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The Impact of Alcohol Ignition Interlocks on a Group of Recidivist Offenders: A Case-study Approach

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Introduction

In addition to combating drink driving through the application of legal sanctions and providing offenders with the opportunity to complete rehabilitation programs, alcohol ignition interlocks have more recently been developed and implemented in a further attempt to reduce re-offending behaviours. The majority of interlock studies have demonstrated that the device significantly reduces recidivism whilst the interlock is installed in participants’ vehicles (Beck et al., 1997; Bjerre, 2002; Morse & Elliot, 1992; Weinrath, 1997). Although it is noted that a considerable body of literature has suggested this reduction in drink driving behaviours is lost upon interlock removal, as re-offence rates are comparable between interlock and non-interlock drivers (Beck et al., 1997; Morse & Elliott, Popkin et al., 1992; Tippetts & Voas, 1998; Voas, Marques, Tippets & Beirness, 1999). More recently, a small sample of interlock trials have reported more favourable results after combining treatment, rehabilitation and intensive supervision programs (Marques, Voas et al., 2000). Nevertheless, questions remain as to why some offenders revert to drinking and driving once the device is removed from the vehicle, or what (if any) long term beneficial effects result from interlock usage. This study aimed to conduct an in-depth analysis of a small group of interlock users experiences, behaviours and perceptions of using ignition interlocks in the first court-ordered trial of the device in Australia.

Method

Data were collected from 12 participants through structured interviews on three separate occasions e.g., upon installation, 1-month and 3-months after installation. Participants in the sample were all male repeat offenders, averaging 39 years of age, who had been convicted of approximately three drink driving offences. Participants were court-ordered to complete an 11-week drink driving rehabilitation program (i.e., “Under the Limit”) while they were on probation and disqualified from driving. Interviews were performed at participants’ local Community Corrections Regional Centre both before the interlock was installed, then one month and three months after interlock installation. Self-reported data was collected through structured interviews that focused on key questions. Qualitative analysis of participants’ self-reported data was undertaken using techniques drawn from grounded theory. In addition, participants’ downloaded interlock recordings were also examined and the AUDIT scale was administered during each interval.

Results

Benefits of Interlocks

In regards to comparisons with traditional legal sanctions, 11 of the 12 participants believed interlocks to be more effective and beneficial, both before interlock installation and whilst using the device. Two major themes emerged from the
qualitative data regarding the benefits of interlocks, which were *Punishment Minimisation* and an *Educational Aspect*. The first theme to emerge was that participants believed they were able to avoid a larger punishment, which was considered extremely desirable as well as more effective in reducing recidivism. The sample reported that continually incurring punishment was not an effective method of producing behavioural change and the reduced penalty provided some participants with the opportunity to remain employed. The second theme to emerge after one and four months of interlock operation consisted of an educational context, as participants believed that interlocks provided the opportunity to learn how to avoid drink driving.

Table 1. Benefits of Interlock Usage

<table>
<thead>
<tr>
<th>Theme</th>
<th>Example</th>
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<tr>
<td>Punishment Minimisation</td>
<td>“Yeah, I’m sick of being punished. It does little for you. It’s not like I suddenly woke up and changed because of it” (participant 4: third interview)</td>
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<td>“I’ve been able to keep my job. It’s better than just being slugged with a penalty” (participant 1: third interview).</td>
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<td>Educational Aspect</td>
<td>“I’ve learnt a lot. It’s a good educational tool for conditioning you not to drive with alcohol in your system. It’s in the back of your mind” (participant 2: fourth interview).</td>
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<td>“I think the interlock has changed me in some ways. I’m better at knowing when to stop drinking” (participant 8: fourth interview).</td>
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**Interlock Performance**

