had been						
drinking?	1	2	3	4	5	
-						

 26. Have you or someone else been injured as a result of your drinking? No								If the respondent answers using the answer categories from the previous question - say "This question is just a yes/no question"			
28. The following statements are about drinking a you tell me how much you agree or disagree v you can give an answer from '1' Strongly Dis	an wi sag	d d th e gree tror	rivi each e to ngly	ing. h st '1(/	U ater D'S	sin mer Stro	g ca ıt? ngl	ard Re y A Stro	J, me gre	could mber ee. ly	SHOW CARD J
People who drink and drive should lose their driver's licenc	D 1	2	grea 3	e 4	5	6	7	8	Agr 9	ee 10	
People who drink and drive should go to jail	1	2	3	4	5	6	7	8	9	10	
It's okay to drink and drive so long as you don't get caught	1	2	3	4	5	6	7	8	9	10	
Everybody drinks and drives once in a whil	1	2	3	4	5	6	7	8	9	10	
There is no excuse for driving whil drunk	1	2	3	4	5	6	7	8	9	10	
Most of my friends think it's okay to drink and driv	1	2	3	4	5	6	7	8	9	10	
The dangers of drinking and driving are overrated	1	2	3	4	5	6	7	8	9	10	
The police spend too much time hassling drinking drivers	1	2	3	4	5	6	7	8	9	10	
It's okay to drive after drinking so long as you're not drunk	1	2	3	4	5	6	7	8	9	10	
Some people drive better after drinking	1	2	3	4	5	6	7	8	9	10	
My friends would think I was really stupid if I drove after drinking	1	2	3	4	5	6	7	8	9	10	
Drinking and driving is common in my community	1	2	3	4	5	6	7	8	9	10	
My community needs stricter laws against drunk driving	1	2	3	4	5	6	7	8	9	10	

