

18-2611

**IN THE UNITED STATES COURT OF APPEALS
EIGHTH CIRCUIT**

MISSOURI BROADCASTERS ASSOC., *et al.*,
Plaintiffs-Appellees,

v.

DOROTHY TAYLOR, *et al.*,
Defendants-Appellants.

Appeal from the United States District Court
Western District of Missouri,
The Honorable Douglas Harpool

ADDENDUM OF APPELLANTS

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subsequently dismissed all claims in Plaintiffs' Complaint in March 2016. (Doc. 62). Plaintiffs appealed Judge Gaitan's ruling and the Eighth Circuit reversed the Rule 12(b)(6) dismissal, remanding the case back to this Court. The Eighth Circuit stated: "Plaintiffs, at a minimum, pled sufficient facts to survive a Rule 12(b)(6) motion to dismiss. On its face, the amended complaint plausibly demonstrates the challenged provisions do not directly advance the government's asserted substantial interest, are more extensive than necessary, and unconstitutionally compel speech and association." *Missouri Broadcasters Ass'n v. Lacy*, 846 F.3d 295, 303 (8th Cir. 2017) (internal citation omitted). The Eighth Circuit further stated, "our review of the grant of the motion to dismiss does not impact the district court's denial of summary judgment." *Id.* at 299 n. 4.

On remand, Plaintiffs filed a motion for reconsideration and/or motion for summary judgment. This Court denied the motion for reconsideration, finding disputed material facts, and scheduled the case for trial. (Doc. 95) ("A case of this importance is best resolved after a more complete evaluation of the evidence rather than on summary judgment based on generalized legal conclusions."). On February 20, 2018, the Court conducted a bench trial and the parties presented evidence and argument on the pending claims. For the reasons set forth herein, the Court finds in favor of Plaintiffs.

THE REGULATIONS AND STATUTE

This case involves Plaintiffs' challenge of two Missouri regulations prohibiting the advertising of certain information by alcohol manufacturers, retailers, wholesalers and distributors and one Missouri statute limiting how wholesalers and distillers advertise their products through retailers.²

² The factual findings set forth herein are based on both the undisputed material facts presented in the summary judgment briefing and the evidence presented during trial.

The “Challenged Regulations” are two parts of 11 C.S.R. 70-2.240, which prohibits media advertisements of alcoholic beverages unless the advertisements conform to requirements set forth later in the regulations. Subsection (5)(G) (the “Discount Advertising Prohibition Regulation”), states:

(5) No advertisement of intoxicating liquor or nonintoxicating beer shall contain:

(G) Any statement offering any coupon, premium, prize, rebate, sales price below cost or discount as an inducement to purchase intoxicating liquor or nonintoxicating beer except, manufacturers of intoxicating liquor other than beer or wine shall be permitted to offer and advertise consumer cash rebate coupons and all manufacturers of intoxicating liquor may offer and advertise coupons for nonalcoholic merchandise in accordance with section 311.355, RSMo;

In essence, this regulation forbids media advertising of price discounts with some exceptions. Retailers are prohibited from offering a coupon or discount to purchase beer or wine, but not intoxicating liquor other than beer or wine. The regulation also prohibits retailers from outside advertising of discounts on alcohol. However, the same discounts may be advertised inside the establishments.³ Generic advertisements such as “Happy Hour” or “Ladies Night” may be used in outside advertising, but other discounts in outside advertising are not permitted, such as “two-for-one” specials.

Subsection (5)(I) (the “Below Cost Advertising Prohibition Regulation”), states:

(5) No advertisement of intoxicating liquor or nonintoxicating beer shall contain:

(I) A price that is below the retailer's actual cost.

³ Outside advertising refers to any advertising of a discount price communicated outside the establishment or visible outside the physical premises of the retailer. Inside advertising refers to advertising of a discount price only visible or communicated within the physical premises of the retailer.

The Below Cost Advertising regulation simply prohibits retailers from advertising prices that are below the retailer's cost. It does not prohibit retailers from selling alcohol at a price below the retailer's cost.

