'Pick a Skipper': an evaluation of a designated driver program to prevent alcohol related injury in a regional Australian city

Kevin Boots Richard Midford

National Centre for Research into the Prevention of Drug Abuse

Please address all correspondence to:

Richard Midford

Senior Research Fellow

National Centre for Research into the Prevention of Drug Abuse

Curtin University

GPO Box U1987

Perth WA 6845

Australia

Email: richard@ncrpda.curtin.edu.au

Summary:

The 'Community Mobilization for the Prevention of Alcohol Related Injury' (COMPARI) project undertook a designated driver intervention for young adults, known as 'Pick-a-Skipper', in the regional Western Australian city of Geraldton, which has a population of approximately 25,000. The first component of the program was a television advertising campaign encouraging people to 'Pick-a-Skipper' if they were going out to drink. The second component of the program comprised a promotion targeting nightclub patrons. The drivers of two or more passengers were provided with free soft drink all night by the nightclub.

The 'Pick-a-Skipper' campaign succeeded in persuading a significant number of those young Geraldton drinkers, who were intending to drive to and from their location of drinking, to select non drinking drivers as 'Skippers' before they began consuming alcohol. It was also found that the mass media component was much more important in the success of the program than the on-site licensed premises component; that males were significantly less likely to select a 'Skipper' and more likely to undertake high risk taking behaviour; that inaccurate knowledge about 'Skippers' was also associated with high risk taking behaviour and accurate knowledge of the 'Skipper' concept was associated with increased frequency of 'Skipper' selection; and that passengers defined as 'high risk takers' are more likely to increase their consumption of alcohol if they have designated a driver.

The study indicates that an extensive media campaign, providing positive images and utility knowledge on designating a non drinking driver, can have a significant impact on drinking and driving behaviour in a local community.

Introduction:

Since its inception in 1992 the 'Community Mobilization for the Prevention of Alcohol Related Injury' (COMPARI) project has undertaken a range of activities aimed at reducing alcohol related harm in Geraldton, a regional city in Western Australia with a population of approximately 25,000. One such activity was a designated driver intervention, given the title of 'Pick-a-Skipper'.

A comparative analysis of 'Driving Under the Influence' (DUI) charges for Geraldton and a control city, Bunbury (Midford et al, 1995) coupled with hospital morbidity statistics for each location (Unwin et al, 1994), revealed that drink-driving was significantly more prevalent in Geraldton during the early 1990's and was accompanied by greater alcohol related road injury morbidity in that city. Young adults were the group most likely to be associated with drink driving and alcohol related harm. As a result, one of the alcohol harm issues COMPARI chose to address was drinking and driving among young adults.

One method, used by health promoters to reduce drink-driving behaviour, has been to encourage drinkers to designate a non-drinking driver whenever the location of drinking necessitates the use of a car (Sheldon and Hammond, 1984). COMPARI decided to promote this practice in Geraldton through a

local media campaign. This was complemented by rewards for designated non-drinking drivers, provided by a popular nightclub in town. The program targeted 18-35 year old Geraldton residents.

Background:

Designated driver programs appear to have originated in Scandinavian countries, where a custom of providing drivers with non-alcoholic drinks has existed for some time (Laurell, 1992). In the 1980's this custom was transformed into a range of health promotion programs in the United States, where a plethora of designated driver programs have been undertaken (Apsler, Harding and Goldfein, 1987). Some programs have focused on licensed premises, by providing on-site incentives, or promotions aimed at encouraging drinkers to choose their driver before drinking, while others have used the mass media to promote behaviour change (DeJong and Atkin, 1995). Similarly, in Australia, a number of agencies have undertaken designated driver programs in association with licensed premises, and at least one, the Liquor Industry Road Safety Association of Western Australia, has undertaken a mass media campaign (Liquor Industry Road Safety Association, 1994).

The 'Pick-a Skipper' campaign was devised by the Liquor Industry Road Safety Association in 1985 as a mass media promotion encouraging drinkers to choose a non-drinking 'Skipper' to drive drinkers home. The promotions included a range of television and print media advertisements that were screened irregularly over a number of years.