drunk a glass or more of a		29. Looking at the categories on answer card K, how often would you hav							
e	drunk a glass or more of an alcoholic drink in the last 6 months?								
Never					0				
A few times									
Once every four									
Once a week									
2 or 3 times a w									
4 or 5 times a w									
Every day of the									
30. Could I get you to turn to the	e next card.	And I'll a	ilso get y	ou to look	at th	SHOW CARD L			
green card again. I would lil	ke to get som	ne indicatio	on of hov	w much yo	ou would				
drink at any one time, say, f	or exampl	last weeke	<u>nd</u> , how	many alco	holic	AND GREEN			
drinks would you have had o	on:					CARD			
None	1 or 2	3 or 4	5 or 6	7 to 9	10/more				
Last Friday 0	1	2	3	4	5				
	1	-	J	•	5				
Last Saturday 0	1	2	3	4	5				
		-	-		_				
And last Sunday 0	I	2	3	4	5				
31. In the past 6 months how of	ten have you	u driven or	n a public	e road afte	r drinking	Write in the number			
(Ask) 1 drink	(it	f provisio	nal)						
2 drinks	(ii	f female)							
3 drinks	(it	f male)							
in one hour?									
Respons	se								
Don't k	no								
		•••••	•••••						
32. I would like to read out a lis	st of stateme	ents about	your rel	ationships		SHOW CARD M			
32. I would like to read out a list family and friends. Using c	st of stateme ard M, coul	ents about ld you indi	your rel	ationships v much you	with with u agree or	SHOW CARD M			
32. I would like to read out a list family and friends. Using c disagree with each statemer	st of stateme eard M, coul nt. You can	ents about ld you indi answer st	your rela icate how rongly ag	ationships v much you gree, agree	with wagree or e,	SHOW CARD M			
32. I would like to read out a lis family and friends. Using c disagree with each statemer disagree, or strongly disagr	st of stateme vard M, coul nt. You can ree.	ents about ld you indi answer st	your rela icate how rongly ag	ationships v much you gree, agree	with with u agree or e,	SHOW CARD M			
32. I would like to read out a lis family and friends. Using c disagree with each statemer disagree, or strongly disagr	st of stateme ard M, coul nt. You can ree.	ents about ld you indi answer st Strongly	your rela icate how rongly az Agree	ationships v much you gree, agree Disagree	with with wagree or e, Strongly	SHOW CARD M			
32. I would like to read out a lis family and friends. Using c disagree with each statemer disagree, or strongly disagr	st of stateme vard M, coul nt. You can vee.	ents about ld you indu answer st Strongly Agree	your rela icate how rongly ag Agree	ationships y much you gree, agree Disagree	with u agree or e, Strongly Disagree	SHOW CARD M			
32. I would like to read out a lis family and friends. Using c disagree with each statemer disagree, or strongly disagr	st of stateme vard M, coul nt. You can ree.	ents about ld you indu answer st Strongly Agree	your rela icate how rongly az Agree	ationships v much you gree, agree Disagree	with u agree or e, Strongly Disagree	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree. My friends respect me 	st of stateme ard M, coul at. You can ree.	ents about ld you indu answer st Strongly Agree 1	your rela icate how rongly az Agree 2	ationships v much you gree, agree Disagree 3	with u agree or e, Strongly Disagree 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagr My friends respect me My family cares for me very mutication. 	st of stateme ard M, coul at. You can ree.	ents about Id you indi answer sti Strongly Agree 1	your rela icate how rongly a Agree 2 2	ationships v much you gree, agree Disagree 3 3	with u agree or e, Strongly Disagree 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree. My friends respect me	st of stateme vard M, coul nt. You can ree.	ents about ld you indu answer st Strongly Agree 1 1	your rela icate how rongly ag Agree 2 2	ationships y much you gree, agree Disagree 3 3	with u agree or e, Strongly Disagree 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagre My friends respect me My family cares for me very multiple and not important to others 	st of stateme ard M, coul at. You can ee.	ents about ld you indu answer st Strongly Agree 1 1 1	your rela icate how rongly ag Agree 2 2 2	ationships v much you gree, agree Disagree 3 3 3	with u agree or e, Strongly Disagree 4 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree, and the statemer disagree, or strongly disa	st of stateme ard M, coul at. You can ree. ch	ents about Id you indi answer str Strongly Agree 1 1 1	your rela icate how rongly ag Agree 2 2 2 2 2 2	ationships v much you gree, agree Disagree 3 3 3 3 3	with u agree or e, Strongly Disagree 4 4 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree, or strongly disagree, or strongly disagree, or strongly disagree, and the statemer disagree, or strongly disagree, and the strongly disagree, or strongly	st of stateme ard M, coul at. You can ree. ch	ents about ld you indi answer sti Strongly Agree 1 1 1 1	your rela icate how rongly ag Agree 2 2 2 2 2 2	ationships y much you gree, agree Disagree 3 3 3 3 3	with u agree or e, Strongly Disagree 4 4 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree,	st of stateme ard M, coul at. You can ree.	ents about ld you indu answer sta Strongly Agree 1 1 1 1 1 1	your rela icate how rongly ag Agree 2 2 2 2 2 2 2 2	ationships y much you gree, agree Disagree 3 3 3 3 3 3 3	with u agree or e, Strongly Disagree 4 4 4 4 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagr My friends respect me My family cares for me very mu I am not important to others My family holds me in high ester I am well liked I can rely on my friends 	st of stateme ard M, coul at. You can ree. ch	ents about ld you indi answer str Strongly Agree 1 1 1 1 1 1 1	your rela icate how rongly a Agree 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ationships v much you gree, agree Disagree 3 3 3 3 3 3 3 3 3 3	with u agree or e, Strongly Disagree 4 4 4 4 4 4 4 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree,	st of stateme ard M, coul at. You can ree. ch	ents about ld you indi answer sti Strongly Agree 1 1 1 1 1 1 1 1	your rela icate how rongly ag Agree 2 2 2 2 2 2 2 2 2 2 2 2	ationships y much you gree, agree Disagree 3 3 3 3 3 3 3 3 3 3 3 3 3	with u agree or e, Strongly Disagree 4 4 4 4 4 4 4 4 4	SHOW CARD M			
 32. I would like to read out a list family and friends. Using c disagree with each statemer disagree, or strongly disagree, disagree, disagree, disagree, disagree, disagree, disagree, disag	st of stateme ard M, coul at. You can ree. ch	ents about ld you indu answer sta Strongly Agree 1 1 1 1 1 1 1 1 1	your rela icate how rongly ag Agree 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ationships y much you gree, agree Disagree 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	with u agree or e, Strongly Disagree 4 4 4 4 4 4 4 4 4 4 4 4 4	SHOW CARD M			