The statute-in-question (the "Challenged Statute"), Ann. Stat. § 311.070.1 states:

Distillers, wholesalers, winemakers, brewers or their employees, officers or agents shall not, except as provided in this section, directly or indirectly, have any financial interest in the retail business for sale of intoxicating liquors, and shall not, except as provided in this section, directly or indirectly, loan, give away or furnish equipment, money, credit or property of any kind, except ordinary commercial credit for liquors sold to such retail dealers. However, notwithstanding any other provision of this chapter to the contrary, for the purpose of the promotion of tourism, a distiller whose manufacturing establishment is located within this state may apply for and the supervisor of liquor control may issue a license to sell intoxicating liquor, as in this chapter defined, by the drink at retail for consumption on the premises where sold; and provided further that the premises so licensed shall be in close proximity to the distillery and may remain open between the hours of 6:00 a.m. and 1:30 a.m., Monday through Saturday and between the hours of 9:00 a.m. and midnight, Sunday. The authority for the collection of fees by cities and counties as provided in section 311.220, and all other laws and regulations relating to the sale of liquor by the drink for consumption on the premises where sold, shall apply to the holder of a license issued under the provisions of this section in the same manner as they apply to establishments licensed under the provisions of section 311.085, 311.090, or 311.095.

Mo. Ann. Stat. § 311.070.1. The statute in essence prohibits distillers, wholesalers, brewers or winemakers from providing any financial aid to retailers, including through advertising, except as provided in Mo. Ann. Stat. § 311.070., section 4(10), which states:

4. Notwithstanding other provisions contained herein, the distiller, wholesaler, winemaker or brewer, or their employees, officers or agents may engage in the following activities with a retail licensee licensed pursuant to this chapter: ...

(10) The distiller, wholesaler, winemaker or brewer may in an advertisement list the names and addresses of two or more unaffiliated retail businesses selling its product if all of the following requirements are met:

- (a) The advertisement shall not contain the retail price of the product;
- (b) The listing of the retail businesses shall be the only reference to such retail businesses in the advertisement;

- (c) The listing of the retail businesses shall be relatively inconspicuous in relation to the advertisement as a whole; and
- (d) The advertisement shall not refer only to one retail business or only to a retail business controlled directly or indirectly by the same retail business;

Mo. Ann. Stat. § 311.070.

The exception contained in Section 4(10) allows a producer or wholesaler of alcohol to advertise on behalf of retailers under certain conditions. To meet the requirements of the exception, producers and wholesalers must exclude the retail price of their products from the advertisements if they identify a retailer; must include multiple unrelated retailers if they choose to identify a retailer; and even then, retailers may only be mentioned in an inconspicuous manner.

It is undisputed, that under existing Missouri law, retailers, such as bars and liquor stores, may advertise and promote price discounts for alcoholic beverages *inside* their establishments. Further, while Missouri state regulation 11 C.S.R. § 70-2.240(5)(G) generally bars media advertising of alcoholic beverage price discounts, it explicitly permits manufacturers of intoxicating liquor, other than beer or wine, to both offer and advertise consumer cash rebate coupons. In addition, Missouri permits media advertising of alcoholic beverage price discounts with generic descriptions (e.g., “Happy Hour” and “Ladies Night”), but does not allow specific prices to be used.

Finally, violations of the regulations or statute may result in fines and penalties, the suspension or revocation of alcoholic sales licenses, and/or misdemeanor criminal prosecutions. See Mo. Ann. Stat. §§ 311.660, 311.868, and 311.880. All these remedies have been enforced by the State.

DISCUSSION

To begin, “the parties agree the challenged provisions regulate commercial speech.” See *Missouri Broadcasters Association v. Lacy*, 846 F.3d at 300. “The First Amendment ‘accords

a lesser protection to commercial speech than to other constitutionally guaranteed expression.”
Id. (citing *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n of New York*, 447 U.S. 557, 563, 100 S. Ct. 2343, 2347, 65 L. Ed. 2d 341 (1980)). In *Central Hudson*, the Supreme Court identified four considerations to determine the constitutionality of laws burdening commercial speech: “(1) whether the commercial speech at issue concerns unlawful activity or is misleading; (2) whether the governmental interest is substantial; (3) whether the challenged regulation directly advances the government's asserted interest; and (4) whether the regulation is no more extensive than necessary to further the government's interest.” *Id.* (citing *1-800-411-PAIN Referral Serv., LLC v. Otto*, 744 F.3d 1045, 1055 (8th Cir. 2014)); see also *44 Liquormart, Inc. v. Rhode Island*, 517 U.S. 484 (1996).⁴ Here, the Eighth Circuit has stated, “The interest in Missouri’s Liquor Control Law, the greater statutory scheme within which the challenged restrictions are situated, is “to promote responsible consumption, combat illegal underage drinking, and ... maintain[] an orderly marketplace.” Mo. Ann. Stat. § 311.015.