Neither the Liquor Industry Road Safety Association campaign, nor most onsite promotions have been evaluated to identify whether designated driver programs are effective in helping reduce alcohol-impaired driving and its damaging sequelae (Wagenaar, 1992). There has also been speculation about whether designated driver programs encourage an increase in passenger consumption (e.g.: Glassoff, Knight and Jenkins, 1994) and reduce drink-drive prevention efforts by diverting attention from other solutions (DeJong and Wallack, 1992).

Nevertheless, some evaluations have been undertaken in Australia and Overseas. For example Boots evaluated three Australian designated driver programs and concluded that: -

A well-implemented designated driver program is a strategy which will help modify behaviour related to pre drink driver selection, driver consumption patterns and drink-drive risk-taking behaviour (Boots, 1994, p29).

The Harvard Alcohol Project undertook an extensive evaluation of a mass media designated driver campaign in the United States. The investigators stated that the campaign had: -

A dramatic impact on awareness, acceptance, and usage of the designated driver concept (which) has been documented in national public opinion polls (Winsten, 1994, p12)

More recently, an evaluation of a designated driver program in six licensed premises that incorporated server training identified that a major limitation to program success was that few licensed premises fully implemented the program, and few customers participated in the program even with active server intervention.

Out data tend to support the view that passively implemented designated driver and server intervention programs by themselves may not have a substantial impact on consumer behaviour. It may be best however, to consider designated driver and server intervention innovations in the context of a broader array of interventions

(Simons-Morton and Cummings, 1997, p331)

These and other findings, albeit from a small number of evaluations, suggest that designated driver program may, in some circumstances, be effective in reducing drinking and driving and achieving the safe delivery of drinkers from their location of drinking (DeJong, 1997).

The Geraldton 'Pick-a-Skipper' program:

The Geraldton 'Pick-a-Skipper' program sought to replicate the benefits deriving from designated driver programs, in the context of a small regional city and to further evaluate the contribution of mass media and of on-site components to the overall impact of the program.

The program had two intervention and three research aims.

Intervention Aims

- Encourage Geraldton drinkers (who were intending to drive to their location of drinking) to select their drivers before they began consuming alcohol.
- Encourage selected or 'designated' drivers to remain under the legal blood alcohol limit.

Research Aims

- Evaluate the effectiveness of the two intervention components of the program
- Provide information about the characteristics of people who reported frequent pre-drink, driver selection
- Provide information about the characteristics of people who reported increased passenger consumption as a result of selecting a designated driver.

There were two components to the Geraldton 'Pick-a-Skipper' program. The first component was an intervention targeting drinkers in their own homes using the medium of television. The second component was an intervention targeting staff and patrons at a licensed premise frequently by the target age

group. It was intended that both components would operate during a defined 3-month period beginning on October 1st 1994 and ceasing on December 31st 1994.

The first intervention was a media campaign, consisting, primarily of television advertising broadcast on the Golden West Network. This television station is the only commercial television station in regional Western Australia and broadcasts to all of Western Australia outside the capital city of Perth (though local advertisements are screened in either the northern split that includes Geraldton or the southern split). Almost all Geraldton households own a television and the Golden West Network has a market share of approximately 75% (P Thompson, personal communication, 10/20/1998). The basis of the television advertising campaign was the 'Pick-a-Skipper' advertisement screened by the Liquor Industry Road Safety Association in the 1980's, (which was used with permission). This advertisement is a humorous cartoon featuring the tune 'Show me the way to go home' and the slogan 'Pick-a-Skipper'. It was modified to include local content, and sponsored and screened by The Golden West Network. A total of 72, paid, thirty second advertisements, were screened during the campaign months and supplemented by approximately 140 free advertisements placed by the network, whenever advertising space was vacant. Paid advertising was screened during television shows which were noted by the Golden West Network as having a large proportion of viewers in the target age group of 18 - 35 year olds. These television shows were generally screened after 8 p.m. or on weekends, and were either contemporary music programs, youth orientated 'soap operas', movies or sporting telecasts. A media launch of the beginning of the campaign also provided some newspaper coverage of the campaign. The

campaign was intended to encourage all drinkers in the target age group, not just those attending a licensed premises, to select their 'Skipper' before they drank.

