

SELF-REPORTED BEHAVIOUR AND PERCEPTIONS OF ENFORCEMENT

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Abstract

The past five years have seen a positive shift in the number of Western Australian drivers who admit to driving after drinking or not wearing a seatbelt while driving. Weekly community surveys in Western Australia have revealed that an overwhelming majority of drivers say that they never drive without wearing a seatbelt or if they think they might be over the legal blood-alcohol limit. However, there has also been a steady decrease in concern for the penalties associated with drink driving and restraint use and the perceived likelihood of being caught by Police for these behaviours. The obvious explanation is that the lack of concern for penalties and detection arises from the relative infrequency of the offending behaviours. Yet, crash statistics continue to reveal that drink driving and non-use of restraints are two of the primary factors involved in fatal crashes on WA roads. This paper explores the relationship between self-reported behaviours and perceptions of enforcement. Do perceptions of enforcement reflect behaviour or is the perception constructed to support the behaviour?

Introduction

Drink driving contributes to more than one in every three fatal crashes. Most people do not drink and drive on a regular basis, however, research shows that around 27% of Western Australian drivers drove home after drinking more than the recommended amount at least once in the past 12 months (NFO Donovan Research, 2001).

The Continuous Tracking, used to evaluate the effectiveness of television commercials, shows positive trends in terms of community awareness and concern about the harm to others caused by drink driving. The Tracking also shows that while anti-drink driving TVCs are on-air, there is an increase in people's intentions to not drink and drive. Similarly, the 2000-2005 Road Safety Strategy identifies restraint-use as one of the major road user behaviours that needs to be addressed if the targets set for reducing road trauma are to be met. Although, in Western Australia, restraint-use is relatively high, an increase in the use of seatbelts would further contribute to saving lives and the prevention of serious injuries.

Community education campaigns over the past years have contributed to an increased awareness about the trauma associated with the non-use of restraints, with a strong emphasis on the negative and often tragic consequences. These campaigns have primarily targeted rural vehicle users as non-use rates have been found to be higher in non-metropolitan areas of Western Australia (WA).

The Continuous Tracking shows that past campaigns have been highly effective in increasing people's awareness of the need to wear a seatbelt at all times. This has co-occurred with an increase in the perceived personal susceptibility to unexpected events. There has also been a strong increase in the 'unacceptability' of not wearing a seatbelt. The community education campaigns about both drink driving and restraint-use have been effective in shifting community attitudes toward these behaviours in a positive direction; however, the data reveal a trend over the past two years in the decrease of concern about the penalties associated with drink driving and non-use of restraints within the driving community.

The obvious explanation for the reduced levels of concern about the associated penalties is that drink driving and non-use of restraints are relatively infrequent behaviours, therefore detection and consequent penalty is unlikely. Why would you be concerned about something that could not affect you? On the other hand, crash statistics and enforcement data show that drink driving and non-use of restraints are two of the primary factors involved in road trauma and road safety offences. This paper explores the relationship between self-reported behaviours and perceptions of enforcement. Do perceptions of enforcement reflect behaviour or is the perception constructed to support the behaviour?

Methodology

The data have been collected over a two-year period using a Continuous Tracking method developed by NFO Donovan Research. Beginning in July 2000, 65 telephone interviews are conducted each week, across metropolitan and regional WA. The sampling procedure includes a quota system to ensure that gender and age groups are adequately represented.

The current sample contains 6853 cases representing 104 weeks (or 2 years) of Tracking. Each interview involves a 43 item questionnaire that is designed to examine awareness of road safety issues, exposure to road

safety advertising, attitudes towards road safety issues, self-reported behaviour, perceived norms, risk perception, perceptions of enforcement and the associated penalties, and some demographic variables.

Measures

The data associated with four categories of items from the questionnaire were extracted for examination for this paper and include the following:

How concerned are you about the penalties that apply if you are caught:

- a) *Drinking and driving in terms of the 0.05 limit?*
- b) *Drinking and driving in terms of the 0.08 enforcement limit?*
- c) *Not wearing a seatbelt?*

The concern about penalties items were measured on a 4-point Likert-type response scale where 1 represented *very concerned* and 4 represented *not at all concerned*.