The Court finds there is a substantial government interest in both dissuading overconsumption of alcohol and combating underage drinking, and Plaintiffs acknowledge the State has these substantial interests. Significant health and public safety interests are clearly involved in both. Further, while Plaintiffs do not concede that the State has a substantial interest in maintaining an orderly marketplace, for the reasons set forth herein, the Court finds that there is also a substantial State interest in maintaining an orderly marketplace. Therefore, the Court’s decision here focuses its analysis under *Central Hudson*’s third and fourth factors and whether

⁴ There is no claim that the advertising prohibited by these regulations and statute are unlawful or misleading. The parties agree that the advertising at issue contains truthful information.

the regulations and statute at issue: 1) directly advance the state's substantial interests; and/or 2) are no more extensive than necessary.

I. THE REGULATIONS - Subsection (5)(G) (the “Discount Advertising Prohibition Regulation”) and Subsection (5)(I) (the “Below Cost Advertising Prohibition Regulation”).

In support of their claims, Plaintiffs argue the regulations prohibit truthful, non-misleading commercial speech and restrict the flow of truthful information to potential customers. *Missouri Broadcasters Ass'n v. Lacy*, 846 F.3d at 299. Plaintiffs also argue there is no evidence that the regulations significantly impact overconsumption of alcohol or underage drinking. They further claim that the state is inconsistent in its enforcement of the regulations and therefore cannot show the regulations directly advance the State's interest. Finally, Plaintiffs claim the State cannot establish that the regulations are no more extensive than necessary to serve its substantial interest. *Id.* In response, Defendants simply argue that the statute and regulations directly advance the State's interest and do not violate the First Amendment.

Under the applicable legal framework, and as admitted by the State, the State has the burden to prove that the regulations directly advance the State's substantial interests and that the regulations are no more extensive than necessary to further the state's interest. *Id.* at 301 (citing *Greater New Orleans Broad. Ass'n, Inc. v. United States*, 527 U.S. 173, 188, 119 S.Ct. 1923, 144 L.Ed.2d 161 (1999)) (quoting *Edenfield v. Fane*, 507 U.S. 761, 771, 113 S.Ct. 1792, 123 L.Ed.2d 543 (1993)); see also *Utah Licensed Beverage Ass'n v. Leavitt*, 256 F.3d 1061, 1070–71 (10th Cir. 2001) (“The Supreme Court has stated that ‘[t]he party seeking to uphold a restriction on commercial speech carries the burden of justifying it.’”) (internal citation omitted). “This burden ‘is not satisfied by mere speculation or conjecture.’” *Utah Licensed Beverage*

Ass'n v. Leavitt, 256 F.3d at 1070–71. The State “must demonstrate that the harms it recites are real and that its restriction will in fact alleviate them to a material degree.” *Id.* (internal citation omitted).

A. The Government Has Failed To Meet Its Burden Of Establishing That The Regulations Directly Advance The State’s Asserted Interest.

In determining whether the regulations directly advance the substantial interest of discouraging overconsumption of alcohol and preventing underage drinking, the Court considers “the relationship between the harm that underlies the State’s interest and the means identified by the State to advance that interest.” *Id.* (citing *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 555, 121 S.Ct. 2404, 150 L.Ed.2d 532 (2001)). Defendants have the burden of proof and ““must demonstrate that the harms [they] recite[] are real and that [defendants’] restriction will in fact alleviate them to a material degree.”” *Id.* (citing *Greater New Orleans Broad. Ass’n, Inc.* 527 U.S. at 188) (quoting *Edenfield v. Fane*, 507 U.S. at 771). “The need for the State to make such a showing is particularly great given the drastic nature of its chosen means—the wholesale suppression of truthful, nonmisleading information.” 44 *Liquormart, Inc. v. Rhode Island*, 517 U.S. at 505. (“Accordingly, we must determine whether the State has shown that the price advertising ban will significantly reduce alcohol consumption.”). “A speech regulation may not be sustained if it provides only ineffective or remote support for the government’s purpose.” *Utah Licensed Beverage Ass’n v. Leavitt*, 256 F.3d at 1071 (internal citation omitted).

