

## Improving alcohol knowledge

Associate Professor Sharyn Rundle-Thiele<sup>1</sup>  
Department of Marketing, Griffith Business School  
Griffith University  
Department of Marketing, Nathan, Qld, 4111, Australia  
Email: [s.rundle-thiele@griffith.edu.au](mailto:s.rundle-thiele@griffith.edu.au)  
Ph: +61 7 3735 6446  
Fax: +61 7 3735 7126

---

<sup>1</sup> Associate Professor Sharyn Rundle-Thiele's teaching interests centre on introductory marketing, marketing management, market research, services marketing. In 2008 she received an Australian Learning and Teaching Council Award in recognition of her outstanding contribution to student learning and she regularly publishes in the marketing education literature. Sharyn's specific research interest centres on sustainable business practice. This research promotes loyal thinking and socially responsible business practice with a focus on alcohol. She has published more than 90 papers in a wide array of journals including *European Journal of Marketing*, *Journal of Services Marketing*, *Journal of Consumer Behaviour*, *Journal of Product and Brand Management*, *Journal of Brand Management*, and *Tourism Management*. Sharyn currently serves on Editorial review boards for *Journal of Services Marketing* and *European Retail Review*. Her research has been widely cited and in 2009 she received an outstanding paper award.

## **Introduction**

Many social marketing campaigns use promotion strategies to persuade people to change their behaviour. However, when managers restrict marketing to delivering messages, they often neglect other aspects of marketing thought, such as understanding and satisfying the target audience's needs (not just reducing them as attempted by the normative campaigns), making the desirable behaviour attractive by offering opportunities in the environment, by offering rewards and incentives, and by making the behaviour and the opportunity conveniently accessible (Rothschild, 1999). The current study goes beyond messages employing a product development approach.

This paper outlines a lesson to impart knowledge related to standard drinks and then demonstrates how this lesson can build knowledge. Specifically, this research project proposed and tested an innovative strategy designed to minimise the potential for motorists to drink and drive. An online survey gave respondents immediate feedback on their answers to questions relating to alcohol. Attitudinal research shows that knowledge is critical in the formation of consumer attitudes (Ajzen and Fishbein, 1980) and subsequent behaviours (Bagozzi, 1981). The rationale for this study was that motorists need to know the number of standard drinks contained in alcoholic beverages in order to be able to make an informed decision about their capacity to drive after drinking.

## **Method**

A database containing 4,071 email addresses for Australian Capital Territory residents aged 18 years and older was purchased from First Direct Solutions for the purposes of this study. Following Dillman's (2000) recommendations, emails were sent in April 2008 inviting people to participate in an online survey on alcohol. Random prize draws with 10 prizes of \$100 Coles Myer Vouchers were offered as an incentive and one reminder was emailed two weeks after the initial emailing date in early May 2008. The survey comprised three sections, namely alcohol perceptions, alcohol knowledge and demographics. The knowledge section contained 12 questions to assess what ACT residents knew about low risk alcohol consumption levels based on NHMRC guidelines, drink driving limits and the number of standard drinks contained in popular alcoholic beverages. The twelve knowledge questions in section two were awarded a score of one for correct answers and a respondent could achieve a maximum test score of twelve.

A total of 797 emails were not delivered and 705 completed surveys were returned representing an effective response rate of 21.5%. Respondents' were asked if they would be willing to be contacted to test their knowledge recall for twelve alcohol knowledge questions. Nine in ten respondents indicated they were willing to be recontacted for the knowledge recall test. Stage two respondents were emailed two weeks after completing the initial online alcohol knowledge survey (late May and early June 2008). A total of 449 responded to the invitation to participate, representing an effective response rate of 63% for Stage two.