	Strongly	Agree	Disagree	Strongly	
	Agree			Disagree	
I am respected by other people	1	2	3	4	
I am loved dearly by my family	1	2	3	4	
My friends don't care about my welfar	1	2	3	4	
Members of my family rely on me	1	2	3	4	
I am held in high esteem	1	2	3	4	
I can't rely on my family for support	1	2	3	4	
People admire me	1	2	3	4	
I feel a strong bond with my friends	1	2	3	4	
My friends look out for me	1	2	3	4	
I feel valued by other peopl	1	2	3	4	
My family really respects me	1	2	3	4	
My friends and I are really important to each other	1	2	3	4	
I feel like I belong	1	2	3	4	
If I died tomorrow, very few peopl would miss me	1	2	3	4	
I don't feel close to members of my family	1	2	3	4	
My friends and I have done a lot for one another	1	2	3	4	
For the next few questions, I would like yo card you can answer Yes Definitely, Yes P Probably Not, or No Definitely Not.	u to use can robably, No	rd N. As ot sure w	you can s hat I'd do,	ee on the , No	SHOW CARD N
 33. Imagine you are out and know you h limit. Would you leave your locked Yes - definitely Yes - probably Not sure what I'd do No - probably not No - definitely not 	have drunk to car where in	oo much t was and	and are ov l not drive	ver th ? 	

34. Using the same answer categories, how following.	v likely would	d you be	e to do the		SHOW CARD N		
Yes Defini	s Yes tel Probably	Not Sure	No Probably Not	No Definitel Not			
Drink Lite beer if driving 1	2	3	4	5			
Plan ahead that the driver will not drink 1	2	3	4	5			
Plan ahead not to drink if you ar going to driv1	2	3	4	5			
Take a taxi by yourself or with others if you have been drinking 1	2	3	4	5			
Keep track of your drinks and stay under the limit if you are driving 1	2	3	4	5			
Stay away overnight if you hav been drinking1	2	3	4	5			
Avoid being involved in "shouts" to make sure you drink less 1	2	3	4	5			
35. I would just like to ask you if you've heard of the Under the Limit Drink Driving Program being run through this court. No Yes Don't kno							
That actually ends the interview. However, of your hearing. I can do that by asking th prefer you can come back and tell me after do?	, I would stil e Clerk of th • your hearin	l like to e Court g. Wha	find out th or if you t would yo	he results would ou like to 1	Do not ask if interviewing after their court hearing		
Come back			•••••	1			

Thankyou for coming back and letting me know the results of your hearing.	Do not say if interviewing after
36. Will you be undertaking the 'Under the Limit' program?	their hearing
1 No 1 Vac 2	
165	
37. Are you on probation? Time in months	
 38. Could you tell me if your licence has been suspended and for how long? Time in months 	
39. Are you on a restricted licence?	
No 1	
Yes	
40. How much was your fine for drink driving?	
41. Were you charged with any other offences today? No	
res - (ASK) what offences were they?	Record verbati
	response
What penalties did you receive (e.g. fines / community service)?	
	Record verbati
	response
42 West state 1:19	
42. were you sent to jan?	
No 2	
110	
43. What was your BAC reading for this offence?	
44. How many other drink driving offences have you had in the last 5 years?	
No prior offences	
One prior offenc2	
Multiple prior offences (Write in number)3	
45. When was your last recorded drink driving offenc	

Appendix 2: Normative Data

Normative Data

Method

TAFE students from the Rockhampton TAFE college were asked to complete a selfadministered survey for use in a larger project that was being run in the Centra Queensland Region. The survey was administered during class times across a wide range of course types, including hairdressing, woodwork, and computing. The surve took approximately 10 minutes to complete and was run over a 2 week period during April, 1997.

The survey was used to obtain local normative data on several of the scales included in the offender interviews. Respondents in the normative sample were asked demographic questions (age, sex, marital status and education level) along with the questions that formed the Mental Health Inventory (MHI5), the Social Suppor Appraisals Scale (SSA), the Self-esteem Support Scale and the Tangible Suppor Scale.

Results

Socio-demographics

The normative sample consisted of 204 TAFE students, 48.5% of which were male. The mean age of the sample was 29.2 years (SD=12.0 years; Median=25.5 years). Table 1 shows the demographics of the normative sample, comparing males and females on these variables. As can be seen from Table 1, there was a tendency for males to be less than 24 years of age, while females tended to be in the 35-44 years age group. This difference was not significant ($\chi^2(4) = 3.65$).