The State’s interest involves significant health and public safety issues for the citizens of Missouri. To pass constitutional muster under the *Central Hudson* analysis, the regulations at issue must directly advance the State’s interest in either discouraging overconsumption of alcohol or preventing illegal underage drinking. The State has the burden to establish the relationship between the potential harm identified and the means set forth in the statute and regulations to

advance that interest in order to meet the *Central Hudson* test. *Missouri Broadcasters Ass'n v. Lacy*, 846 F.3d at 301 (citing *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 555, 121 S. Ct. 2404, 150 L.Ed2d 532 (2001)). The State must further demonstrate that the statute and regulations will, in fact, advance the State's substantial interest by addressing the potential harms to a material degree. *Id.* (internal citation omitted). Simply stated, the State must show that prohibiting advertising of discount prices and below-cost alcohol directly reduces overconsumption of alcohol and underage drinking.

While the burden of proof is on Defendants, Plaintiffs submitted credible and substantial evidence, through their expert witness, that there is in fact no demonstrative relationship between media advertising of alcohol and overall consumption rates or underage drinking. Plaintiffs' evidence demonstrated that advertising significantly affected the brand and type of alcohol sold, but did not statistically impact the total amount of alcohol consumed by individuals. In fact, Plaintiffs submitted convincing evidence that increases in overall alcohol advertising expenditures have occurred while the per capita consumption of alcohol has actually declined. The State failed to present any evidence contradicting the testimony, empirical studies, and statistical analysis relied on by Plaintiffs' expert. Further, the State offered no empirical or statistical evidence, study, or expert opinion demonstrating how these regulations further protect the State's interest.⁵ For example, the State did not present evidence showing overconsumption or underage drinking is less frequent in Missouri than in states without similar advertising restrictions. The State did not produce evidence that the rate of overconsumption or underage drinking decreased

⁵ The State discussed a 2003 Kuo study during the cross examination of Plaintiffs' expert witness. However, the study was not admitted as evidence. The testimony regarding the study was that it examined establishments that sold alcohol within 2 miles of colleges. Plaintiffs' expert witness opined that the study only addressed advertising in establishments and on the windows of establishments, but did not relate to mass media price advertising.

when the challenged regulations were adopted in Missouri. As a result, the Court finds the State has provided no evidence that the challenged regulations significantly advance a substantial State interest. The State failed to meet its evidentiary burden.

The State's regulatory scheme is, at best, inconsistent if designed to reduce overconsumption and underage drinking. The State allows discount priced alcohol to be sold at retail establishments in Missouri. While the regulations at issue prohibit discount advertising *outside* a retailer, the discounted prices are allowed and can be advertised once a consumer is *inside* the establishment. As a result, consumers already motivated to go inside an establishment are thus allowed to have knowledge of, and take advantage of, the discounted price and sale. This is far more likely to lead to overconsumption than general media advertising.

The State's scheme has other inconsistencies. While the regulations prohibit the advertising of some sales, such as two-for-one specials, going out of business sales for a local wine store, or a coupon for a free drink with the purchase of a meal, the State allows other generic advertising of discounts of alcohol, including "happy hours" and "ladies' night" advertisements. The State also allows for coupons to be used for the sale of some types of alcohol, but not others. As identified by Plaintiffs there are glaring inconsistencies in the regulations as applied, and lead to serious questions as to whether the regulations even intend to *directly* advance its substantial interest in reducing overconsumption and underage drinking.

The Court also notes Missouri's neighboring states do not have the same prohibitions on alcohol advertising that Missouri imposes. Since a significant portion of Missouri citizens are subjected to advertising in their neighboring states, such as Kansas, Arkansas, Illinois and Iowa, the impact the Missouri regulations have on the State's interest are even further minimized. The advertising restrictions adversely impact Missouri establishments' competitive position in those

areas by depriving consumers of truthful comparative pricing information for Missouri establishments.

Here, this Court agrees, and Plaintiffs have established, that “the multiple inconsistencies within the regulations poke obvious holes in any potential advancement” of the State’s interest, “to the point the regulations do not advance the interest at all.” *Missouri Broadcasters Ass’n v. Lacy*, 846 F.3d at 301. Therefore, based on the record before the Court, the Court finds the State has failed to meet its burden of establishing that the regulations directly advance the State’s asserted interest.

