The Influence of Price-Related Point-of-Sale (POS) Promotions on Bottle Shop Purchases of Young Adults

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Abstract

Introduction and Aims: To investigate the impact of point-of-sale (POS) promotions on product choice, brand choice, and purchase quantity of young adults purchasing alcohol for off-premise consumption in Australia.

Design and Methods: A cross-sectional interviewer-completed survey conducted at 24 bottle shops (liquor stores); 12 each in the capital cities of Sydney, New South Wales (NSW) and Perth, Western Australia (WA). Participants were 509 adults (18 and over) exiting bottleshops having purchased alcohol.

Results: When prompted 26.5% indicated that there was a special offer, price discount or special promotion connected with a product that they had purchased. Those who participated in point-of-sale promotions purchased a greater quantity of alcohol than those who did not participate: RTDs (ready-to-drink), an average of 11.5 standard drinks (SD) compared to an average of 8.9 SD (t=1.320, p=0.190); beer, an average of 26.8 SD compared to an average of 16.4 SD; wine an average of 16.1 SD compared to an average of 13.8 SD (t= 0.924, p = 0.357).

Discussion and Conclusions: Participation in POS promotions may be associated with increased purchase quantities, not solely shifting between brands. There is a need for further research to explore changes in purchase, and consumption, patterns as a result of the availability of price-based promotions. The results of this study, combined with previous research, suggest that regulators – and marketers – should consider the immediate and cumulative effect of point-of-sale promotions on drinking patterns, particularly those of younger drinkers.

Key Words: alcohol consumption, marketing, interview, Australia
Introduction

The 2010 National Drug Strategy Household Survey found that approximately 66.1% of males and 54.5% of females aged between 20 and 29 years consumed alcohol at least once in the previous 12 months in a pattern that placed them at risk of an alcohol-related injury from a single drinking occasion [1]. Almost one third (32.9%) of males and 18.5% of females did so at least weekly; these rates were even higher for those aged 18-19 years [1]. Heavy episodic-drinking is associated with harm in both the long-term and short-term [2-4]. While there are a range of factors that influence drinking patterns, alcohol marketing has been identified as an important contributor to young people’s drinking intentions and behaviours [5-7]. To date, the major focus of alcohol marketing research has been on mainstream advertising (i.e., broadcast and print). However, there is a growing body of research exploring the effects of other forms of alcohol marketing such as sponsorship of sport, online advertising and outdoor advertising, and a small but developing body of research into point-of-sale (POS) marketing.

Alcohol point-of-sale marketing

POS refers to promotional activity within a store or venue, at the point where a purchase will be made, unlike more traditional media channels that capture the audience’s attention at a time when they have no direct opportunity to purchase. Alcohol POS includes both ‘on-premise’ (licensed venues such as bars, pubs and clubs) and ‘off-premise’ (liquor store or other retail outlet where the alcohol is not consumed on the premises) promotions. POS promotions for ‘take-away’ alcohol sales can include such things as: price reductions; price-quantity discounts; gift with purchases; and competitions (e.g., buy a drink and enter the draw to win a prize).

There is a small, but growing, body of research into the effects of POS promotions in licensed venues – with these studies consistently showing an association between the availability of
promotions and increased alcohol consumption. As early as the 1970’s, an experimental study in the US found that alcohol consumption was more than doubled during simulated ‘happy hours’ among both heavy and light drinkers [8]. A decade ago US research found that lower prices, weekend beer specials, and the availability of promotions in the next 30 days were associated with higher heavy episodic drinking rates among college students [9]. More recent experimental research has re-confirmed the association between price-related promotions (or price reductions) and increased consumption among college students [10]; as have reviews of studies of alcohol-related harm in public drinking environments [11,12].

What has been largely neglected in both research and policy is the nature, extent and effects of point-of-sale alcohol promotions in bottle shops and liquor stores, particularly in Australia. In the US, researchers have conducted a number of audits of POS advertising and promotions and found these to be widespread across all store types [13,14]. A study of the correlates of the in-store promotions for beer found that large-volume units are more likely to be promoted than smaller package sizes [15]. A small-scale study conducted in Wollongong, New South Wales, found that POS promotions were widespread [16], and a more recent study of POS promotions in two Australian metropolitan cities confirmed the ubiquitous nature of these promotions [17].

