Difficulties in engaging novice disqualified drivers in a longitudinal study into their behaviours and attitudes

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Introduction

In South Australia drivers aged between 16 and 25 who have had their learner’s permit or provisional driver licence disqualified are required by law to attend a \textit{ur choice} workshop. This interactive 90 minute workshop, delivered by trained facilitators, addresses the high incidence of road crashes involving young drivers. Participants in small groups (up to 12) discuss the reasons young drivers are involved in crashes, explore how road crashes affect individuals, families and friends and have the opportunity to think about strategies that could make them a safer driver. The majority of workshops are held in the evening with day time sessions occasionally available.

Following a three year (2012-2015) longitudinal survey involving 9318 potential participants, driver behaviour and attitudinal data relating to road safety was eventually gathered from a total of 99 young people who responded to the four questionnaires over a six month period.

The purpose of this paper is to describe the methodological challenges involved when engaging South Australian drivers to participate in the \textit{ur choice} workshop. The experience gained during the conduct of this study will contribute to the overall body of knowledge relating to processes used to engage this demographic.

Methodology

The data collection process used throughout this study was logistically complex, owing to the desire to follow attitudes of the workshop participants over a 6 month period (i.e. pre-workshop attendance, 1 week, 3 and 6 months post-workshop attendance) and aiming for the completion of 4 survey forms per final respondent. These 4 surveys were undertaken between March 2012 and January 2015 employing online (via customised websites) and paper (posted) questionnaires. A summary of the survey method is illustrated, in Figure 1: Overview of methodology.

Table 1 shows the responses received, by all methods, for each stage of the study:

\textbf{Table 1: Responses received for each stage of the study}

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number dispatched/invited</th>
<th>Number completed/received</th>
<th>Response rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>urchoice 1: pre-workshop</td>
<td>9318</td>
<td>1816</td>
<td>19%</td>
</tr>
<tr>
<td>urchoice 2:</td>
<td>1594</td>
<td>390</td>
<td>24%</td>
</tr>
</tbody>
</table>
At each stage data was collected via self-completion paper or online questionnaires/forms posted to individuals’ home addresses. Respondents’ contact details remained secure, confidential and separate from the research data.
Time: -1 month pre-urchoice workshop
Participant is contacted by DPTI (via mail-out) and invited to attend a urchoice workshop at the specified time/date/location and is also invited to participate in study.

Time: - 2 weeks pre-urchoice workshop
Participant confirms attendance and contact details. Provides permission to be included in study. Prior to attending urchoice workshop, participant's current knowledge and attitudes are initially surveyed (5 mins) via mail-out questionnaire or online/website.

Time: -1 week pre-urchoice workshop
If participant has not responded, they are contacted (by phone) and permission/survey response is requested.

Time: urchoice workshop attendance
Participant attends urchoice workshop.

Time: + 1 week post-urchoice workshop
Participant is contacted for second survey of knowledge and attitudes (5 mins) via mail-out questionnaire online. Results are reported, together with the pre-seminar responses.

Time: + 3 months post-urchoice workshop
At three months post-urchoice workshop, participant is contacted again for third survey of knowledge and attitudes (5 mins) via mail-out/online. Results are reported with the pre- and 1 week post-seminar responses.

Time: + 6 months post-urchoice workshop
At 6 months post-urchoice workshop, participant is contacted again for fourth survey of knowledge and attitudes (5 mins) via mail-out/online. Results are reported with the total pre- and post-seminar responses.

Time: Project completion
All results and relevant implications are presented/circulated.

Figure 1: Overview of urchoice study methodology
Discussion

The original, broad objective of the study was to evaluate whether there were any learnings delivered and retained over the longer term, by the urchoice workshops.

Upon reflection on the study method the finding of value to the research team and potentially others working in this field, has been the experience of the challenges of conducting a sustained investigation into this particular group. The nature of the actual and potential respondents created significant issues with data confidence and contributed to the high costs of conducting much-needed research among that group.

The original sampling objective for the study was to close the longitudinal evaluation when \( n=400 \) urchoice4 surveys had been received and to run analysis on the data gathered from a robust set of responses. The original study period was estimated to require 12-15 months from the first urchoice1 (pre-workshop) questionnaire to the final \( n=400, \) urchoice4 response.

The rate of responses to this study were severely underestimated at every step of the way, beginning with an unwittingly optimistic assumption of 50% response rates across the four surveys relating to levels of engagement with each stage.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number Originally estimated</th>
<th>Number completed/received</th>
</tr>
</thead>
<tbody>
<tr>
<td>urchoice 1: pre-workshop</td>
<td>2400 (assumed 50% response rate)</td>
<td>1816 (achieved 19% response rate)</td>
</tr>
<tr>
<td>urchoice 2: 1 week post-workshop</td>
<td>1200 (assumed 50% response rate)</td>
<td>390 (achieved 24% response rate)</td>
</tr>
<tr>
<td>urchoice 3: 3 months post-workshop</td>
<td>800 (assumed 50% response rate)</td>
<td>148 (achieved 47% response rate)</td>
</tr>
<tr>
<td>urchoice 4: 6 months post-workshop</td>
<td>400 (assumed 50% response rate)</td>
<td>99 (achieved 76% response rate)</td>
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</table>

Contrary to expectations of achieving \( n=400 \) responses, the urchoice4 study (6 months post-workshop) closed when just 99 respondents had completed their 4th questionnaire. To achieve this final sample it took 3 years, 9318 clients, 753 urchoice workshops, an assortment of additional competition draws, retail vouchers and literally hundreds of hours and thousands of telephone calls and SMS reminders to achieve that reduced and modified result.

It was apparent from the outset that many of these young, disqualified drivers (as they were pre-workshop, when first invited to participate) were exceedingly reluctant to complete questions, cooperate with “the government” and/or participate in any data-gathering endeavour without the promise of significant personal gain.

In convincing respondents to initially become involved, and then sustain their involvement, the research team employed a number of tactics, including:

- Mentioning the surveys/study at all workshops
- Mentioning the surveys/study during telephone enquiries relating to workshops and licences
- Providing links to the surveys on the urchoice web page
• Multiple call-backs from Gen Y staff, requesting/reminding people to complete the survey
• Competition draws for $50, $100, $200 retail vouchers (e.g. iTunes, Coles Myer, BigW etc.)
• Competition for an iPad
• Appeals to a sense of community and improvement to driver safety for all road users
• Promises of $10 and $20 vouchers for study participation (i.e. not a chance draw).

Nevertheless, the process was very slow, frustrating and expensive and the decision to close off the study at the end of January 2015 was taken with the certainty that, at the rates of response being achieved, it would take an impractical length of time and resourcing to achieve the original target of the n=400 sample.

While the research team were confident of the veracity of the data received from the final ur choice4 (and earlier respondents, who dropped out at stages urchoice2 and urchoice3), statistical significance was unable to be achieved and there remains concern that these responses were gathered from the more compliant members of this survey population, namely those who did want to assist and be involved in the study. Those who did not want to be involved were likely to be the less cooperative members of this population and may have demonstrated different attitudes and behaviours to those contributing to the urchoice data. In retrospect, it is unfortunate that the research team has no way of measuring the effect of this self-selecting sampling methodology.

Conclusions

While the study sought to engage a range of 16-25 year old disqualified drivers to evaluate the effect of the urchoice workshop intervention, the issues with achieving engagement from this highly reluctant survey population threw many challenges in gathering and acting upon the data received.

It is recommended that any future research among this disqualified novice driver group takes these challenges into extra account when planning and resourcing studies of significance to road safety.