Examination of the downloaded interlock data indicated that there were 53 “start-up” breath test failures over the four-month installation period and 11 re-test failures. All 12 participants recorded a “start-up” failure at some time during the four-month period, which signifies an attempt to drive after drinking. There were 42 “start-up” failures during the day and 11 at night, 10 re-test failures during the day and 1 at night, and 18 re-test breath samples not provided during the day and 6 at night. Failures were also more likely during the week than on weekends. The average BAC reading for breath-test failures was 0.022%, ranging from 0.016% to 0.166%, and the rolling re-test average was 0.020%, ranging from 0.016% to 0.026%. Five participants failed to provide a rolling re-test on 10 occasions in the first month, 2 participants 12 times in the second month and 2 participants on 2 occasions in the third month. However, examination of the frequency of breath test failures over the four-month period revealed a considerable reduction from the first to the fourth month. For example, there were 17 “start-up” breath test failures over the first month provided by 8 participants, 19 by 6 participants in the second month, 12 by 5 in the third month, and 5 by 2 participants in the fourth month. Although it is noted that an examination of breath test failures at the individual level revealed that a smaller group of heavy drinkers emerged, as 3 participants accounted for 36 “start-up” failures and 8 “rolling re-test” failures over a cumulative period of 8 months. In regards to self-reported alcohol consumption levels, examination of the AUDIT scores revealed that the
majority of participants were drinking harmful levels of alcohol (e.g., score >8) after completing the UTL program, although some participants reported reducing their consumption levels (see below).

**Self-reported Perceptions of Interlocks**

Taken together, there was considerable variability in participants’ experiences of operating the interlock, as well as the impact that the device had on both drinking levels and driving behaviours. However, four main themes emerged from the qualitative analysis of the interview with the participants, which are depicted in Table 2. Firstly, participants experienced some level of initial difficulty providing adequate breath samples when operating the interlock. Although, it is noted that a considerable reduction was evident in the number of incorrect breath samples provided over the four-month data collection period, indicating participants became more proficient with interlock usage through experience.

A second factor that emerged regarding successful interlock operation (specifically being locked out of one’s vehicle after providing breath violations) was being willing to reduce alcohol consumption levels. Although participants completed a drink driving rehabilitation program that promotes controlled drinking, three quarters of the sample were not planning to reduce their alcohol consumption levels upon interlock installation. Closer examination of the pattern of violations indicated that those who registered the highest number of breath test failures also reported the highest alcohol consumption levels.

A third theme to emerge, that relates to attaining successful interlock outcomes such as avoiding drink driving, was the discrepancy between the downloaded interlock recordings and self-reported data regarding the cause of breath test violations. The results indicate that some participants: (a) were not aware of safe drinking levels before using a vehicle, and/or (b) were not willing to recognise when they had consumed an inappropriate level of alcohol and made an error in judgement. Firstly, the possibility remains that some participants did not have appropriate knowledge regarding safe drinking levels, or were not willing or able to implement safe drinking practices. In addition, the elevated alcohol consumption levels of some participants suggest alcohol dependency. Secondly, an unwillingness to recognise and acknowledge attempts to drink and drive remains a concern, as it is hoped that interlocks provide users with immediate feedback regarding their intoxication levels, which serves to help participants make better decisions regarding when they should not attempt to drive (Popkin et al., 1992).

The fourth theme to emerge from the downloaded and self-report data was the general reduction in the frequency of breath-test violations over the four month period, as seven of the nine participants who used an interlock for four months demonstrated a reduction in the number of breath test violations. The results also support recent research that has also demonstrated a general reduction in the number of breath violations over the course of the interlock study (Marques, Tippetts et al., 2000). Despite this positive reduction in breath violations, it is acknowledged that such changes were small. Furthermore, it is noted that six participants were still consuming harmful levels of alcohol after the fourth month. Taken together, positive outcomes were associated with reductions in difficulties operating the interlock and registered breath violations, but concerns remain regarding willingness to reduce alcohol consumption and recognition of inappropriate drinking behaviours.
Themes Associated with Interlock Operation and Successful Outcomes

