

This section details our research design, as well as our rationale for using this methodology

RESEARCH DESIGN

3.1 Methodology

The National Binge Drinking Campaign is to be evaluated in four waves of online research over the two years of the campaign's life. The research program includes one baseline survey, which was conducted prior to the launch of the campaign in November 2008, and three post-launch evaluation surveys. The second survey, the results of which are outlined in this report, was conducted in April 2009, following the conclusion of the initial media buy for the campaign.

The methodology for the survey completed in April 2009 is detailed below. The survey mirrored the scope and structure of the November 2008 baseline survey, with some revisions, and then included additional evaluation questions focusing on the campaign materials.

Online survey

An online survey methodology was considered most appropriate for evaluating the campaign for a number of reasons:

- A very large sample could be accessed cost-effectively. The research required sampling 15–17 year-olds, 18–25 year-olds and parents of 13–17 year-olds. A methodology which involved random telephone sampling would have been prohibitively expensive due to the costs involved in trying to find suitable participants. This problem is compounded by the fact that young people often are not at home, many do not have landlines and response rates tend to be poorer among younger age groups. With an online research panel, demographic data are held on each member, allowing for a targeted sampling approach. Online surveying therefore represented a much cheaper and more efficient data collection method than other options.

- Participants could be presented with visual and audio stimulus material. This allowed images of different types of alcohol, and their different containers and sizes, to be presented allowing for more accurate measurement of consumption. In evaluation waves, campaign materials were also able to be presented to participants. These visual prompts ensure more accurate prompted recall measures than in telephone interviewing where alcohol volumes and campaign materials can only be verbally described.
- Online surveying provides an environment where the participant is free to 'speak their mind' anonymously and without fear of being overheard, as might be the case with telephone interviewing. This is particularly important when researching a sensitive topic such as underage alcohol consumption.
- An online survey offers convenience and better access to participants. It arrives at the participant's desk top and can be completed any time of day or night, at their convenience.
- There are no interviewer, data-entry or data-editing errors or biases as may be introduced when third parties are required to interview, code or process survey responses.

Questionnaire development

Separate youth and parent questionnaires were developed by the Department and Ipsos-Eureka for the baseline wave, drawing on tools that have been used in previous research, and taking advantage of the unique question presentation opportunities provided by online surveying. These questionnaires were revised for the April 2009 survey, with campaign evaluation questions added. The April 2009 questionnaires for 15–25 year-olds and parents are included as appendices to this report (see Appendix A: Youth questionnaire April 2009 and B

Appendix B: Parent questionnaire April 2009).

The most notable change to the survey questions in April 2009 was the addition of a 'recap' question. Given the high levels of consumption reported in the benchmark survey, a recap option was introduced to reduce the possibility of young people misinterpreting consumption questions, or making mistakes when entering data. After being asked to indicate how many containers (of a range of types and sizes) of alcoholic drinks they had consumed on their last drinking occasion, participants were provided with a recap of the total amount of each type of alcohol they had indicated that they had drunk on their last drinking occasion, and were given the opportunity to edit their response if they required. This option was not available to participants in the November 2008 baseline survey.

Both questionnaires were subject to pre-testing using cognitive interviews. The cognitive interview process involves a researcher interviewing a participant, taking them through the proposed questionnaire and asking specific questions:

- what the participant interprets as the meaning of each question;
- what the participant understands key words or phrases to mean;
- where discrepancies exist between a question's intended meaning and the meaning perceived by the participant, which words the participant believes would more accurately convey the intended meaning;
- the feelings evoked by the question;
- whether the participant feels that their intended answer is adequately captured by the response options available; and
- whether the participant believes there are important topics that have not been adequately covered by the questionnaire.

A total of 22 cognitive interviews were conducted with 15–25 year-olds prior to November 2008 fieldwork, as shown in Table 7, below. In addition, five cognitive interviews were conducted with parents of 13–17 year-olds.