Thinking about your driving in general, how likely is it that you:

- a) *Would be stopped by Police for a random breath test on an average week night?*
- b) *Would be stopped by Police for a random breath test on an average weekend night?*
- c) *Would be stopped by Police for a random breath test any time during the day?*
- d) *Would be picked up for not wearing a seatbelt?*

The perception of likelihood of enforcement items were measured on a 5-point Likert-type response scale from 1 -*very likely* through to 5 - *very unlikely*.

The items measuring self-reported behaviour for drink driving and restraint use involved the respondent choosing from 5 statements offered to them.

Which of these statements best describes you?

- a) *I always keep a very close watch on my drinking and driving and never drive if I've had anything at all to drink.*
- b) *I keep a close watch on my drinking and driving and I try not to drive if I've had more than two or three standard drinks.*
- c) *I keep a fairly close watch on my drinking and driving, but I have driven when I've had more than two or three standard drinks.*
- d) *I keep some watch on my drinking and driving, but I sometimes drive when I probably shouldn't.*
- e) *I don't worry about my drinking and driving and often drive when I shouldn't.*

Which of these statements best describes you?

- a) *I always wear a seatbelt when I'm driving if one is available.*
- b) *I almost always wear a seatbelt when I'm driving if one is available.*
- c) *I usually wear a seatbelt when I'm driving if one is available.*
- d) *I often don't wear a seatbelt when I'm driving.*
- e) *I almost never wear a seatbelt when I'm driving.*

The average number of hours the respondent drove in a week and the area in which most of that driving was done (city or country) were also examined to account for differences in exposure to enforcement. Further, respondents' demerit point record at the time of the interview was recorded to determine if salience influenced perceived likelihood of enforcement or concern for the associated penalties (ie. if recent interactions with or exposure to penalties influence related perceptions). Age was also included in the analysis.

Findings

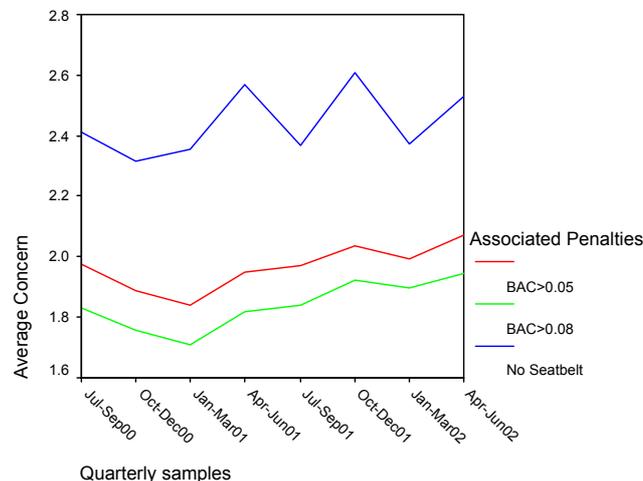
Concern about associated penalties

The data were split into 8 groups representing quarterly samples: July-September 2000 through to April-June 2002. These groups were then examined to verify whether the decreases in concern for the penalties associated with non-use of restraints and drink driving offences were statistically significant.

As illustrated in figure 1, changes in mean scores were not great, however, differences between the expected cell sizes were significant: concern about the penalties for BAC>0.05 x quarterly sample [$X^2(21, N=6619) = 66.846, p<.001$], concern about the penalties for BAC>0.08 x quarterly sample [$X^2(21, N=6600) = 52.019, p<.001$], concern about the penalties for non-use of restraints x quarterly sample [$X^2(28, N=68302) = 72.809, p<.001$].

Further analysis revealed that concern about the associated penalties was not influenced by hours of driving but did vary significantly as a factor of area in which most driving occurs: concern about the penalties for BAC>0.05 x country/metropolitan [χ^2 (3, N=6097) = 103.478, $p < .001$]; concern about the penalties for BAC>0.08 x country/metropolitan [χ^2 (3, N=6080) = 93.174, $p < .001$]; concern about the penalties for non-use of restraints x country/metropolitan [χ^2 (4, N=6292) = 125.981, $p < .001$]. The analysis suggested that country drivers are significantly less concerned about the penalties associated with drink driving and restraint use offences than metropolitan drivers.

