

The Effects of Bar-Sponsored Alcohol Beverage Promotions Across Binge and Nonbinge Drinkers

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Alcohol-related problems have proliferated on college campuses in recent years and have resulted in many negative consequences, including death. The authors examine the effects of advertised drink specials at bars (reduced prices on beer and wine, all you can drink for a fixed price) in two between-subjects experiments. The findings indicate that these advertised promotions positively affect attitudes and intentions of patronizing the bar and influence students' expectations of amounts consumed for themselves and other consumers. The authors examine the effects of the promotions for consumers who are categorized as binge and nonbinge drinkers and find that binge drinkers differ from nonbingers in their attitudes and intentions related to such promotions in several important ways. For example, when a social responsibility message about not drinking and driving is included in the advertisement, bar patronage intentions are lower for nonbinge drinkers, but there is no effect of the message for binge drinkers. The authors address implications for consumer welfare and policy.

College presidents view excessive alcohol consumption as the most serious problem on college campuses today (Center for Science in the Public Interest 2000). In response to such problems, messages emphasizing social and personal responsibility are now a promotional tactic commonly used by many breweries and distillers. Typically aimed at young drinkers, these messages often warn of the dangers of drinking and driving or encourage consumers to know their limits. However, young consumers are also bombarded with advertising that encourages excessive alcohol consumption. For example, advertising in college newspapers often promotes drink specials such as "Ladies drink free all night long," which appeared in Louisiana State University's student newspaper, and "Ease your mind before final exams with our mind eraser drink special," which appeared in the Auburn University student newspaper (Erenberg and Hacker 1997). Thus, while national breweries attempt to enhance their images by presenting advisory statements such as "Think when you drink" and "Know when to say when," local bars often promote deep price discounts on alcoholic beverages and drink specials that may encourage excessive consumption.

We examine two primary issues of interest to both consumer welfare proponents and public policymakers. First, we examine how different types of alcohol beverage promotions affect binge and nonbinge drinkers' attitudes, intentions, perceptions, and expectations. Second, given the pro-

liferation of promotional messages that potentially encourage heavy, or binge, drinking, we consider whether messages that encourage responsible drinking behavior have the intended effect of discouraging binge drinking or whether they "boomerang" and serve as an additional enticement for frequent users of alcohol. Two studies examine these issues across college-aged consumers who are categorized as nonbinge or binge drinkers.

Background and Hypotheses

Concerns Regarding College Students' Excessive Alcohol Consumption

University officials, policy advocates, and government officials are concerned about the level of alcohol consumption and the extent of binge drinking by college students.¹ National attention was focused on the problem after several well-publicized deaths, including those of an 18-year-old Massachusetts Institute of Technology freshman and a 20-year-old Louisiana State University undergraduate student. Alcohol has been involved in two-thirds of college student suicides, 98% of college rapes, and 95% of violent crime on campus (CASA Commission 1994). Other research has found positive associations between high levels of alcohol consumption and increased incidences of traffic fatalities, unplanned sexual activity, physical and sexual assault, unintentional injuries, physical and cognitive impairment, and poor academic performance (Presley, Meilman, and Lyeria 1993; Wechsler and Isaac 1992).

Although the Federal Trade Commission has traditionally advocated self-regulation of the alcohol beverage industry,

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¹Binge drinking is defined as five or more drinks in a single time period for a man and four or more drinks for a woman in some studies (Wechsler et al. 1995, 2000) and as five drinks or more regardless of sex in others (Boles et al. 2000; Schulenberg et al. 1996).

it has recently taken action against several alcohol beverage producers for depicting young people consuming alcohol in potentially dangerous situations in their advertising (Hacker 1998). In response to an increased threat of regulation, many producers now promote socially responsible drinking behaviors in their advertising (Erenberg and Hacker 1997). Increased public pressure and potential liability have also persuaded many firms in the industry to discontinue advertising on college campuses. However, advertising by local bars has taken the place of beverage advertisements in many college newspapers.

Advertisements for local bars often focus on deeply discounted drink prices and special themes such as ladies' nights (to attract both female and male drinkers), beat-the-clock specials, and "all you can drink" for a prespecified low price. "All you can drink" promotions that offer unlimited drinks for one low price are prohibited or restricted in 18 states. However, many bars evade such laws by charging extremely low prices on a per-drink basis. For example, some establishments offer "any coin, any drink" specials and "penny" beers, which are of particular concern to public policy advocates because of their tendency to promote binge drinking. Surprisingly, little empirical research has examined how such advertisements affect college students' attitudes and intentions regarding their own alcohol consumption.