## **Results and Discussion**

The average test score in the initial knowledge lesson for ACT residents was eight out of 12, suggesting on average respondents were getting four out of 12 questions wrong. Less than 0.2% of ACT residents in the sample answered all twelve questions correctly in the initial alcohol knowledge test. These results suggest there are ‘knowledge gaps’ for the overwhelming majority of the ACT population. Forty two percent of ACT residents in the sample had a score of nine or more correct. These results suggest that ACT residents may not be armed with sufficient knowledge to make informed decisions about the amount of alcohol they are consuming.

While more than two-thirds of respondents knew that the legal blood alcohol limit for driving in the ACT is 0.05, less than one in ten respondents knew that a standard 750ml bottle of wine (14.5% Alcohol/Volume) contains 8.6 standard drinks and one-third of respondents did not know that a 375ml full-strength beer, containing 4.8% alcohol, contained 1.4 standard drinks. These findings are consistent with research conducted in the early 1990’s by Carruther and Binns (1992) and also by Lader and Meltzer (2002). Carruther and Binns (1992) identified that the level of knowledge of the alcohol content in a variety of beverages and the knowledge of the term ‘standard drink’ was poor.

### **Knowledge recall**

Respondents were asked to provide their email addresses in stages two and three to enable knowledge test scores to be directly compared. A total of two-hundred and forty nine people provided email addresses that could be linked to enable a direct comparison between the initial knowledge test and the knowledge recall test. The average recall test score for ACT residents was 9.3 out of 12 (standard deviation 1.6), suggesting on average respondents were now getting under three out of 12 questions wrong. In the knowledge recall test 9% of ACT residents in the sample answered all 12 questions correctly. This was a significant improvement when compared to the initial alcohol knowledge test where less than 1% achieved a test score of 12 out of 12. While only one-third of respondents were between 75% and 100% correct in the initial alcohol knowledge test a pleasing three-quarters were between 75% and 100% in the recall test. Further, improvements were noted for each of the twelve knowledge questions. Taken together, the results of this study suggest that requiring ACT residents to undertake an alcohol knowledge test can assist to arm ACT residents with sufficient knowledge to make informed decisions about the amount of alcohol they are consuming.

## **Conclusions and Public Policy Implications**

The results of this research show that an online alcohol knowledge test can improve ACT resident knowledge relating to alcohol. Taken together, the results of this study suggest that requiring ACT residents to undertake an alcohol knowledge test provides one means to arm ACT residents with sufficient knowledge to make informed decisions about the amount of alcohol they are consuming. People must possess the skills in order to perform necessary behaviours (Gielen and Street, 2003) and knowledge of standard drinks is requisite for the adult driving population. For people choosing to drink alcohol prior to driving they must know both the number of standard drinks contained in the beverages they consume and how many standard drinks they can consume to safely drink and drive.

## References

Ajzen, I. and Fishbein, M., 1980. Understanding attitudes and predicting social behavior. New Jersey: Prentice-Hall.

Bagozzi, R., 1981. Attitudes, intentions and behaviour: A test of some key hypotheses. *Journal of Personality and Social Psychology* 41 (4), 607-627.

Carruthers, S.J., Binns, C.W., 1992. The standard drink and alcohol consumption. *Drug and Alcohol Review* 11, 363-370.

Dillman, D.A., 2000. Mail and Internet surveys: the tailored design method. Chichester: John Wiley.

Gielen, A.C., Sleet, D., 2003. Application of behaviour-change theories and methods to injury prevention. *Epidemiology Review* 25, 65-76.

Lader, D. and Meltzer H., 2002. Drinking: Adults Behaviour and Knowledge in 2002, Office for National Statistics, London, UK.

National Health and Medical Research Council, 2009. Australian guidelines to reduce health risks from drinking alcohol." Available from [http://www.nhmrc.gov.au/consult/archive/draft\\_australian\\_alcohol\\_guidelines.htm](http://www.nhmrc.gov.au/consult/archive/draft_australian_alcohol_guidelines.htm), accessed June 21<sup>st</sup> 2009.

Rothschild, M., 1999. Carrots, Sticks, and promises: A conceptual framework for the management of public health and social issues behavior. *Journal of Marketing* 63, 24-37.