Figure 1. Two-year trends in concern about associated penalties for quarterly samples



Age was also found to have a significant influence on the amount of concern held about the penalties associated with drink driving and restraints offences with older drivers being less concerned than their younger counterparts: concern about the penalties for BAC>0.05 x age [χ^2 (21, N=6773) = 103.730, $p < .001$]; concern about the penalties for BAC>0.08 x age [χ^2 (21, N=6752) = 113.797, $p < .001$]; concern about the penalties for non-use of restraints x age [χ^2 (28, N=6988) = 119.645, $p < .001$]. This is illustrated in figure 2.

Figure 2. Average concern about associated penalties across age groups

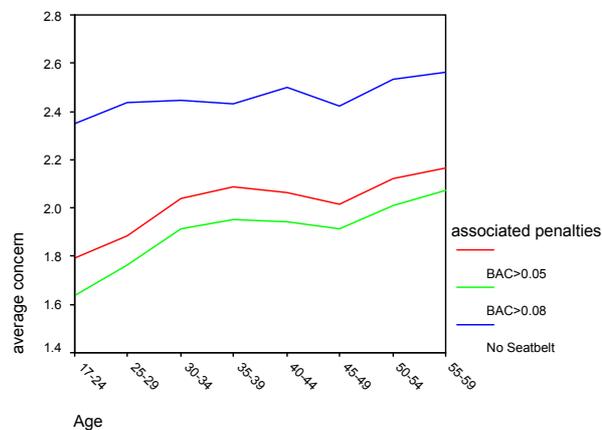
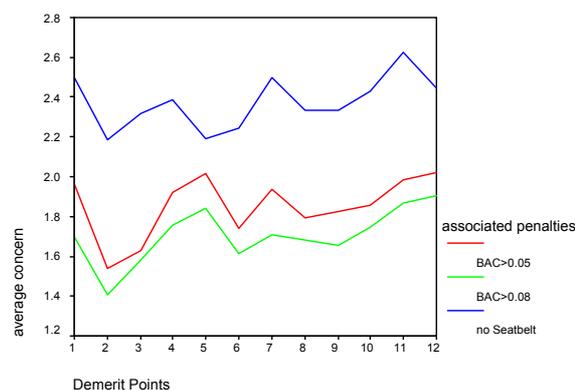


Figure 3. Average concern about associated penalties across available demerit points



Similarly, the number of demerit points that a driver had available on their driver's licence also had a significant effect on the level of concern they held about the associated penalties: concern about the penalties for BAC>0.05 x available demerit points [χ^2 (33, N=6518) = 80.599, $p < .001$]; concern about the penalties for BAC>0.08 x available demerit points [χ^2 (33, N=6497) = 75.938, $p < .001$]; concern about the penalties for non-use of restraints x available demerit points [χ^2 (44, N=6726) = 95.783, $p < .001$]. Generally speaking, the more demerit points available to the driver, the less concerned they were about the penalties. This finding might reflect the influence of salient interactions with enforcement and penalties on current perceptions, it also reflects the effectiveness of the demerit point system in influencing driver attitudes.

Therefore, there has been a significant decrease in the average amount of concern about the penalties associated with drink driving and restraint use offences over the past two years. Within this sample, older drivers, those who drive mostly on country roads and those with more available demerit points on their licence are generally less concerned about the associated penalties.

With regard to self-reported behaviour, there has been a significant positive shift in self-reported restraint use over the 8 quarters: [χ^2 (28, N=6848) = 45.783, $p < .018$]; that is, higher levels of more regular use. Changes in drink driving behaviour, however, were found to be not statistically significant: [χ^2 (28, N=6840) = 37.752, $p < .103$].

Research Hypotheses

This research was designed to examine the relationship between self-reported behaviour and perceptions of enforcement using concern about associated penalties as a reflection of the nature of this relationship. As shown in figures 4 and 5, self-reported behaviour has a significant relationship with concern about associated penalties: concern about the penalties for BAC>0.05 x drink driving behaviour [χ^2 (12, N=6759) = 201.988, $p < .001$]; concern about the penalties for BAC>0.08 x drink driving behaviour [χ^2 (12, N=6738) = 180.027, $p < .001$]; concern about the penalties for non-use of restraints x restraint use behaviour [χ^2 (12, N=6738) = 180.027, $p < .001$].

