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## **The Effect of Price, Venue and Place of Residence on Alcohol Consumption**

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## Introduction

The adverse consequences of excessive alcohol consumption are widespread with repercussions not only for the individual but for society at large (Naimi, Nelson and Brewer, 2010). This study examined the effect of price, venue and place of residence on the alcohol consumption of young women between the ages of 18-24 years who attend university in Australia, Wales and Germany. Excessive alcohol consumption is a global public health issue (Rabinovich *et al.*, 2009), thus the purpose of our novel study of low-risk, risky and high-risk alcohol consumption was to compare and contrast the same cohort across three countries.

## Background

Studies have shown that *price* can both deter and encourage alcohol consumption (Elder *et al.* 2010). Simply put, the fundamentals of economics apply in that the Law of Demand is operating (Marshall, 1920) with a consistent inverse relationship between price and alcohol consumption is apparent over time and across countries irrespective of study design and analytical approach (Elder *et al.*, 2010; Rabinovich *et al.*, 2009). Indeed, this evidence underpinned the Australian Federal Government's 2008 'Alcopops' tax legislation that saw some 720,000 less standard drinks consumed per week within 12 months (Roxon, 2009).

Similarly, the *venue* in which alcohol is consumed too influences consumption (Holloway, Valentine and Jayne, 2009). Examination of geographies associated with drinking is emergent but there is a clear pattern to spaces in which alcohol is consumed (Jayne, Valentine and Holloway, 2008). The literature differentiates between private settings (e.g. at home) and public locales (e.g. pubs) (NHMRC, 2009). There is interplay between venue and gender, perceptions of safety and affordability. Public drinking is linked to masculinity as well as sub-cultural factors (Heley, 2008) and private drinking environments have been coded to imply femininity (Holloway, Valentine and Jayne, 2009). Private settings are regarded as both safe and cheap facilitating greater quantities of alcohol consumption. Younger people too move between drinking locations, commencing at less expensive setting before moving on to public venues (NHMRC, 2009; Shanahan, Wilkins and Hurt, 2002). Cultural differences are to be expected, with a US study finding little difference in the amount of alcohol consumed between public and private venues (Naimi, Nelson and Brewer, 2010).

Finally, *place of residence* is related to alcohol consumption (O'Hara *et al.*, 2007). Among university students, the heavier drinkers tended to live independently in on-campus university accommodation (Wood *et al.*, 2009). Conversely, those who lived with parents were less likely to engage in excessive drinking (Dowdall and Wechsler, 2002; Shim and Maggs, 2005). So apparent is the link to place of residence, that environmental management intervention strategies have been successful in changing perceptions and decreasing police-reported incidents in US college campuses (Wood *et al.*, 2009).

## Method and Results

Using scales from the extant literature, our self-administered questionnaire was refined with assistance from an expert panel (n=6) and a pilot testing phase (n=45). Data was collected from a regional Australian University, a Welsh city university and a rural German university. To alleviate bias in the reporting of alcohol consumption a standard drinks table was included and participants were instructed not to discuss their answers with others while completing the survey. Quota sampling was used and data collected at various days, times, and campus locations. Respondents were classified as low risk, risky and high risk in terms of their self-

reported alcohol consumption using the Australian Alcohol Guidelines (NHMRC, 2001). In terms of the Australian sample (n=305), the alcohol consumption of 122 (40.0%) respondents were classified as low-risk; with 75 (24.6%) deemed risky; and 108 (35.4%) as high-risk. For the German sample (n=325), a total of 195 (60.0%) respondents were classified as low-risk, while 77 (23.7%) were regarded as risky and 53 (16.3%) high-risk in terms of their alcohol consumption. For the Welsh sample (n=354), 131 (37.0%) were classified as low-risk, 167 (47.2%) risky, whilst the remaining 56 (15.8%) fell into the high-risk category.

Regarding measures, respondents indicated their place of residence as being dependent (e.g. ‘in parents house’) or independent (e.g. ‘university accommodation’). Similarly, venues where alcohol was consumed was organised into private (e.g. ‘at a friend’s house’) and public (e.g. ‘at a night club’) settings. Price was measured with 4 items on 7-point semantic scales from which a composite variable was created (Australian loadings 0.65-0.80;  $\alpha=0.69$ ; German loadings 0.67-0.75;  $\alpha=0.70$ ; Welsh loadings 0.66-0.82;  $\alpha=0.77$ ). Results of the multinomial and subsequent binary logistic regressions are shown in Table 1.