B. The Government Has Failed To Meet Its Burden Of Establishing That The Regulations Are No More Extensive Than Necessary To Further The Government's Interest.

Under *Central Hudson* factor number 4, the Court must look to whether there are alternatives that directly advance the asserted interests in a manner that is less intrusive to Plaintiffs’ First Amendment Rights. See *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n of New York*, 447 U.S at 564-566. The “regulation of speech cannot be sustained unless there is evidence that the state ‘carefully calculated the costs and benefits associated with the burden on speech imposed’ by the regulations.” *Utah Licensed Beverage Ass’n v. Leavitt*, 256 F.3d at 1075 (citing *Lorillard Tobacco Co. v. Reilly*, 121 S.Ct. at 2425). The Court finds the State cannot meet its burden under *Central Hudson* factor number 4.

Plaintiffs’ evidence establishes that the State’s interest in discouraging the overconsumption of alcohol and combating illegal underage drinking can be obtained from less restrictive alternatives that may actually have a much greater effectiveness than the existing regulations. Plaintiffs’ evidence established that educational programs have been found to be effective in promoting the State’s interests, especially as it relates to driving while under the

influence. In fact, the evidence presented at trial indicates that if the State provided additional funding for these awareness programs it would further promote the State's interest in preventing underage drinking and preventing the overconsumption of alcohol. Defendants failed to offer evidence to contradict this. In fact, the State's own evidence demonstrated the effectiveness of educational programs in preventing underage drinking and also reinforced the need for, and direct benefits which would be derived from, committing additional resources to those programs. The Chief of Enforcement for the Missouri Division of Alcohol and Tobacco Control testified that his division is authorized 14 agents, all with prior law enforcement experience. His agents spend about 95 percent of their time on licensing and only 5 percent of their time on enforcement. The Chief stated he would like the Division's agents to spend 50 percent of their time on enforcement and 50 percent of their time on licensing.

Another alternative raised by Plaintiffs, and supported by the evidence presented, is an increase in the State's excise tax on alcohol that could further the government's interest. An overall increase in the cost of alcohol would, based on the evidence, likely reduce overall alcohol consumption.⁶ Such a tax could, at least theoretically, advance the State's interest in reducing the overconsumption of alcohol and underage drinking.

From the record, the Court finds the State has multiple non-speech-suppressive alternatives that could directly advance the State's interests in reducing overconsumption and underage drinking. Alternatives include, but are not limited to: (1) an increase in taxes of alcohol; (2) direct controls on pricing; (3) development and full funding of educational campaigns concerning the problems of excessive and underage drinking; (4) a ban on promotions on alcohol in the entirety;

⁶ The State's tax rates on alcohol are low compared to other states.

(5) enhancement of enforcement penalties; or (6) implementation of one or more of the foregoing alternatives within a 2-mile radius of colleges instead of the entire state.

The Court finds Plaintiffs have presented sufficient evidence that there are reasonable alternatives, including those stated herein, to the challenged restrictions that the State could have enacted that are less intrusive to Plaintiffs' First Amendment rights. See *44 Liquormart, Inc. v. Rhode Island*, 517 U.S. at 507 (suggesting limiting alcohol purchases by heavily taxing and/or regulating alcohol or developing educational campaigns about the effects of alcohol as alternatives to Rhode Island's blanket ban on advertising the price of alcohol). The State provided no evidence to contradict the possible effectiveness of these alternatives.

Therefore, for the reasons set forth herein, the State has failed to meet its burden at step four and cannot establish that the regulations are no more extensive than necessary to further its interest.

II. THE STATUTE.

Plaintiffs contend the Challenged Statute prohibits truthful, non-misleading commercial speech and restricts the flow of truthful information to potential customers. In addition, Plaintiffs argue the statute is unconstitutional because it compels speech and association by requiring producers and wholesalers to list more than one retailer on advertisements, if they chose to list any retailer at all. Defendants argue the State has a substantial interest in maintaining an orderly marketplace by maintaining a three-tier separation and preventing undue influence over retailers.

The statute states, in part, "Distillers, wholesalers, winemakers, brewers or their employees, officers or agents shall not, except as provided in this section, directly or indirectly, have any financial interest in the retail business for sale of intoxicating liquors," Mo. Ann. Stat. § 311.070.1. The statute dictates how distillers and wholesalers may advertise retailers selling their products. *Missouri Broadcasters Ass'n v. Lacy*, 846 F.3d at 298. Producers and

wholesalers are required, if they choose to list any retailers in an advertisement, to exclude the retail price of the product from the advertisement, to list multiple unaffiliated retailers, and to make the listing inconspicuous. *Id.* at 299.