Figure 4. Average concern for associated penalties by drink driving behaviour

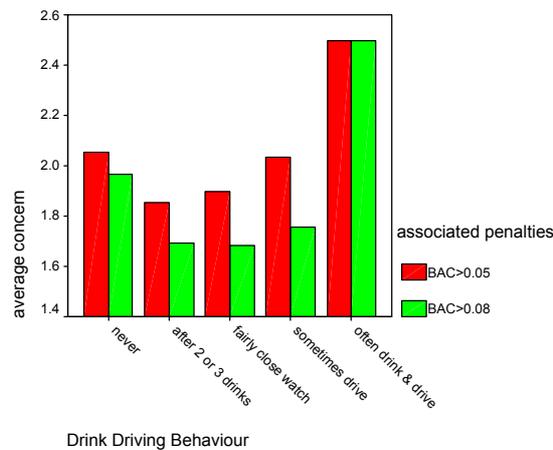
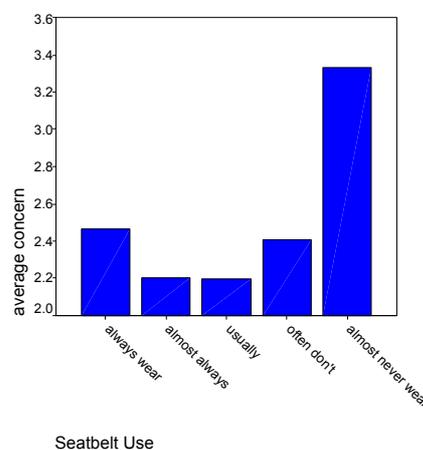
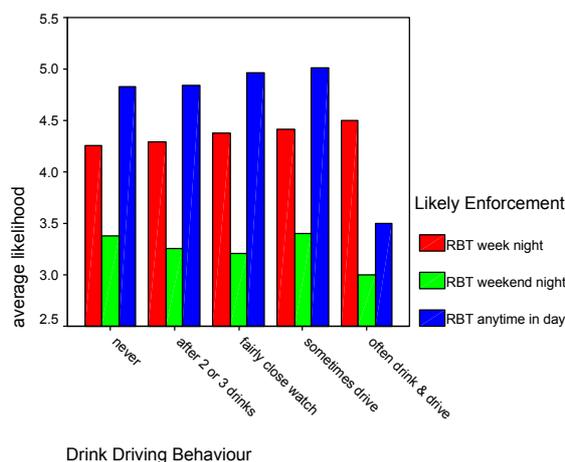


Figure 5. Average concern for associated penalties by seatbelt use



However, as illustrated in figures 6 and 7, the nature of the relationship between self-reported behaviour and perceived likelihood of enforcement is a little more complex. Those persons who drink and drive often are significantly more likely to perceive that they could be pulled over for a random breath test (RBT) at anytime during the day than other groups of drivers, but there is no difference between the behaviour groups for perceived likelihood of being stopped for an RBT on a week night or weekend night. This finding might reflect the behaviour of drivers with a broader alcohol problem (involving regular consumption during the day) rather than a behaviour specific to drink driving, especially in light of the consistent pattern in perceived likelihood across the week night and weekend night variables. Interpretation of this finding should also take into account the very small numbers in the ‘often drink and drive’ category (n=2).

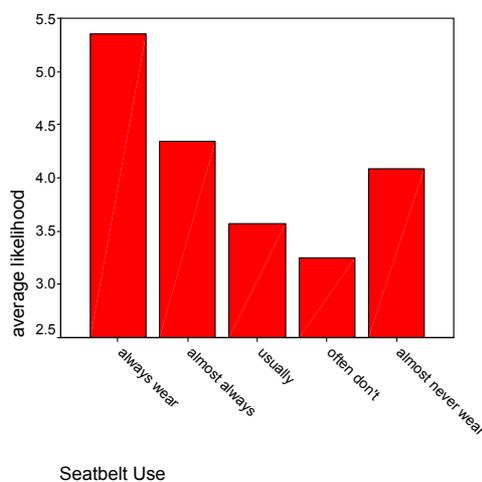
Figure 6. Average perceived likelihood of enforcement by drink driving behaviour



On the other hand, the restraint use data reveals a pattern more consistent with the hypothesis that perceived likelihood of enforcement is a direct function of behaviour; that is, those who always wear their seatbelt are unlikely/unable to be caught for not wearing one. The exception to this pattern is for those drivers who report almost never wearing a seatbelt, these drivers are more likely than those who often or usually don't wear one, to perceive that they are unlikely to be caught for this offence.. Figure 7 shows the significant effect of restraint use behaviour on perceived likelihood of enforcement: likelihood of enforcement x restraint use behaviour [$\chi^2(20, N=7006) = 922.097, p < .001$].