Table 1 also shows the marital status of males and females in the normative data. There was no difference between these groups for marital status ($\chi^2(4) = 8.71$), although there was a trend for more males to be single and more females to be married. Differences were also examined for education level and once again found to be non-significant ($\chi^2(4) = 3.85$).

	Males (%)	Females (%)
Age Group		
Less than 24 years	52.6	44.8
25-34 years	21.6	18.1
35-44 years	13.4	22.9
45-54 years	9.3	11.4
55+ years	3.1	2.9
Marital Status		
Single	54.5	39.0
Married	31.3	44.8
De Facto	9.1	6.7
Divorced	4.0	3.8
Widowed		
Separated	1.0	5.7
Education Level		
Primary	1.0	2.9
Junior (Grade 10)	26.3	35.2
Senior (Grade 12)	30.3	24.8
TAFE/Apprenticeship	30.3	27.6
University/CAE	8.1	4.8
Other	4.0	4.8

Table 1Age, marital status and education level for males and females in the normative sample

Mental Health Inventory

The mental health status of the normative sample was examined using the MHI5 and no difference between males and females was found (t(195) = -.24). The Cronbach's alpha (reliability) for the MHI5 was .81 (N = 197). Figure 1 shows the distribution of scores for the MHI5 for the entire sample. The mental health or psychologica well-being of this sample was high as 86.8% of the sample had a MHI5 score of 10 or less (in a possible range of 0 to 20). The mean score on the MHI5 was 6.5 (SD=3.5; Median = 6).





Social Support Appraisals Scale

Family Subscale: The Cronbach's alpha for the Family subscale was .87 (N = 190). Scores on this subscale were in the mid-to-high end of the range. The Familysubscale had a mean score of 13.4 (SD=4.3; Median = 13), with 80% of the normative sampl having a score of 16 or less (in a possible range of 8 to 32). No gender differences were found (t(188) = 1.34).

<u>Friends Subscale</u>: Cronbach's alpha for the Friends subscale was .91 (N = 197). An examination of the Friends subscale found a gender difference (t(195) = 2.46), with females indicating that they had higher support from friends than did males. The mean score for females was 12.4 (SD=3.5; Median = 13) with 81% of females having a score of 14 or less (in a possible range of 7 to 28). The mean score for males was 13.6 (SD=3.8; Median = 14) with 67% having a score of 14 or less. The overall mean for the Friends subscale was 13.0 (SD=3.7; Median = 13).

<u>Others Subscale</u>: The Cronbach's alpha for the Others subscale was .89 (N = 190). The normative sample had a mean score of 15.6 (SD=3.9; Median = 15) with 71.6% of the sample having a score of 16 or less (in a possible range of 8 to 32), indicating tha the sample were receiving a high level of support from others. No gender difference was found (t(188) = 1.29).

<u>Comparison of the Family, Friends and Others Subscales</u>: After adjusting scores on the Family, Friends and Others subscales to account for differences in the number o items that make up the scales, a repeated measures ANOVA was conducted to determine if the normative sample was receiving more support from any one subgroup within their social network. A significant result emerged (F(2,176) = 58.26), with

support from family being greater than support from friends (F(1,177) = 25.37) and support from friends being greater than support from others (F(1,177) = 12.25).

Total SSA Scale: The SSA total scale score, which represents the sum of the three subscales presented above, was examined for a gender difference. No difference was found between males and females for this measure (t(176) = 1.87). The Cronbach's alpha for the total SSA scale was .95 (N = 178). Figure 2 shows the distribution o scores for the total SSA scale. Scores on this measure were clustered in the low end of the scale range indicating that respondents in the normative sample were receiving a high level of support from their entire social network (ie family, friends and others). The mean score was 42.0 (SD=10.6; Median = 41) with 93.3% of the sample having a score of 58 or less (in a possible range of 23 to 92).



Figure 2 Distribution of Total SSA Scores for the Normative Sampl

<u>Replication o Subscales</u>: A factor analysis was performed on the items that make up the total SSA scale to determine if the subscales could be replicated in the normative sample. A 3-factor solution reflecting the Family, Friends and Others subscales was expected. Factor analysis using varimax rotation of the entire normative sampl produced a 3-factor solution as did factor analyses of males and females separately. However, item loadings on these factors did not completely replicate the expected factors for the entire normative sample, for males or for females. The results sugges that the SSA scale is not performing as expected with the normative sample and these results should be considered in future analyses using the normative data.