The second component of the program involved a promotion targeted at nightclub patrons of one of two similar nightclubs in Geraldton, that agreed to participate (both were invited to participate). The patrons of the nightclub were overwhelmingly 18-35 year olds. Drivers of two or more passengers patronizing the participating nightclub were provided with free soft drink all night. The free soft drink was donated by the nightclub and was advertised on the television advertisement and on two nightclub banners. Door staff were encouraged to actively advertise the free soft drink to 'Skippers' upon entry.

Quantitative Evaluation Methodology:

The media campaign was evaluated by independent pre and post intervention surveys. Two hundred pre-test and 180 post-test telephone surveys were conducted with 18 to 35 year old Geraldton residents. Telephone numbers of potential respondents were selected by generating random numbers that identified a page, a column and a position within the Geraldton telephone book, and an interview was undertaken with one person in each household, if that household included a person in the desired age range who was willing to participate. The surveys took approximately three minutes to complete and were undertaken by university employed research assistants in the week preceding and the week following the three-month campaign. The questions aimed to identify risk taking behaviour (whether the respondent believed that

within the last four weeks they had been a driver or passenger in a car where the driver may have been over 0.05 BAC); the frequency of 'Skipper' selection; whether passengers' consumption increased when a 'Skipper' was selected; and knowledge of the 'Skipper' concept and associated publicity. The pre-intervention data was analyzed to provide information about the characteristics of 'Skippers' and those people at greater risk of drink-drive related problems. The pre and post intervention results were compared in order to measure the impact of the intervention. The data obtained was analyzed using the chi-squared goodness of fit test (Siegel and Castellan, 1988). However, as most of the pre and posttest survey questions allowed 'other' and/or 'unsure' answers sample sizes reported for the variables analyzed were always less than the total pre or posttest samples.

The pre-test sample represented approximately 2.6% of Geraldton's 18-35 year old population, while the post test sample represented approximately 2.3%. The male to female ratio was almost identical between pre and post tests with 38% of respondents being male at pre test and 37% being male at post test (p=0.8077). Similarly, there was no significant difference in the age of respondents between the pre and posttests (p=0.5884).

Qualitative Evaluation Methodology

Implementation of the nightclub promotion was monitored by regular visits to the club by the first author and by maintaining a register of 'Skippers' at the entrance to the club. Monitoring involved brief fortnightly visits to the nightclub and informal conversation with management, door and bar staff.

A focus group of 'Skippers' from the nightclub was also interviewed to evaluate the nightclub promotion and the media campaign. All 'Skippers', who registered at the nightclub, were invited to participate and were offered a small fee for their attendance. Five chose to participate in the focus group. The one hour focus group discussed issues related to the advertising and implementation of the 'Pick-a-Skipper' campaign, the usual drinking behaviour of 'Skippers' and passengers, participant thoughts about the 'Skipper' concept and why the participants had chosen to act as 'Skippers'. The discussion was supervised by two facilitators and recorded on audiotape.

Results:

The survey and the focus group provided measures of the impact, reach and influence of the television campaign (tables 1&2) and measures of the participation rate, and impact, of the nightclub intervention; provided valuable information about the differences between people who regularly select a designated driver and those that do not (table 3), and provided information about the differences between people who regularly increase their alcohol consumption after selecting a designated driver and those that do not (table 4).

Both the survey and the focus group were valuable in providing information about the impact of the television advertising intervention that was intended to encourage the selection of 'Skippers'. Three significant differences were noted between the pre and posttest samples. Firstly, there was an association between the intervention and the frequency of driver selection. Respondents were asked:

When you travel by car to a place where you will be drinking alcohol, how often will you select a driver before drinking commences? Always, Usually, Sometimes or Never?

After excluding those respondents who gave an 'other' response (such as 'do not drive, do not drink, do not drive to drink locations or never drink too much), the frequency of driver selection was significantly higher in the post intervention sample than in the pre intervention sample (p = 0.016) (see table 1). An analysis of this finding comparing the pre and posttest odds ratios reveals that the significant change identified was largely due to more post test respondents claiming that they 'always' selected a skipper. That is, only the odds ratio comparing the pre and post reference group cases ('never' respondents) with the pre and post 'always' cases was significant (p = 0.0302: df = 1: Odds ratio = 2.5199: 95% CI 1.0922- 5.8136).