Table 7. Cognitive interview structure for November 2008 survey

		Age			
		15–17 years		18–25 years	
		Male	Female	Male	Female
Alcohol consumption	High risk	1 interview	1 interview	2 interview	2 interview
	Risky	2 interviews	2 interviews	2 interviews	2 interviews
	Low risk	2 interviews	2 interviews	2 interviews	2 interviews

Ten cognitive interviews were conducted with 15–25 year-olds prior to the April 2009 fieldwork (see Table 8, below). In addition, two cognitive interviews were conducted with parents of 13–17 year-olds. These cognitive interviews ensured interpretation of questions had not changed between November 2008 and April 2009. They also tested new questions and changes to existing questions.

Table 8. Cognitive interview structure for April 2009 survey

		Age			
		15–17 years		18–25 years	
		Male	Female	Male	Female
Alcohol consumption	High risk	1 interview	-	1 interview	1 interview
	Risky	1 interview	1 interview	1 interview	1 interview
	Low risk	1 interview	1 interview	-	1 interview

Fieldwork

The online surveys were hosted and managed by I-view.

The research was conducted with 15–25 year-olds, who represent the primary target audience for the campaign, and parents of 13–17 year-olds, who represent the secondary target audience. Those who qualified and completed the survey received an incentive of ‘e-points’ for their participation⁷.

For all 15–17 year-olds, parental consent was required for them to participate in the research, as stipulated in the Australian Market and Social Research Society Code of Professional Behaviour. Parents who were known to have children aged 15–17 years were approached via email and encouraged to allow their children to participate in the survey. In some households, both a parent and a 15–17 year-old were interviewed.

The average evaluation survey length for 15–25 year-olds was 14 minutes for the baseline survey conducted in November 2008 and 22 minutes for the evaluation survey in April 2009. For parents, the average survey lengths were 9 minutes in November 2008 and 20 minutes in April 2009. This increased survey length was primarily due to the introduction of campaign

⁷ ‘E-points’ can be accrued over time and redeemed for cash, vouchers or merchandise.

evaluation questions, although other improvements made to the questionnaire are also likely to have added to the length.

The fieldwork for the November 2008 baseline wave was conducted from 13 to 23 November, and the fieldwork for the April 2009 evaluation wave was conducted from 27 March to 13 April. Both waves of research were conducted in accordance with the requirements of the International Standard covering social and market research, AS ISO 20252.

Sample

In total, 4,363 interviews were conducted in November 2008 and 4,200 in April 2009. The final sample breakdown for both waves is shown in Table 9.

Table 9. Sample breakdown

		15–17 year-olds		18–25 year-olds		Parents of 13–17 year olds	
		Nov 08	April 09	Nov 08	April 09	Nov 08	April 09
Gender	Males	410	530	688	1,071	415	490
	Females	397	493	1,543	1,041	910	575
Location	NSW/ACT	302	358	760	777	458	365
	VIC/TAS	199	302	631	598	353	312
	QLD	164	196	458	387	251	195
	SA/NT	76	89	184	152	143	93
	WA	66	78	198	198	120	100
Cultural background	Language other than English spoken at home	60	97	384	450	NA	NA
	English only spoken at home	747	926	1,847	1,662	NA	NA
	ATSI	41	32	69	47	NA	NA
	Non-ATSI	766	991	2,162	2,065	NA	NA
TOTAL		807	1,023	2,231	2,112	1,325	1,065

The demographic characteristics of the survey sample across waves are included at Appendix E.

3.2 Data analysis

Weighting

The youth sample for each wave was weighted by age, gender and location to match the Australian population. Weights were calculated based on the latest population demographic statistics available from the Australian Bureau of Statistics⁸. Thus, for young people in each wave, an individual weight was calculated for each cell of the gender x age x location matrix by dividing the proportion of the actual population in that cell by the proportion in that cell obtained by the survey. For example, the actual proportion of Australian 15–17 year-olds who are male and residing in Victoria was divided by the proportion of the surveyed 15–17 year-old sample that was male and residing in Victoria to obtain the weight to be applied to this sub-group of the sample. This weight was applied to all results analysed by age and survey wave.