The limited evidence available from the United States in the area of alcohol promotions, combined with the extensive body of research into tobacco point-of-sale promotions [18,19], suggests POS promotions may influence both short-term and long-term alcohol consumption and related harms. There is increasing evidence of the long-term effects of ownership of alcohol branded merchandise (one of the common forms of POS promotions); ownership of these products is associated with alcohol initiation among young people [20-22]. However, there is a limited research into the immediate effects of POS promotions on alcohol purchasing behaviour.
Recent research in Scotland has looked at the effects of reductions in POS promotion; specifically by investigating the effects on alcohol consumption and purchasing behaviours of a ban on off-trade multi-buy promotions implemented in 2011 [23-25]. A study using a panel sample found that following the multi-buy ban there was a significant decrease (8.1%) in the number of products purchased on each trip but a significant increase (9.2%) in the frequency of shopping trips [23]. Studies using actual shopping sales data found that, following the ban, there was a decrease in off-trade alcohol sales across all major drink categories [24]; the effect was greatest on wine sales, with a 4.0% decline in wine sales in the year following the ban [25].

**Purpose of the study**

The aim of the present study was to investigate the relationship between POS promotions and the product choice, brand choice, and purchase quantity of young adults purchasing alcohol for off-premise consumption in Australia.

**Method**

In Australia packaged alcohol is not sold in grocery or convenience stores; it is sold in stand-alone ‘bottelshops’ or ‘liquor stores’, although the increasing co-location and co-branding of these with large supermarkets is blurring this line. This study took place concurrently with an audit study of 24 bottle shops; 12 each in the capital cities of Sydney, New South Wales (NSW) and Perth, Western Australia (WA) [14]; the audits were conducted during the day and the patron exit data collected in the evenings, recruitment of bottle shops is reported in the published audit paper [14]. Interviewer-completed surveys were conducted with customers exiting each of these stores to examine the type, brand and quantity of alcohol purchased (including viewing the respondents’ purchases and recording the number of
standard drinks purchased\(^1\); reasons for purchase type and quantity; and any association between purchase and recalled exposure to point-of-sale (POS) promotion materials.

Interviewers attended a training session facilitated by the research team that detailed the background to the project, the overall aims and objectives of the study, safety/self protection issues associated with the data collection, how to approach customers, and reviewed the interview protocol in detail. Interviewers also role played several scenarios with the senior researchers to develop strategies to deal with difficult respondents, and to gain an understanding of the level of detail required in participants’ responses to the various items. The study protocol was approved by the Human Research Ethics Committees of the two participating universities.

In each bottle shop where exit interviews were conducted, field staff aimed to collect 20 surveys (total target sample size; \(n=480\)). This sample size was based on previous research conducted at the host institution and practical constraints, such as the project budget. As people exited a bottle shop, every person who appeared to be within the target age range (18-25 years) was approached and invited to participate in the study. Each participant read a Participant Information Sheet and was required to read and sign a consent form prior to taking part in the study. The inclusion criteria for participants were: being aged between 18-25; and, having made a purchase (alcoholic or non-alcoholic) at the bottle shop.

In total, 514 interviewer-completed surveys (hereafter referred to as interviews) were conducted; and these took approximately five minutes per respondent. A total of 509 respondents provided answers to all questions and were included in the analysis. Interviews were evenly split between the two survey locations (Sydney 49.3%, 251 interviews; Perth 50.7%, 258 interviews). Given that weekend alcohol consumption was of specific interest, all interviews were conducted on a Friday (43.0%) or Saturday (57.0%) evening. Interviews were

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\(^1\) In Australia, all alcohol products have the number of standard drinks clearly shown on the label.
conducted in between December 2008 and April 2009, with 72.1% conducted in January or February. In order to maximize the representativeness of the data collection periods, no interviews were conducted on or around public holidays (e.g., Christmas Day and New Years Eve/Day).

Consistent with inclusion criteria, all respondents reported they were aged between 18 and 25 years. Twice as many males (67.4%; n=343) as females (32.6%; n=166) were interviewed, possibly indicating that males frequent bottle shops more regularly than females, although alternative explanations were that males were more likely to agree to be surveyed, or more often visit bottle shops in the survey locations or during survey periods. Data were entered into the statistical software package SPSS (version 19) by a trained research assistant, and descriptive analysis was conducted.