Interpersonal Support Evaluation List
<u>Self-esteem Support</u>: Cronbach's alpha for the Self-esteem Support subscale was .82 (N = 181). Figure 3 shows the distribution of self-esteem support scores for the normative group. The mean self-esteem support score was 19.8 (SD=4.6; Median = 20), with approximately 50% of the sample having a score of 20 or more (in a possible range of 0 to 30). Results indicate that self-esteem support is in the mid-to-high range for this sample. No gender difference was found for this scale (t(179) = -1.48).

A standard multiple regression was performed with Self-esteem Support scores as the dependent variable. MHI5, Family, Friends, and Others scores were entered as independent variables to determine the influence of mental health and social suppor subgroups on self-esteem support. The regression analyses were performed on the total normative sample and on males and females separately. Full summary tables fro the regression analyses are presented in Appendix 3.



Figure 3 Distribution of Self-esteem Support Scores for the Normative Sample

For the total normative sample, the multipl R was .799 and was significantly different fro zero (F(4,151) = 66.52). The model accounted for 63.8% of the variance in Self-estee Support scores. Mental health, support from family, and support from friends were significant predictors in this model, having standardised regression coefficients of $\beta = -.389$, -.165, and -.217 respectively. The results suggest that mental health is the most importan variable in the prediction of Self-esteem Support

For males, the multiple *R* was .834 (F(4,68) = 38.80), with the model accounting for 69.5% of the variance in Self-esteem Support scores. Of the four independent variables entered into the regression analysis, only mental health was shown to be a significant predictor. The standardised regression coefficient for mental health was $\beta = -.383$.

A similar result to that found for males emerged from the regression analysis for females. The multiple *R* was .757 (F(4,78) = 26.10), with the model predicting 57.2% of the

variance in Self-esteem Support scores. Once again, the only significant predictor in the model was mental health status ($\beta = -.393$).

The results of the regression analyses described above indicate that mental health is the most important predictor of self-esteem within this sample. Although support from family and support from friends emerged as significant predictors for the total normative sample, they were not significant predictors of Self-esteem Support scores when males and females were examined separately. The Beta Coefficients (see Appendix 3) for the Family and Friends subscales were similar for all three regression analyses (ie for the total normative sample, males and females), suggesting that the increased sample size in the regression analysis using the total sample allowed the significant results to emerge.

<u>*Tangible Support:*</u> The Cronbach's alpha for the Tangible Support subscale was .88 (N = 198). Figure 4 shows the distribution of scores for this scale. Scores are clustered in the high end of the spectrum, with approximately three-quarters of the sample having a score o 20 or more (in a possible range of 0 to 30). The mean score for this scale was 23.7 (SD=5.5; Median = 25). No gender difference was found for this scale (t(196) = -1.149).



Figure 4 Distribution of Tangible Support Scores for the Normative Sample

A standard multiple regression was performed with Tangible Support scores as the dependent variable. MHI5, Family, Friends, and Others scores were entered as independent variables to determine the influence of mental health and social suppor subgroups on tangible support. The analyses were performed on the total normative sample and on males and females separately. Full summary tables from the regression analyses can be viewed in Appendix 3.

For the total normative sample, the multipl R was .705 and was found to be significant (F(4,167) = 41.21). The model accounted for 49.7% of the variance in Tangible Support scores. Three of the four independent variables entered into the model were significant predictors of Tangible Support scores. These were menta health ($\beta = -.259$), support from family ($\beta = -.220$) and support from friends ($\beta = -$

.443). Support from friends appears to be the most important predictor of Tangible Support scores.

For males, the multiple *R* was .778 (F(4,80) = 30.59), with the model accounting for 60.5% of the variance in Tangible Support scores. Mental health status and suppor from friends emerged as significant predictors with standardised regression coefficients of $\beta = -.228$ and -.420. Support from friends appears the most important predictor in this instance.

Similar results to those found for males emerged for females. The multiple *R* was .624 (F(4,82) = 13.08), with the model accounting for 38.9% of the variance in Tangible Support scores. Of the four independent variables entered into the regression analysis, only mental health and support from friends emerged as significant predictors o tangible support. The β values were -.247 and -.416, respectively. The most importan predictor of tangible support is support from friends.