Table 1 - The Impact and Reach of the Television Campaign

Significant associations (p<0.05) were found to exist between:	Pre- intervention responses %	Post- intervention responses %	Chi- square	DF	P value
	Sample size	Sample size			
	141	155			
The intervention & the frequency of 'Skipper' selection	Always 46% Usually 22% Sometimes 19% Never 13%	Always 59% Usually 25% Sometimes 10% Never 6%	10.323	3	0.0160
The intervention & recollection of publicity about 'Skippers'	Yes 76% No 23% Unsure 1%	Yes 93% No 6% Unsure 1%	21.652	2	0.0001

Driver selection increased most markedly among those respondents who did not report high risk taking behaviour (Chi=14.281; DF=3; p=0.0025), and among female respondents (Chi=8.454; DF=3; p=0.0375).

Secondly, there was an association between the intervention and recollection of publicity about 'Skippers'. When respondents were asked whether they had ever seen or heard any publicity about 'Skippers' or Designated Drivers, recollection of publicity was significantly higher in the post intervention sample than in the pre intervention sample (p = 0.0001).

One explanation for these successes of the 'Skipper' campaign was provided by a focus group member who suggested that the 'Skipper' slogan provided a conceptual and practical tool for participants to rationalize and express in positive terms their choice to abstain from, or to limit, their alcohol consumption. She stated that:

You use that terminology now instead of..."I'm not drinking", I say, "I'm 'Skipper' tonight"

And:

It's new terminology. Instead of..."who's the driver?" or "who's on the wagon?"

Thirdly, among those respondents who stated that they had seen or heard publicity about 'Skippers' or Designated Drivers, many more post intervention respondents (38.9%: 95% CI 29.4%-49.6%) accurately recalled of one or more sponsors of the publicity than did pre intervention respondents (2.7%: 95% CI 0.73%-6.87%) (table 2).

Table 2 - The Impact and Reach of the Television Campaign

	Pre COMPARI Intervention % Accurate Responses n = 149	Pre COMPARI Intervention Confidence Interval	Post COMPARI Intervention % Accurate Responses n = 162	Post COMPARI Intervention Confidence Interval	
	11 = 149				
Respondents who stated	2.7%	0.73%-	38.9%	29.4% -	
that they had seen or heard		6.87%		49.6%	
publicity about Skippers or					
Designated Drivers					

Focus group participants also believed that the Skipper publicity had broad community reach. According to one 'Skipper' the advertising resulted in much general conversation:

A lot of people did talk about it...say you'd be down the pub...and they'd be talking about the campaign, just a general thing, someone would say something about a 'Skipper' and say 'what about this thing?'

And:

That thing 'show me the way to go home', it's probably a well known colloquial song so...I remember we were having a party out the back, and one of the crew arced up with that The evaluation also provided information about the participation rate, and impact, of the nightclub intervention. In contrast to the community wide media campaign, the impact of the nightclub intervention was limited. Only thirty-five people, from a total nightclub population of approximately four thousand people, identified themselves to door staff during the three-month campaign period as 'Skippers'. The monitoring of visits to the nightclub revealed that the door staff did not actively encourage patron participation in the scheme. This was despite the fact that all verbalized support for the concept and that all were aware of their role in this aspect of the campaign. One participant noted:

Sunday night they didn't have the book out. Nothing! I used to go and put my hand through, grab the book, write my name down, and get my own stamp and stamp my hand

Nevertheless the nightclub did maintain a competition register, provided excellent locations for the banners and did give soft drink to all people who registered as 'Skippers'. Other staff, particularly bar staff, were very supportive of the scheme, often serving 'Skippers' before other customers.

Interestingly, 'Skippers' were adamant that the availability of free soft drinks at the nightclub was an incentive to encourage them to choose one nightclub over another. Comments included:

When we used to go out before, before the campaign started, I used to think oh no, I don't really want to go out tonight, be 'Skipper', because I had to pay for everything so when we got free drinks, "yeah, I'll go out with you no worries", so it was a good incentive to get you going out there

And:

On the occasions that I did take people out I always said let's go to 'Floyd's' (the participating nightclub) and not ... (the other nightclub), because they were giving away free drinks

And:

I thought it was a great idea; it was a winner for 'Floyd's' (the participating nightclub). When you decided to go you'd go to 'Floyd's' because they've got that thing on

The evaluation also provided valuable information about the differences between people who regularly selected a 'Skipper' and those that did not (table 3), and about the differences between people who regularly increased their alcohol consumption after selecting a 'Skipper' and those that did not (table 4).