**Results**

Nearly one-quarter of respondents (24.0%) earned less than $13,000 in a year; just over one in five (21.9%) earned more than $52,000; and the remainder were relatively evenly distributed in this range.

Respondents were then asked how often they usually buy alcohol from a bottle shop (not necessarily the one where they were interviewed) and 73.5% indicated that they did so once a week or more, and more than 90% of those interviewed stated that they visited a bottle shop at least once every fortnight. It must be noted that this is likely to over-estimate the regularity with which 18-24 year olds visit bottle shops as those who do so more often are more likely to have been invited to participate in this survey. Indeed, it was desirable that these young people were over-sampled, as they are typically a high-risk sub-population targeted by POS promotions – and likely to be influenced by them.

**What did they (intend to) buy?**
Customers were asked what they planned to buy on this particular occasion of visiting a bottle shop. The most common response was beer (33.0%), followed by spirits (including pre-mixed) (28.1%), and wine (19.8%). Of interest was that 10.8% of those surveyed did not know when they came to the store what they would purchase – one implication of this is that it is possible that these customers are more likely to be influenced by promotions than those who know what they want to purchase when they arrive. The remainder of participants intended to buy multiple types of alcohol (6.5%), cider (1.5%) and other non-alcoholic drinks (0.2%).

The majority of respondents reported that they followed through with their purchasing plan, with 75.4% (n=384) indicating that they purchased what they originally intended. As shown in Figure 1, beer was by far the most common type of alcohol purchased by males (53.6% of male respondents), followed by RTDs (19.5%), wine or champagne (19.2%), and spirits (17.8%). Females most commonly purchased wine (44.6%), followed by pre-mixed alcohol/RTDs (27.1%), spirits (25.3%) and beer (16.3%). Very few customers (male or female) purchased any other type of alcohol (such as cider, fortified wines or liqueurs).

***INSERT FIGURE 1 HERE***

**Reasons for product choice**

Customers were asked to identify the reasons why they purchased the product that they did; this was an open-ended (unprompted) question. As shown in Table 1, by far the most common reason for purchasing a specific alcohol was that it tastes good (60%). Other commonly stated reasons were that it was their ‘favourite’ (17.0%) or that it was cheap (14.9%). Just under 8% (n=44) spontaneously mentioned the role of promotional factors, including “on special” (n=33) and “promotion” (n=11).

***INSERT TABLE 1 HERE***
While promotions were rarely mentioned unprompted (n=44), when prompted 135 respondents (26.5%) indicated that there was a special offer, price discount or special promotion connected with any product that they had purchased. A further 12 (2.4%) indicated that while there was no specific promotion related to their purchase, they visited that particular store because it was always ‘cheap’. The most commonly reported promotions were simple price discount such as “usually $20, reduced to $16” or “$2 off the marked price” (64.2% of all promotions); followed by price-quantity promotions such as “buy 6, get 1 free” or “usually $20, now two for $30” (18.7%); and gifts with purchase (3.7%).

The influence of POS promotions

Alcohol type and brand: More than a third of those who had purchased a product with an associated promotion (37.8%; n=51) reported that they purchased that particular type of alcohol because there was a promotion attached to it; whereas more than half (60.0%; n=81) reported that they purchased a specific brand of product because of the promotion.

Alcohol quantity: Two-fifths of those utilising a POS promotion (40.7%; n=55) reported that they purchased a specific quantity of alcohol because of an associated promotion. While the cross-sectional nature of our data does not enable us to determine causality or to identify all potential confounders, it was clear that those who participated in beer POS promotions purchased a greater quantity of alcohol than those who did not. As shown in Table 2, participation in a beer POS promotion was associated with an increase from an average of 16.1 standard drinks to an average of 26.8 standard drinks (t=4.678, p<0.001). There was also a non-significant trend towards an increased purchase volume for RTDs (from 9.0 standard drinks without an associated promotion to 11.5 standard drinks with an associated promotion) and wine (an increase from an average of 14.2 to 16.1 standard drinks. Consistent with the increased purchase quantity, respondents who had purchased items with associated promotions spent significantly more on average than respondents who had not purchased items with associated promotions ($35.97 compared to $30.57).
As expected, customers who did not have a specific product in mind prior to purchase were slightly more likely to participate in a POS promotion; 29.1% of ‘undecided’ customers purchased a product with a promotion, compared to 26.2% of those who knew what they wanted (z(1)=1.918; p=0.028). Those respondents who changed their minds (i.e., came intending to buy one thing but bought something different) were significantly more likely than those who purchased as intended to buy a product with a promotion (38.9% versus 23.2%; z(1)=3.205; p=0.001). Consistent with the role of POS promotions – influencing the decision at the point of purchase – almost all of these respondents (94.4%) indicated that they first saw or heard of the promotion when visiting the store on that occasion (rather than beforehand or through media sources).