<table>
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<tr>
<th>Themes</th>
<th>Examples</th>
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<td>Incorrect Breath Samples</td>
<td>“I couldn’t get the thing to work. I’d suck then blow, suck then blow and I couldn’t get it to work. It’s been terrible. As a result I had heaps of violations” (participant 3: third interview).</td>
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<td>“It took me awhile to get used to it, it was frustrating, you know.....I had some problems but I’m OK now. I got used to it” (participant 11: third interview).</td>
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<td>Unwillingness to Reduce Alcohol Levels</td>
<td>“I don’t drink less, why should I? It’s not my drinking that is the problem. That’s fine” (participant 3: second interview).</td>
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<td>“I don’t care, my drinking is fine. It’s the interlock that is the problem” (participant 6: first interview).</td>
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<td>False Positives</td>
<td>“Yes, I’ve had some breaches when I wasn’t drinking. Not immediately before anyway. The night before.... but not before I got in the car” (participant 6: third interview).</td>
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<td>“It’s locked me out when I wasn’t drinking. Perhaps my cigarette set it off....but I wasn’t drinking before I got in my car” (participant 4: second interview).</td>
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<td>Reduction in BAC Failures</td>
<td>“Despite the difficulties using the darn thing, I got better at avoiding drinking before I drive....I guess I had to, what’s the alternative?” (participant 7: third interview).</td>
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<td></td>
<td>“I just realised that I can’t drink much during the week.....when I need to drive. I’ve cut back and it seems to be working. I know when I can and can’t have a beer” (participant 1: third interview).</td>
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Discussion

The present study aimed to examine a small group of recidivist drink drivers’ perceptions and experiences of installing and operating an alcohol ignition interlock, after completing a licence disqualification period and a drink driving rehabilitation program. The two themes that emerged regarding the self-reported effectiveness of interlocks compared to traditional legal sanctions were: (a) the ability to avoid a purely punitive sanction, and (b) interlocks were considered an educational tool that assisted the sample in avoiding drink driving. These themes may prove an aid in designing marketing campaigns and interlock programs to increase notoriously low participation rates.

While participants appeared to overcome initial operational difficulties, participants were generally unwilling to reduce their alcohol consumption levels as well as recognise that interlock breath violations resulted from drinking. Rather, participants displayed a propensity to blame the readings on “false positives”. Recognition of inappropriate drinking behaviours appears vital for offenders to avoid the drink driving sequence after interlock removal, and further research is required to: (a) determine the propensity of offenders to avoid blame, and (b) the required interventions to increase awareness. Of concern is that some repeat offenders’ drinking levels appear extremely entrenched and resistant to change despite experiencing the negative consequences associated with breath violations. That is,
they continued to engage in inappropriate drinking behaviours despite being sanctioned for a drinking related offence, completing a drink driving program, installing an interlock and being regularly locked out of their vehicle, which resulted in written warnings from their probation officer. The results support the assertion that some offenders are not aware of the severity of their drinking behaviours and/or may not be willing to be truthful regarding their drinking behaviours (Cavaiola & Wuth, 2002). If individuals do not acknowledge inappropriate drinking levels during interlock usage, then achieving successful behavioural change once the device is removed from vehicles appears unlikely.

The results of the current study provide some insight into why interlocks may only be effective whilst installed to offenders’ vehicles. The high alcohol consumption levels of some participants suggest alcohol misuse or dependence issues, as well as indicating that drinking levels remain resistant to multiple interventions. This finding has direct implications for program developers, facilitators and probation officers who need to be aware of some offenders’ unwillingness to change drinking behaviours and the corresponding effect this attitude has on interlock performance. Interlock users may benefit from supervision, as well as focused efforts to address drinking levels before interlock installation and during initial periods of operation. In addition, a high number of breath test violations during early interlock usage may prove to effectively identify individuals who should be directed towards additional interventions e.g., alcohol counselling.

References

Bjerre, B. (2002). A preliminary evaluation of the Swedish ignition interlock program and recommended further steps. *Proceedings of the 16th International Conference on Alcohol, Drugs and Traffic Safety, Montreal, Canada, [CD-ROM], ICADTS.*