Respondents who frequently selected their driver before drinking were significantly less likely to report high risk taking behaviour (p = 0.0308) (defined as not having been in a car with a .05 driver in the last month).

Respondents who frequently selected their driver before drinking were also significantly more likely to report that they had heard of the 'Skipper' concept (p=0.0047) (table 3).

Table 3 - Association between Frequent Skipper Selection and Other Variables (High Risk Taking Behaviour and Knowledge of the Skipper Concept). (Pre-test sample only).

Significant associations (p<0.05) were found to exist between:		Pre- terventic esponse: %		Chi- square	DF	P value
Frequency of 'Skipper'		0.05 Driver	0.05 Driver			
selection (always,		Yes	No	8.889	3	0.0308
usually, sometimes,	Always	26%	51%			
never) & reporting	Usually	27%	20%			
being in a car with a .05 driver in the last month (yes, no). N = 140.	Some- times	37% 11%	15% 13%			

Frequency of 'Skipper'		Heard of Skipper	Heard of Skipper	12.050	3	0.0047
selection (always,				12.959	3	0.0047
usually, sometimes,		Yes	No			
never) & having heard	Always	48%	31%			
of the 'Skipper' concept	Usually	24%	0%			
(yes, no). N = 141	Some-					
(yes, no). 14 = 141	times	16%	54%			
	Never	12%	15%			

Focus group participants suggested that the selection of 'Skippers' often related to identifying non-drinkers,

I don't drink so they always choose me

To sharing the responsibility between friends,

If you do it for your friends they'll do it for you in return

Or to specific events such as socializing before work.

It depends on what you've got on; if you have to work the next day or you don't

Respondents who reported that as passengers they would always or usually increase their alcohol consumption after selecting a Skipper, were significantly more likely to be younger (closer to eighteen years old than thirty-five years old), and be higher risk takers (defined as not having been in

a car with a .05 driver in the last month) than those that did not increase their alcohol consumption (table 4).

Table 4 - Association between Increased Passenger Consumption and Other Variables (Age and High Risk Taking Behaviour). (Pre-test sample only).

A significant association (p<0.05) was found to exist between:	Pre- intervention responses %						Chi- square	DF	P value
Increased passenger		18-		24-		30-			
consumption after		2	23	29		35	12.904	6	0.0446
selecting a 'Skipper'		y	//o	y/o		y/o			
(always, usually,	Always	22%		16%	6	9%			
sometimes, never) &	Usually	37%		13%	6	15%			
age (18-23, 24-29, 30-	Some- times	1:	2%	29%		26%			
35 year old). N = 123.	Never	2	8%	42%		49%			
Increased passenger			0.05			0.05			
consumption after			Driver		Ι	Priver	8.672	3	0.034
selecting a 'Skipper'			Y	es		No			
(always, usually,	Alway	s 17		7%		13%			
sometimes, never) &	Usually	y	42	2%		16%			
reporting being in a car	Some-			10/		2.407			
with a .05 driver in the	times					24%			
last month (yes or no).	Never		25	9%		44%			
N = 123.									

Focus group participants gave reasonably consistent messages about whether passenger consumption was likely to increase as a result of the 'Pick-a-

Skipper' concept. The message was that if drinkers had access to a non-drinking driver they consumed more alcohol. This was the case whether the non-drinking driver was a 'Skipper' or a taxi-driver. For example, one 'Skipper' reported that her passengers were likely to drink large quantities of alcohol,

If I'm 'Skipper' they usually know, they get blotto, then I take them home

And another stated that he encouraged drinking large quantities of alcohol,

I tell them to get blind...why not...if that's what they're into, then do it

Most however, also stated that the pre-planned use of a taxi or other safe transport option resulted in similar excessive consumption.