**Discussion**

Our previous research (audits conducted in the same locations as the interviewer-completed patron exit surveys) demonstrated that POS promotions are widespread. This audit of bottle shops in Perth and Sydney found an average of 33 promotions per outlet; the average number of standard drinks required to participate in the promotions ranged from 12 for RTDs to 22 for beer [17].

In the present study, we found that ‘taste’ was the most common unprompted reason for product choice, followed by ‘my favourite’ for beer, spirits and RTDs, and ‘price/cheap’ for wine. Respondents were more likely to report that a POS promotion influenced their choice of alcohol brand than their choice of alcohol type, consistent with the argument that promotions and price discounts encourage brand-switching [26,27].

However, we also found an association between participation in a promotion and purchase quantity. While only 8% of respondents spontaneously identified a promotion as the reason for their purchase decision, those who participated in a promotion purchased 29.2% more
standard drinks if purchasing RTDs, 63.4% if purchasing beer or 16.7% if purchasing wine. Thus, as was found in earlier US research on price discounts, it appears that participation in POS promotions, particularly those that have an influence on price, is associated with increased purchase quantities, not solely shifting between brands.

It has been suggested that, as many of the promotions are of the form of price or price-volume reductions, they serve to save consumers money and thus have a benefit for consumers. However, we found that respondents who had purchased items with associated promotions spent significantly more on average than respondents who had not purchased items with associated promotions ($35.97 compared to $30.57). This suggests that, at least for some consumers, POS promotions may serve to increase purchase volume – given that such promotions require purchase of a specific quantity in order to receive the promotional offer; and that 40% of respondents who utilised a promotion stated that they purchased the quantity they did because of the promotion. However, as this is cross-sectional data and we did not ask about usual purchase volume we cannot exclude the alternate explanation that some of those who utilised a promotion were predisposed to purchasing large quantities of alcohol and thus sought out promotional discounts.²

While point-of-sale promotions, including price-volume promotions, are commonly used for many fast moving consumer goods (FMCGs), it is important to note that alcohol is ‘no ordinary commodity’ [28]. In the case of point-of-sale promotions, this relates to both the post-purchase consumption pattern and the potential for harm associated with increased consumption.

First, point of sale promotions (and particularly price-volume promotions) of commodities such as canned foods and paper-goods result in stockpiling for future use [29,30]; that is, people do not typically consume their 12 cans of baked beans or their 12 boxes of facial

² We thank an anonymous reviewer for this suggestion
tissues in a single sitting. However, previous Australian qualitative research with young people aged 16-25 years found that some (but not all) report consuming these increased volumes of alcohol on the single drinking occasion [31], citing reasons such as the difficulty of storage of ‘left-over’ alcohol without the knowledge of their parents (for those under 18 years); the positive emotions experienced by receiving something for free (e.g., “I’d be more inclined to drink both of them because one is free” and “You’d be celebrating”); and their previous experience that if alcohol is available it is consumed (e.g., “…if there’s heaps of alcohol, we’ll drink heaps of alcohol” and “When you’ve got it there in front of you, you keep pushing yourself, oh another one.”)

Unlike many other consumer products, the decision to consume the quantities of alcohol purchased by our respondents in a single sitting does have real potential for harm; even assuming a unit (can/bottle) of beer contains a single standard drink – and many contain more – those participating in promotions purchased on average just under 22 standard drinks, which is several times the amount identified by the NHMRC as placing a drinker at high risk of harm in the short-term [32]. However, we cannot assume that respondents intended to consume (or did consume) their purchase in one sitting, or that it was solely for their own consumption (although 38.6% reported that all of the alcohol they purchased was for their sole consumption and not for themselves and others to share). Critically, the data presented here allow us to conclude that POS promotions, particularly those that influence price, are having an influence on young people’s alcohol purchasing behaviours. The precise impact on consumption and harm is less clear, but this study indicates the importance of further examination of this influence, especially among young people.