Table 1: Summary of Results of Hypothesis Testing

		Australia	Wales	Germany
Logistic Multinomial Findings	<b>H1.</b> Price is a significant predictor in differentiating between low-risk, risky and high-risk alcohol consumers.	Unsupported $\chi^2 = 2.92$ , $p>0.05$	Supported $\chi^2 = 55.15$ , $p<0.05$	Unsupported $\chi^2 = 3.63$ , $p>0.05$
	<b>H2.</b> Venue is a significant predictor in differentiating between low-risk, risky and high-risk alcohol consumers.	Unsupported $\chi^2 = 2.13$ , $p>0.05$	Supported $\chi^2 = 14.46$ , $p<0.05$	Unsupported $\chi^2 = 0.72$ , $p>0.05$
	<b>H3.</b> Place of residence is a significant predictor in differentiating between low-risk, risky and high-risk alcohol consumers.	Supported $\chi^2 = 8.64$ , $p<0.05$	Unsupported $\chi^2 = 0.46$ , $p>0.05$	Unsupported $\chi^2 = 1.67$ , $p>0.05$
Logistic Bivariate Findings	Low-risk vs Price Risky vs Venue Place of Residence	Unsupported Unsupported Supported	Supported Supported Unsupported	Unsupported Unsupported Unsupported
	Low-risk vs Price High-risk vs Venue Place of Residence	Unsupported Unsupported Supported	Supported Supported Unsupported	Unsupported Unsupported Unsupported
Bivariate Findings	Risky vs High-risk vs Price	Unsupported	Supported	Unsupported
	Risky vs High-risk vs Venue	Unsupported	Unsupported	Unsupported
	Risky vs High-risk vs Place of Residence	Unsupported	Unsupported	Unsupported

### Conclusions

The multinomial analysis revealed that price and venue influenced alcohol consumption in Wales alone while place of residence influenced alcohol consumption in Australia. Interestingly, price, venue and place of residence had no effect on 18-24 year old women attending university in Germany. The binomial results for Wales showed that there was a sensitivity to price for all three risk classifications; however, location was of little consequence to risky drinkers when compared to high risk drinkers. For Australia, the place of residence did not influence alcohol consumption for the risky versus high risk comparison. On the whole, it can be concluded from these mixed findings that the effect of price, venue and residence is country specific, requiring culturally congruent marketing interventions. For example, an ‘upstream’ campaign addressing alcohol price promotion in Wales would be beneficial but would draw limited success in Germany. The key implication of our study of the same cohort across three countries is that it provides a more meaningful macro view of alcohol consumption; thus has the capacity to contribute to effectual intervention strategies.

## References

- Dowdall, G., Wechsler, H., 2002. Studying college alcohol use: Widening the lens, sharpening the focus. *Journal of Studies on Alcohol* 14, 14-22.
- Elder, R., Lawrence, B., Ferguson, A., Naimi, T., Brewer, R., Chattopadhyay, S., Toomey, T., Fielding J., 2010. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *American Journal of Preventive Medicine* 38 (2), 217-229.
- Heley, J., 2008. Rounds, Range Rovers and rurality: The drinking geographies of a new squirearchy. *Drugs: Education, Prevention and Policy* 15 (3), 315-321.
- Holloway, S.L., Valentine, G., Jayne, M., 2009. Masculinities, femininities and the geographies of public and private drinking landscapes. *Geoforum* 40, 821-831.
- Jayne, M., Valentine, G., Holloway, S., 2008. Geographies of alcohol, drinking and drunkenness: A review of progress. *Progress in Human Geography* 32 (2), 247-263.
- Marshall, A., 1920. *Principles of Economics*, 8<sup>th</sup> Edition, Macmillan, London.
- National Health and Medical Research Council, 2009. Australian guidelines to reduce health risks from drinking alcohol, viewed 5 October 2010, < <http://www.nhmrc.gov.au/>>
- National Health and Medical Research Council 2001. *Australian alcohol guidelines: Health risks and benefits*, viewed 18 October 2005, <[www.alcohol.gov.au](http://www.alcohol.gov.au)>.
- Naimi, T.S., Nelson, D.E., Brewer, R.D., 2010. The intensity of binge alcohol consumption among U.S. Adults. *American Journal of Preventative Medicine* 38 (2), 201-207.
- O'Hara, R., Harker, D., Raciti, M., Harker, M., 2007. Attitudinal, normative and demographic influences on female students' alcohol consumption. *Young Consumers* 9 (1), 7-16.
- Rabinovich, L., Brutscher, P.B., Vries, H.D., Vlift, J., Reding, A., 2009. The affordability of alcoholic beverages in the European Union: Understanding the link between alcohol affordability, consumption and harms. European Commission, Cambridge.
- Roxon, N. 2009. Alcopops Tax Loophole Finally Closed, Office of the Minister for Health and Ageing, Media Release 13 August, viewed 5 February 2010, < [www.health.gov.au](http://www.health.gov.au)>
- Shanahan, P., Wilkins, M., Hurt, N., 2002. A study of attitudes and behaviours of drinkers at risk research report. Commonwealth Department of Health and Ageing, Canberra.
- Shim, S., Maggs, J., 2005. A psychographic analysis of college students' alcohol consumption: Implications for prevention and consumer education. *Family and Consumer Sciences Research Journal* 33 (3), 255-273.

Wood, M.G., DeJong, W., Fairlie, A.M., Lawson, D., Lavigne, A.M., Cohen, F., 2009. Common ground: An investigation of environmental management alcohol prevention initiatives in a college community. *Journal of Studies on Alcohol and Drugs* 16 (July), 96-105.