Conceptual Rationale and Hypotheses

In Study 1, we examine how the type of alcohol beverage promotion and its time frame influence consumers' attitudes and intentions. We use acquisition-transaction utility theory (Thaler 1985) to hypothesize these effects across consumers who are classified as binge or nonbinge drinkers. Acquisition utility is simply the economic gain or loss from the transaction and is equal to the amount by which the utility of the purchased good exceeds the purchase price. Transaction utility is equal to the internal reference price (i.e., a memory-based perception of a price standard that serves as a basis for comparison) minus the purchase price of the product (Lichtenstein, Burton, and Karson 1991). Promotions that substantially reduce price increase acquisition utility by decreasing price (while holding the utility provided by the good constant), thus enhancing perceptions of economic gain. They also increase transaction utility by lowering the offering price relative to the internal reference price for a drink purchase in a bar or nightclub. We expect such increases through acquisition and transaction utility to have a positive effect on consumer attitudes and patronage and increase the perceived likelihood of greater alcohol consumption.²

Longer promotions are also expected to be associated with higher utilities than shorter promotions. Most consumers patronizing a bar are likely to anticipate making multiple drink purchases over an extended period of time. The utility gained from the purchase of discounted drinks increases incrementally on the basis of the time period for which the discount is offered and the rate at which drinks are purchased. From the consumer's perspective, the longer a

price promotion is in effect, the greater is the cumulative product-acquisition utility. This, in turn, should result in more favorable attitudes and patronage intentions and increase the likelihood of greater consumption.

Will binge and nonbinge drinkers respond differently to "binge-drinking promotions?" In general, the higher consumption frequencies of binge drinkers suggest that the utility gained from alcoholic beverage promotions will be greater for binge drinkers than for nonbinge drinkers.

Research has found that binge drinkers have more positive attitudes toward drinking behaviors and have higher levels of involvement with alcoholic beverages and bars (Schulenberg et al. 1996; Turrisi 1999). This suggests that binge drinkers will have more favorable attitudes toward the ad and toward the bar sponsoring the promotion, as well as more favorable patronage intentions and perceptions of a greater likelihood of increased consumption for themselves and others.

We expect the type of promotion offered to interact with drinking status. Compared with advertisements that do not promote price discounts, advertisements that offer reduced prices should have a greater (more positive) impact for binge drinkers than for nonbinge drinkers. Because of differences in purchase amounts and consumption levels, increases in total acquisition and transaction-related utilities should be greater for binge than for nonbinge drinkers; that is, binge drinkers have more to gain from heavily discounted drink prices than nonbinge drinkers do. On the basis of the previous discussion, we offer hypotheses related to advertised alcohol beverage promotions, promotion time frame, and effects across binge and nonbinge drinkers:

- H₁: Consumers will respond more favorably to advertisements that emphasize alcoholic beverage promotions than to similar advertisements that contain no such alcohol-related promotions, and effects will be stronger for larger price reductions. When exposed to advertisements with the alcohol promotion, consumers will have more favorable (a) attitudes toward the ad, (b) attitudes toward the bar, and (c) intentions to patronize the bar. In addition, consumers will expect that both (d) they and (e) others at the bar will consume more alcoholic beverages.
- H₂: Compared with an alcohol beverage promotion that runs for a shorter time period, consumers exposed to advertisements with an alcohol promotion that runs for a longer time period will have more favorable (a) attitudes toward the ad, (b) attitudes toward the bar, and (c) intentions to patronize the bar. In addition, consumers will expect that both (d) they and (e) others at the bar will consume more alcoholic beverages.
- H₃: Compared with consumers categorized as nonbinge drinkers, binge drinkers exposed to bar advertisement promotions will have more favorable (a) attitudes toward the ad, (b) attitudes toward the bar, and (c) intentions to patronize the bar, and they will expect that both (d) they and (e) others at the bar will consume more alcoholic beverages.
- H₄: The influence of an alcohol beverage promotion on (a) attitude toward the ad, (b) attitude toward the bar, and (c) intentions to patronize the bar will be stronger (more favorable) for binge drinkers than for nonbinge drinkers. Similarly, the alcohol promotion will lead to stronger effects for binge drinkers with respect to their expectations of higher levels of consumption (d) for themselves and (e) for others.

²It should be noted that other theoretical explanations might exist. For example, social utility theory may provide a rationale for favorable effects on patronage intentions for bar happy hours. The focus of this study leaned toward price manipulations, to which transaction and acquisition utility theories are more closely tied.