Limitations

This study has several limitations that should be noted. The use of a cross-sectional design means that we are unable to determine causality or to identify all potential confounders, or to demonstrate that this increased purchase quantity led to increased consumption quantity.
Respondents were not asked about the product but not the quantity they intended to purchase before entering the store, so we cannot compare differences between intended and actual purchase quantities. Patrons were surveyed only on Friday and Saturday nights and in warmer weather, and it is possible that purchase behaviours may be different on weeknights and/or in winter; and the number of refusals was not recorded (although the interviewers reported that the majority of those approached consented) and thus the results do not represent all purchasers during that time period. As data were collected from patrons of 24 outlets, the results cannot necessarily be generalised to other locations, although the consistency of the data collected in two capital cities increases our confidence in the reliability of the data.

There is a need for regulators – and marketers – to further explore the immediate and cumulative effect of point-of-sale promotions on drinking patterns, and related harm, particularly among younger drinkers. If the evidence does indicate that such influences on purchasing translate to harm, there will be clear indications for policy

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References


Table 1: Reasons for alcohol purchases by alcohol type

<table>
<thead>
<tr>
<th>Reason for purchase (unprompted)</th>
<th>Alcohol Purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL (n=572)</td>
</tr>
<tr>
<td>Taste</td>
<td>60.0% (343)</td>
</tr>
<tr>
<td>Favourite</td>
<td>17.0% (97)</td>
</tr>
<tr>
<td>Cheap</td>
<td>14.9% (85)</td>
</tr>
<tr>
<td>On special</td>
<td>5.8% (33)</td>
</tr>
<tr>
<td>For a specific event or location</td>
<td>5.8% (33)</td>
</tr>
<tr>
<td>Friends drink it</td>
<td>5.6% (32)</td>
</tr>
<tr>
<td>Something new / different</td>
<td>5.4% (31)</td>
</tr>
<tr>
<td>High alcohol content / to get drunk</td>
<td>3.7% (21)</td>
</tr>
<tr>
<td>Low carb / healthier than others</td>
<td>2.4% (14)</td>
</tr>
<tr>
<td>Promotion</td>
<td>1.9% (11)</td>
</tr>
<tr>
<td>Other</td>
<td>5.1% (28)</td>
</tr>
</tbody>
</table>

* Some respondents purchased two products and were asked why they purchased each
Figure 1: Alcohol types purchased by gender

- Beer: Males 53.6%, Females 16.3%
- Wine or champagne: Males 44.6%, Females 19.2%
- RTDs: Males 19.5%, Females 27.1%
- Spirits: Males 17.8%, Females 25.3%
- Other: Males 2.5%, Females 4.8%
Table 2: Average purchase quantities and spend with and without participation in POS promotions

<table>
<thead>
<tr>
<th></th>
<th>Ave Standard Drinks</th>
<th></th>
<th>Total amount spent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Promotion</td>
<td>No promotion</td>
<td>t</td>
<td>sig</td>
</tr>
<tr>
<td><strong>RTD</strong></td>
<td>11.5 (n=30)</td>
<td>9.0 (n=82)</td>
<td>1.391</td>
<td>0.167</td>
</tr>
<tr>
<td><strong>Spirit</strong></td>
<td>22.3 (n=26)</td>
<td>24.0 (n=70)</td>
<td>-0.689</td>
<td>0.492</td>
</tr>
<tr>
<td><strong>Beer</strong></td>
<td>26.8 (n=47)</td>
<td>16.1 (n=149)</td>
<td>4.678</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Wine</strong></td>
<td>16.1 (n=48)</td>
<td>14.2 (n=69)</td>
<td>0.752</td>
<td>0.453</td>
</tr>
<tr>
<td><strong>Cider</strong></td>
<td>5.7 (n=5)</td>
<td>8.4 (n=9)</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

*participants who stated they were not sure if they purchased a promotion were excluded from this table

** t tests not conducted due to small number of respondents purchasing cider