Overall, the results of the three regression analyses described above suggest that the most important predictor of tangible support is support from friends. Mental health status is also important, but it does not appear as important as support from friends. When the regression analysis was performed on the total normative sample, support from family also emerged as a significant predictor of tangible support, however this may be due to an increase in sample size compared to the regression analyses of males and females separately.

<u>Comparison of the Self-esteem Support and Tangible Support Subscales</u>: A Paired Samples *t*-test was performed to determine if the normative sample was receiving more Self-esteem Support or Tangible Support from their social network. The results of the analysis were significant (t(177) = 11.49), with the mean level of Tangible Suppor (Mean = 23.6)being higher than the mean level of Self-esteem Support (Mean = 19.9). The normative sample was receiving more tangible assistance than self-esteem suppor from their social network.

<u>Replication o Subscales</u>: A factor analysis was run on the variables that make up the subscales of the ISEL and after varimax rotation a 4-factor solution emerged for the entire normative sample and a 5-factor solution emerged for each of males and females from the normative sample. The results do not reflect the expected 2-factor solution that would represent the Self-esteem Support and Tangible Suppor subscales of the ISEL. The outcomes of the factor analysis may have resulted from the use of two o the four subscales from this measure. That is, by splitting the ISEL and retaining only two subscales from the total scale, the influence of the items that make up the two unused subscales on the responses given to the two remaining subscales, was absent. The results suggest that the subscales of the ISEL are not performing as expected with the normative data.

Appendix 3: Summary Tables of Regression Analyses

- Section A: Self-esteem Support Scores (DV) with Mental Health Status Family Subscale Friends Subscale Others Subscale
- Section B: Tangible Support Scores (DV) with Mental Health Status Family Subscale Friends Subscale Others Subscale

Section A

Table 1
Standard multiple regression of mental health and social support subgroups on
self-esteem support scores for the total offender sample

Variable	Self	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr ²
	estee							(unique)
MHI5	376					251***	245	.055
Family	431	.062				.035	.034	.001
Friends	637	.248	.663			214	190	.009
Others	663	.180	.675	.852		556***	481	.058
				Iı	ntercept =	33.793		
Means	21.60	6.75	13.32	12.32	14.97			
SD	4.25	4.14	4.23	3.77	3.68			
							$R^2 =$.517
						Adjus	sted $R^2 =$.503
							R =	.719***

Scales are negatively scored; **** p<.001

Table 2

Standard multiple regression of mental health and social support subgroups on self-esteem support scores for males in the offender sample

Variable	Self	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2
	estee							(unique)
MHI5	296					199**	190	.034
Family	381	.030				.082	.089	.004
Friends	602	.188	.656			199	187	.009
Others	643	.141	.663	.848		562***	516	.069
				I	ntercept =	32.689		
Means	21.53	6.34	13.50	12.50	15.14			
SD	3.93	3.75	4.28	3.70	3.61			
							$R^2 =$.467
						Adjus	sted $R^2 =$.448
						-	R =	.683***

^a Scales are negatively scored; ^{**} p<.01, ^{***} p<.001

Table 3

Standard multiple regression of mental health and social support subgroups on self-esteem support scores for the total normative sample

Variable	Self	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2
	estee							(unique)

MHI5	660					516***	389	.092	
Family	589	.459				177*	165	.012	
Friends	624	.460	.523			256**	217	.019	
Others	710	.595	.730	.756		214	187	.008	
					Intercept =	32.239			
Means	19.84	6.50	13.40	12.98	15.61				
SD	4.56	3.48	4.33	3.69	3.90				
							$R^2 =$.638	
						Adjus	sted $R^2 =$.628	
							R =	.799***	
^a Scales are	^a Scales are negatively scored; $* p < .05$, $* p < .01$, $* p < .001$								

Table 4Standard multiple regression of mental health and social support subgroups onself-esteem support scores for males in the normative sample

Variable	Self	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2
	estee							(unique)
MHI5	725					510***	383	.069
Family	614	.491				149	141	.006
Friends	650	.461	.465			261	216	.017
Others	794	.673	.796	.757		293	240	.007
]	Intercept =	32.988		
Means	19.28	6.44	13.82	13.63	15.99			
SD	4.87	3.55	4.64	3.79	3.90			
							$R^2 =$.695
						Adju	sted $R^2 =$.677
							R =	.834***