In addition to the perceived likelihood of increased consumption, respondents' estimates of the specific number of drinks they expect to consume and the specific number of drinks they expect others to consume are examined. As noted previously, consumers are presumed to have a reference point with regard to the number of drinks they expect to consume. This initial reference point may then be adjusted on the basis of factors specific to the current behavioral episode (Turrisi 1999). Situational variables that may affect estimated consumption relative to a reference point include factors such as price discounts on alcohol, the expected length of time at the bar, amount of discretionary funds available, or the length of time a price promotion is offered (Wylie, Zhang, and Casswell 1998). Drinking status and promotion type are therefore expected to influence the amount of alcohol respondents expect both themselves and others to consume, given adjustments made to an initial reference point.³ Prior research has shown that students' drinking behaviors mimic those of their peers (Baer and Carney 1991). Consumers' expected alcohol consumption amounts for themselves and others should therefore be greater for binge drinkers than for nonbinge drinkers. Consumption reference points also should be higher for men (than for women) and students (than for nonstudents). In addition, given lower individual drink prices, binge drinkers may perceive greater increased total utility from a larger cumulative number of drinks and may be less restricted by a fixed "ceiling" effect regarding the total number of drinks to be consumed in a single evening. This suggests that estimated consumption amounts will be influenced by an interaction between promotion type and drinking status with the type of consumer (H_6).

H_5 : Specific expected alcohol consumption amounts will be higher for (a) advertisements that use alcohol beverage promotions, (b) promotions that run for a longer time period, (c) binge drinkers, and (d) men and student consumers.

H_6 : Both the type of promotion and drinking status will interact with the type of consumer (e.g., self, sex, student) to influence specific expected alcohol consumption amounts.

Study 1

Method

Pilot Tests

An initial pilot test was performed to help determine appropriate levels for the manipulations. Undergraduate students ($n = 21$) were exposed to an advertisement with no price-related information for a fictitious bar, and then they responded to a series of questions. Findings indicate that perceptions of "normal" prices for a 12-ounce beer and a 4-ounce glass of wine at the fictitious bar were \$3.00 and \$3.30, respectively. Respondents also provided estimates of the number of drinks the average man and woman would consume at the full price, the low discount price (\$1.50), and the very low discount price (\$.50). The results showed that

the very low price resulted in the greatest estimates of consumption, and the very low price and a longer-running promotion (4:00 P.M. until 1:00 A.M.) were perceived most favorably.

Design, Participants, and Procedures

The study design was a 3 (type of promotion) \times 2 (hours of the promotion) \times 2 (drinking status) between-subjects experiment. The type of promotion manipulation included three conditions: (1) \$.50 drink special on beer or wine, (2) \$1.50 drink special on beer or wine, and (3) reduced prices on appetizers (the control with no discount on alcoholic beverages). The duration of the promotion varied across the following two levels: (1) 4:00 P.M. until 7:00 P.M. and (2) 4:00 P.M. until 1:00 A.M. The sample consisted of 189 subjects who reported having consumed alcohol in the past six months. The advertising stimulus was for a fictitious bar and nightclub named Top Shelf, and it featured the copy, "Coolest beer/finest wine anywhere" and promoted a "Wednesday night special." All manipulations were presented in the form of a mock-up of a newspaper advertisement similar to those typically found in campus newspapers. Except for the manipulated type and hours of the promotion, all other information presented in the advertisement was invariant.

Subjects were undergraduate students at a major Southern university who voluntarily participated in this study. The mean age of respondents was 21.4 years.⁴ The subjects were categorized by drinking status (either binge or nonbinge drinkers) on the basis of self-reports of whether they had consumed five or more drinks at a single sitting during the past 14-day period (Wechsler et al. 1995, 2000). All subjects included in the analyses reported that they had consumed some alcoholic beverages during the past six months (i.e., nondrinkers were excluded from the analyses). For these drinkers, 87 subjects were classified as binge drinkers and 102 were categorized as nonbinge drinkers.

Dependent Measures

The questionnaire contained measures of attitude toward the ad, attitude toward the bar, bar patronage intentions, and alcohol consumption-related expectations. Attitude toward the ad was measured with a four-item scale (seven-point items with endpoints of "good"/"bad," "like"/"dislike," "positive"/"negative," "interesting"/"boring"; $\alpha = .93$). Attitudes toward the bar/nightclub were also measured with four seven-point items ("positive"/"negative," "fun"/"boring," "exciting"/"dull," "favorable"/"unfavorable"; $\alpha = .96$). Intentions to patronize the bar were measured with two seven-point items ("likely"/"unlikely," "possible"/"not possible"; $r = .90$). Two items assessed subjects' alcohol consumption-related expectations for themselves ("Would you be likely to drink more than usual because of the special?"; endpoints of "very likely"/"very unlikely") and for others ("The Wednesday night promotion will lead some customers to drink more than they should"; endpoints of "strongly agree"/"strongly disagree"). For all items, higher scores indicate more favorable responses.

³Consumption estimates were obtained for subjects themselves (self) and for four groups of consumers (male students, female students, male nonstudents, and female nonstudents).

⁴The legal drinking age in the state in which the study was conducted is 21 years.