As previously stated, the Court finds that preventing the overconsumption of alcohol, preventing illegal underage drinking, and maintaining an orderly marketplace are substantial state interests. Alcohol manufacturing, wholesale distribution, and retail sales, are part of a significant industry with a large economic impact and significant potential social consequence. A consistent regulatory scheme, maintaining a distinct three-tier system separating manufacturing, wholesalers, and retailers from financial intermingling, could provide benefits to Missouri consumers by maintaining competition at the retail level. As such, the Court finds the first two *Central Hudson* factors have been met and analyzes whether the Challenged Statute: 1) directly advances its substantial interests; and/or 2) is no more extensive than necessary.

A. The Government Has Failed To Meet Its Burden Of Establishing That The Statute Directly Advances The State's Asserted Interest.

As set forth in the Eighth Circuit's opinion, "Missouri's Liquor Control Law establishes restrictions on retailers, wholesalers, and producers exchanging money to promote the responsible consumption of alcohol and other state policy interests." *Missouri Broadcasters Ass'n v. Lacy*, 846 F.3d at 302. "The challenged statute is an exception to those restrictions." *Id.* (citing Mo. Ann. Stat. § 311.070.1). The Eighth Circuit noted, "the statute does nothing to further the interest in maintaining an orderly marketplace and actually weakens the impact of the overall statutory scheme because this statute is an exemption to the restrictions preventing retailers, wholesalers, and producers from becoming financially entangled." *Id.* See Mo. Ann. Stat. §§ 311.070.1, 311.070.4(10).

In essence, the three tier system the State is promoting is a measure to keep the manufacture and wholesale tiers from controlling or dominating the retail tier. Therefore, the State believes the three tier system maintains an orderly marketplace by prohibiting vendor paid advertisements and cooperative advertisements. The State's purported goal is to restrict manufacturers and wholesalers from comingling with, or picking favorites among, retailers. The intent is to prevent restrictions of competition and/or prevent wholesalers from gaining fiscal control of retailers' sales tactics or strategies.

Missouri's Challenged Statute, similar to the regulations discussed herein, is also filled with exceptions and inconsistencies adopted piecemeal over time. For example, the State permits Missouri based wineries to comingle all three tiers, including producing wine, wholesaling wine, and retailing wine. *See* Mo. Ann. Stat. §§ 311.190.1 and 311.070.11. Further, Missouri allows out of state wineries to make direct retail sales to Missouri residents and consumers. Distillers of spirits and microbrewers are allowed to sell their own produced liquor or beer through retail businesses on their premises, again comingling the three tiers the Statute is argued to protect. Plaintiffs provided numerous examples, such as these, demonstrating how the three tier regulatory system has been blurred, if not wholly abandoned.

The Challenged Statute generally prohibits distillers, wholesalers, brewers, or winemakers from providing advertising, financial assistance, or incentives to retailers through advertising.⁷ However, even the Statute itself contains numerous exceptions to this general rule. These exceptions apply to both advertising restrictions and to prohibitions on providing financial incentives and assistance to retailers. As described above, a distiller, wholesaler, brewer, or

⁷ The Challenged Statute restricts truthful fact-based advertising and therefore, infringes on commercial speech and is subject to First Amendment protection under the *Central Hudson* test.

winemaker may advertise on behalf of a retailer if the advertisement refers to multiple retailers, does not include the retail price, and only identifies the retail businesses in an inconspicuous manner.

In addition, wholesalers are permitted to provide other financial incentives to retailers, including barware, mirrors, or other tangible goods to be placed inside the retail establishments, that in essence provide advertising of the wholesaler's products. These types of "incentives" expressly permit some financial commingling of the wholesale and retail tiers of the liquor industry and contradict the State's asserted interest in maintaining a separate three tier marketplace. In response to Plaintiffs' evidence, the State has provided no explanation as to why advertising commingling would disrupt the State's regulatory scheme, while these other instances of financial commingling that are allowed under the State's statutes and regulations do not.