Discussion:

The results indicate that the 'Pick-a-Skipper' campaign succeeded in its first intervention aim, namely persuading a significant number of those young Geraldton drinkers, who were intending to drive to and from their location of drinking, to select non drinking drivers as 'Skippers', before they began consuming alcohol. Advertising the selection of a 'Skipper' does appear likely to increase the incidence of frequent 'Skipper' selection among groups of young drinkers.

The explanation from a focus group member that the campaign promoted 'new terminology' that resulted in an increase in 'Skipper' selection is a useful insight into the success of the first intervention aim. The widespread use of the term 'designated driver' in other countries appears to have supported a similar behavioural outcome (DeJong, 1997).

Achievement of the second intervention aim, encouraging more drivers to remain under the legal blood alcohol limit, was not demonstrated. The results showed no significant difference between the pre and post test samples with regard to the frequency of reporting being in a car where the driver may have been over 0.05% BAC. While the use of telephone surveys as a way of obtaining accurate measurement of such changes is problematic, more direct methods such as the analysis of drink driving offending rates also contain confounding factors, because of variance in policing effort over time.

Nevertheless, it would be expected that an increase in pre-drinking driver selection would achieve a reduction in the numbers of drivers with a BAC in excess of .05% and a corresponding decrease in the number of people taking the risk of travelling with them. The failure to identify this confirmatory change may be due to an ineffective message or insufficient exposure of the message. Alternatively, the evaluation may not be sufficiently sensitive to detect change.

Given the success of the first intervention aim, namely increased selection of designated drivers, it seems likely that failure to achieve the second aim is not caused by the wrong approach. The intervention was limited in terms of coverage, duration and evaluation resources. The best explanation for the

combination of results is that the 'dose' was not strong enough and that evaluation of its effects insufficiently precise.

The results related to the first research aim of evaluating the effectiveness of the two intervention components of the program, paralleled previous research findings (E.g.: Simons-Morton and Cummings, 1997 & Winsten, 1994). That is, firstly, the mass media was successfully used to encourage drinkers to modify their behaviour in sufficient numbers to be detectable through random community surveying of a relatively small sample size (minimum n=180). Secondly, that a poorly implemented licensed premises intervention focusing on servers and patrons is likely to be ineffective in recruiting participants and inefficient in its use of public health resources. The successful first intervention aim of the 'Pick-a-Skipper' campaign would almost certainly have been replicated had the second component of the program not been undertaken. The outcome of this evaluation therefore questions the efficacy of undertaking designated driver interventions in licensed premises when the effort required to support and sustain such interventions is considerable and does not guarantee that the intervention will be 'well implemented' (Boots, 1994). In practice, local community workers intending to implement designated driver programs focusing on servers and patrons of particular licensed premises would be well advised to involve only those premises whose management is enthusiastic and pro-active in their willingness to participate. Producing 'well implemented' interventions in these establishments will be sufficiently challenging (Simons-Morton and Cummings, 1997).

The second research aim, to provide information about the characteristics of people who reported frequent pre-drink driver selection revealed that males were significantly less likely to select a 'Skipper' and more likely to undertake high risk taking behaviour. However, inaccurate knowledge was also associated with high risk taking behaviour and accurate knowledge of the 'Skipper' concept was associated with increased frequency of 'Skipper' selection. The first of these findings mirror the relationship between men and drinking and driving previously documented in both random breath testing results and related traffic accident statistics (Perrine, 1990; Beel & Stockwell, 1993; Unwin & Serafino, 1995; Snow, 1996). Together, these findings suggest that the designated driver intervention is less successful with high-risk takers, but nevertheless a useful tool with which to encourage community wide acceptance of pre drink driver selection.

It also appears likely that the designated driver intervention will result in some negative outcomes in that passengers who fall into the high risk taker category are more likely to consume more alcohol if they have designated a driver or arranged transport other than driving themselves from the location of drinking. The cost versus benefit debate related to whether the designated driver causes more harm than good requires further research input, but the authors support the recent assessment of DeJong that 'the designated driver campaign has been a net plus for the cause of drunk driving prevention' (DeJong, 1997, p25). While acknowledging that 'high risk takers' will consume more alcohol when they are not driving, the experience of the authors in implementing and evaluating the 'Pick-a-Skipper' program and other designated driver programs is that no passenger who has admitted to consuming more alcohol after

selecting their driver has not also admitted that the use of a taxi would result in the same behaviour.