^a Scales are negatively scored; **** p<.001

Table 5Standard multiple regression of mental health and social support subgroups onself-esteem support scores for females in the normative sample

Variable	Self	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2
	estee							(unique)
MHI5	608					513***	393	.104
Family	549	.427				185	174	.016
Friends	583	.486	.584			202	170	.011
Others	626	.532	.662	.756		194	180	.010
				Iı	ntercept =	31.504		
Means	20.29	6.55	12.98	12.35	15.26			
SD	4.26	3.42	3.97	3.50	3.89			
							$R^2 =$.572
						Adjus	sted $R^2 =$.550
						Ū	<i>R</i> =	.757***
a Caslas an	1	1 ***	001					

^a Scales are negatively scored; *** p< .001

Section B

tangible support scores for the total orienter sample									
Variable	Tangible	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2	
								(unique)	
MHI5	131					013	010	.000	
Family	410	.062				198	166	.014	
Friends	523	.248	.663			852***	636	.100	
Others	392	.180	.675	.852		.363	.265	.018	
					Intercept =	32.449			
Means	24.67	6.75	13.32	12.32	14.97				
SD	5.05	4.14	4.23	3.77	3.68				
							$R^2 =$.299	
						Adjus	sted $R^2 =$.279	
							R =	.547***	

Table 1

Standard multiple regression of mental health and social support subgroups on tangible support scores for the total offender sample

^a Scales are negatively scored; **** p<.001

Table 2Standard multiple regression of mental health and social support subgroups ontangible support scores for males in the offender sample

Variable	Tangible	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	Sr^2
								(unique)
MHI5	083					004	003	.000
Family	328	.030				128	110	.006
Friends	452	.188	.656			841***	622	.100
Others	315	.141	.663	.848		.396	.286	.021
					Intercept =	30.884		
Means	24.62	6.34	13.50	12.50	15.14			
SD	5.00	3.75	4.28	3.70	3.61			
							$R^2 =$.227
						Adjus	sted $R^2 =$.199
							R =	.477***

^a Scales are negatively scored; *** p< .001

Table 3Standard multiple regression of mental health and social support subgroups ontangible support scores for the total normative sample

Variable	Tangible	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2
							-	(unique)
MHI5	497					418***	259	.042
Family	540	.459				289**	220	.023
Friends	601	.460	.523			625***	433	.077
Others	559	.595	.730	.756		.073	.052	.001
					Intercept =	37.230		
Means	23.67	6.50	13.40	12.98	15.61			
SD	5.51	3.48	4.33	3.69	3.90			
							$R^2 =$.497
						Adjus	ted $R^2 =$.485
						-	R =	.705***
^a Scales are negatively scored; ^{**} p<.01, ^{***} p<.001								

Table 4

Standard multiple regression of mental health and social support subgroups on tangible support scores for males in the normative sample

Variable	Tangible	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2
								(unique)
MHI5	570					383*	228	.027
Family	577	.491				224	162	.009
Friends	634	.461	.465			655***	420	.070
Others	675	.673	.796	.757		191	122	.002
					Intercept =	40.955		
Means	23.21	6.44	13.82	13.63	15.99			
SD	6.05	3.55	4.64	3.79	3.90			
						Adjus	$R^{2} =$ ted $R^{2} =$ $R =$.605 .585 .778 ^{****}
^a Scales ar	e negatively so	ored: * n<	$05^{***} n < 0$	01				

Scales are negatively scored; p<.05, p<.001

Variable	Tangible	MHI5 ^a	Family ^a	Friends ^a	Others ^a	В	β	sr^2		
							-	(unique)		
MHI5	419					377*	247	.041		
Family	477	.427				278	224	.027		
Friends	555	.486	.584			574**	416	.067		
Others	431	.532	.662	.756		.185	.147	.007		
					Intercept =	34.350				
Means	24.11	6.55	12.98	12.35	15.26					
SD	4.95	3.42	3.97	3.50	3.89					
							$R^2 =$.389		
						Adju	sted $R^2 =$.360		
						-	R =	.624***		
^a Scales ar	^a Scales are negatively scored: [*] $p_{c} = 05$ ^{**} $p_{c} = 01$ ^{***} $p_{c} = 001$									

Table 5 Standard multiple regression of mental health and social support subgroups on tangible support scores for females in the normative sample

Scales are negatively scored; p < .05, p < .01, p<.001