Further analysis shows that regular non-using drivers and regular drink drivers are more likely to do most of their driving on country roads, have less available demerit points, and be younger. (Seatbelt use also varied significantly by hours of driving which arguably reflects non-use in heavy vehicles by commercial/professional drivers.)

Figure 7. Average perceived likelihood of enforcement by seatbelt use



Discussion

This analysis has shown that both self-reported behaviour and perceptions of the likelihood of enforcement have a significant relationship with the concern about the penalties associated with drink driving and restraint use offences. It has also revealed that although perceived likelihood of enforcement/detection is related to

behaviour with regard to restraint use, this is not the case for drink driving. Rather, the perceived likelihood of drink driving enforcement, specifically RBT, appears to be a function of Police activity during particular times of the day and week. Further examination of this relationship would require the analysis of Police activity data.

A further disparity between the nature of drink driving and restraint use issues exists in the relationship between concern for associated penalties and occurrence of the behaviours. There have been corresponding significant decreases in concern for the penalties associated with non-use of restraints and non-use rates over the past two years; that is, while concern about the penalties has gone down, restraint use has gone up. Police records of seatbelt offences verify the decrease in self-reported non-use rates (WAPS, 2002).

On the other hand, although there has been a significant decrease in the concern about drink driving penalties, there has not been a corresponding decrease in self-reported drink driving rates over the past two years. Further, Police records show an increase in drink driving offences incurred through RBT during the same time period. These data suggest that a review of the penalties and enforcement activity associated with drink driving may be timely.

The salience and exposure measures were found to have an effect on levels of concern about associated penalties. Specifically, country drivers were shown to be less concerned and perceive less enforcement activity than their metropolitan counterparts. They are also more likely than those who drive mostly in the city to drive after drinking or not always wear a seatbelt when driving. The significant effect of location reflects one of the primary hurdles to be crossed in the development of effective road safety countermeasures. Besides the need for increases in Police presence and activity in country WA, there is the lack of alternative methods of transport and frequent driving on non-gazetted roads (NFO Donovan Research, 2001).

It is possible that simply addressing the enforcement and associated penalties issues will not curb the prevalence of drink driving in country WA. Without access to reliable transport or secure accommodation the perceived 'necessity' of drink driving amongst younger drivers will persist (NFO Donovan Research, 2001).

With regard to restraint use, more than 96% of both country and city drivers already report wearing their seatbelt always (89%) or almost always (7%). It is probable that the non-use that does occur is primarily on private and non-gazetted roads where enforcement is not possible anyway, therefore further improvements can only come from changes in attitudes, perceptions of risk and internal motivation.

Older drivers and those retaining most of their demerit points are also less concerned about the associated penalties and perceive that enforcement of drink driving and restraint use laws to be unlikely. Further, a significant positive relationship exists between age and available demerit points ($r = .134, p < .001$); older drivers are more likely to have more available points (ie. less offences) than younger drivers. Therefore, it is suggested that both expectancy and salience play a role in the level of concern about associated penalties. Older drivers generally have more driving experience and carry accumulated knowledge about the relative likelihood of enforcement, they are also less likely to have recent experience in interacting with Police and the consequences of enforcement are therefore less salient than for many younger drivers.

In summary, analysis of these data suggests that perceptions of enforcement do reflect self-reported behaviour, particularly with regard to restraint use and likelihood of enforcement on a weekend night. There is some indication that drink driving behaviour could be 'justified' or 'supported' in the minds of those who do drive after drinking, by the perception that enforcement is unlikely.

Examination of self-reported behaviours reveals that drink driving countermeasures including strategic enforcement activity and review of associated penalties are necessary in order to effectively target offending behaviours. Restraints countermeasures appear to be having a positive effect although a review of the associated penalties could result in further improvements in compliance rates.

References

NFO Donovan Research (2001). *Drinking and Driving in the Great Southern*. Road Safety Council, WA.

WAPS - Western Australian Police Service (2002). *Traffic Management and Road Safety Trends Report, June 2002*.