Conclusion:

The Geraldton 'Pick-a-Skipper' program provides further evidence that mass media designated driver programs are a useful strategy to reduce drink drive risk taking behaviour. Given the relatively low cost of community initiated mass media campaigns, the 'Pick-a-Skipper' campaign may be an appropriate strategy for local groups seeking to reduce alcohol related harm in their communities. This study provides evidence to support the effectiveness and efficacy of designated driver mass media campaigns. However, there is little evidence to support the effectiveness and efficacy of on-site licensed premise interventions. The evaluation of the Geraldton 'Pick-a-Skipper' program also indicates that designated driver interventions will be most useful as a 'general community' intervention which seeks to reduce the incidence of drinkers driving under the influence of alcohol, and that other strategies should be used to target population sub-groups which are at 'high-risk' of drink driving.

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References:

- Apsler, R. Harding, W. and Goldfein, F. (1987) *The review and assessment of designated driver programs as an alcohol countermeasure approach*, US Department of Transportation, Washington DC.
- Boots K, (1994) The Designated Driver Program: An Outcome Evaluation, Health Promotion Journal of Australia, 4(1), 26-29.
- Beel, A. and Stockwell, T. (1993) *The Introduction of 0.05 Legislation in Western Australia: A Preliminary Research Report*, National Centre for Research into the prevention of Drug Abuse, Curtin University of Technology, Perth.
- DeJong, W and Wallack, L., (1992) Role of Designated Driver Programs in Prevention of Alcohol Impaired Driving: A Critical Reassessment, Health Education Quarterly, 19(4), 429-442.
- DeJong, W., (1997) College students' Use of Designated Drivers: The Data are In, *Prevention Pipeline*, Nov/Dec, 25-27.
- DeJong, W. and Atkin, C.K. (1995) A Review of National Television PSA Campaigns for Preventing Alcohol Impaired Driving, 1987 1992, *Journal of Public Health Policy*, 16(1), 59-79.
- Glassoff, M.A., Knight, S.M., and Jenkins, L.K., (1994) Designated-driver Programs: College Student's Experiences and Opinions, *Journal of American College Health*, 43(2), 65-70.
- Laurell, H. (1992) Alcohol is a problem on Swedish roads too, *Alcohol, Drugs* and *Driving*, 5(2), 139-48.
- Liquor Industry Road Safety Association, (1994) Personal correspondence with President, T Wright.

- Midford, R., James, R., Oddy, W., Dyskin, E. V. and Beel A. (1995) Alcohol consumption and harm in two Western Australian regional centres, *Australian Journal of Public Health*, 19(1), 41-45.
- Perrine, M. W. (1990) Who are the Drinking Drivers?, *Alcohol Health and Research World*, 14(1), 26-35.
- Siegel, S. and Castellan, N. J. (1988) *Nonparametric Statistics for the Behavioural Sciences*, Mcgraw-Hill Book Company New York.
- Sheldon, F. and Hammond, B. (1984) Know your driver 1984 Campaign, The Bottom Line on Alcohol in Society, 6(1), 16-18.
- Snow, R. W. (1996) Characteristics of Convicted Drinking Drivers Who
 Attended the Mississippi Alcohol Safety Education Program, 19921994: A Statistical Summary, Mississippi State University, Mississippi.
- Unwin, E., Swensen, G., Moroz, P. and Thomson, N. (1994) *Hospitalization* due to alcohol-caused injuries in Western Australia, 1981-1992, Health Department of Western Australia, Perth.
- Unwin, E. and Serafino, S. (1995) A study of hospitalization and mortality due to alcohol use in the Pilbara region and Western Australia, 1989-1993, Health Department of Western Australia, Perth.
- Wagenaar, A. (1992) Designated driver programs: a commentary on the DeJong and Wallack Article, *Health Education Quarterly*, 19(4), 443-445.
- Winsten, J. A. (1994) Promoting Designated Drivers: The Harvard Alcohol Project, *American Journal of Preventive Medicine*, 10(3), 11-14.