A separate weight was calculated for the combined sample (all age groups) that corrected the imbalance caused by the intentional over-sampling of younger drinkers. This weight was applied to all results not analysed by age, for example those represented by risk level.

Statistical analyses

The survey results for November 2008 and April 2009 are presented in Sections 4 to 8. Throughout these sections, significant differences between survey waves are reported. Where questions were only asked in one survey wave (for example, campaign evaluation questions), significant differences between age categories are reported. In all cases, a two-sided test has been used, which is generally considered to be conservative. A significance level of $p < 0.050$ has been adopted throughout⁹.

Non-ordinal categorical data have been compared using chi-square tests. Statistical comparisons throughout this report based on ordinal data, such as age, consumption level, risk level and agreement level have been analysed using the Kendall's tau-b test. A comparison of means (ANOVA) has been conducted on ratio data, such as number of standard drinks consumed on last drinking occasion.

⁸ Excel spreadsheets available at <http://www.censusdata.abs.gov.au/ABSNavigation/prenav/PopularAreas?&collection=Census&period=2006&&navmapdisplayed=true&textversion=false>. Accessed 14/05/09.

⁹ A glossary of statistical terms is included in Appendix D.

Test type and p-values for all significant test results are reported, with p-values reported to three decimal places.

Significant differences are indicated in the charts using arrows. Arrows positioned on top or within columns indicate that the specific proportion has altered significantly in the direction of the arrow (a significant chi-square result). Arrows positioned to the right of a series of columns indicates a significant trend across the series in the direction of the arrow (a significant Kendall's tau-b result).

Please note that combined figures in the text (for example, the total percentage of people who agree and agree strongly) may appear to be different to the figures shown in the charts, as a result of rounding.

Calculation of alcohol consumption

To assess alcohol consumption patterns, 15–25 year-olds were asked whether they had consumed more than ten alcoholic drinks within their life, and those who had done so were then asked how often in the last three months they drank an alcoholic drink.

The alcohol consumed on the last drinking occasion by 15–25 year-olds who had consumed alcohol in the last three months was analysed according to the type and amount of alcohol consumed. To increase accuracy of consumption estimations, respondents were asked to report on the container size and the number of each of these containers they drank for each alcoholic beverage they had consumed on this most recent drinking occasion (For reference, the questionnaire is included in Appendix A). Data for each respondent was then computed to generate the equivalent number of standard drinks of alcohol consumed. Standard drink conversion formulas for different alcohol types and container sizes were provided by the Department of Health and Ageing (included in Appendix C). Responses coded as 'other' were back coded to the most reasonable drink type and size, where possible. Where this was not possible, the responses were treated as missing data.

When calculating the average number of standard drinks consumed and the total share of consumption by beverage category, respondents who reported consuming 26¹⁰ or more standard drinks on their last drinking occasion were excluded from all analyses based on last occasion consumption. As a conservative measure, these extreme cases have been deemed, on the balance of probabilities, to be more likely due to incorrect answers than coma inducing or potentially life-threatening levels of consumption. Hence, they were excluded from the analyses because of their potential to erroneously skew results.

In this report, low risk drinking is defined as the equivalent of less than seven standard drinks for males, and less than five standard drinks for females on their last drinking occasion. Risky drinking is defined as the equivalent of seven to ten standard drinks for males and five to six standard drinks for females on their last drinking occasion. High risk drinking is defined as the equivalent of 11 or more standard drinks for males and seven or more standard drinks for females on their last drinking occasion.

¹⁰ Twenty-six standard drinks are approximately:

- 1.5 750ml bottles of spirits (e.g. whiskey, gin, vodka, rum, or tequila)
- 3.5 bottles of wine (750ml)
- 17 cans or stubbies of full strength beer (4.9%)
- 26 shots or nips of spirits (e.g. whiskey, gin, vodka, rum, or tequila)
- 26 cans or stubbies of mid strength beer (3.5%)
- 33 cans or stubbies of light beer (2.7%)