The Court finds the State cannot meet its burden to establish that the Statute directly advances a substantial interest. The infringement of Plaintiffs' First Amendment rights clearly exceeds any direct benefit to maintaining what is left of the three tier regulatory scheme.⁸ As a result, the State has failed to establish how the Challenged Statute directly advances its substantial interests.

B. The Government Has Failed To Meet Its Burden Of Establishing That The Statute Is No More Extensive Than Necessary To Further The Government's Interest.

The Court finds that the Challenged Statute is not narrowly tailored to the State's substantial interests. Here, the only issue addressed by the statute is cooperative advertising. The

⁸ In essence, the State's interest in maintaining an orderly marketplace through a three tier system has certainly been blurred, if not eliminated, for certain entities based on the various exemptions, including those for distilleries, breweries, and Missouri wineries.

State has alternative non-speech-suppressive alternatives that are available to meet the State's interest in maintaining an orderly marketplace.

For example, the State may police rather than ban intra-tier advertising arrangements. *See e.g., Retail Digital Networks, LLC v. Appelsmith*, 810 F.3d 368, 653 (9th Cir. 2016). Further, other alternatives exist, such as restoring the three tier separation by taking away other exceptions that do not affect First Amendment speech, while maintaining some level of control over supplier payments to retailers. The State could monitor wholesale and producer advertising and any cooperative advertising payments through a self-reporting system, or it could limit the amount of money allowed to be spent on advertising on an annual basis. The State could limit non-advertising related financial incentives and assistance which could be provided to retailers.

C. The Statute Unconstitutionally Compels Speech.

Finally, the Court agrees with Plaintiff's contention that the Statute unconstitutionally compels speech and association by requiring producers and wholesalers to list more than one retailer on an advertisement, if they choose to list any. In doing so, the Statute's requirement compels producers and wholesalers to associate and support retailers they may not wish to include, if they choose to include a retailer in an advertisement. *See Missouri Broadcasters Ass'n v. Lacy*, 846 F.3d at 303 (internal citations omitted)("[F]reedom of thought and expression 'includes both the right to speak freely and the right to refrain from speaking at all.'"). "The Statute is conditional in that it only impacts speech if producers and wholesalers choose to include the name and address of a retailer in an advertisement, but if a producer or wholesaler does choose to include such information, it is compelled to (1) associate with multiple retailers, and (2) include multiple retailers' information on the advertisement." *Id.* The Court finds Plaintiffs have established that compelling this speech and association violates the First Amendment.

As set forth herein, there are ways the State can regulate abuse of favoritism to retailers beyond the rigid prohibitions contained in the Statute. The Court finds the State has failed to establish that the Statute advances a substantial state interest, and further, even if the Statute did in fact advance a substantial state interest, the State cannot establish that it is no more extensive than necessary to further that interest.

CONCLUSION

The Eighth Circuit's opinion made clear if the allegations contained in Plaintiffs' Complaint are true, then the regulations and statute violate the First Amendment and are unconstitutional. For the reasons stated herein, the Court finds the allegations are true. Defendants have failed to meet their burden under *Central Hudson*.

Wherefore, the Court finds in favor of Plaintiffs and finds the challenged regulations and statute violate the First Amendment to the United States Constitution and are unconstitutional. The Court hereby **ORDERS** that Defendants are permanently enjoined from enforcing the advertising restrictions contained in Missouri regulations 11 C.S.R. 70-2.240(5)(G) and 11 C.S.R. 70-2.240(5)(I). The Court further **ORDERS** that Defendants are permanently enjoined from enforcing Mo. Ann. Stat. § 311.070 to the extent it prohibits alcoholic beverage manufacturers and distributors from providing financial or other support for retail advertising of alcoholic beverages that does not meet the requirements of the exception set forth in Mo. Ann. Stat. § 311.070.4(10).

The Court further finds Plaintiffs are entitled to a judgment for attorneys' fees and court costs pursuant to 42 U.S.C. § 1988, the Civil Rights Attorneys Fees Award Act of 1976, and/or 28 U.S.C. § 2202. Plaintiffs are ordered to submit their Motion for attorneys' fees and court

costs to the Court within 30 days of the date of this Order. Defendants shall have the opportunity to respond to Plaintiffs' Motion prior to the Court issuing a ruling on that issue.

IT IS SO ORDERED.

Date: June 28, 2018

/s/ Douglas Harpool
DOUGLAS HARPOOL
UNITED STATES DISTRICT JUDGE

Mo. Rev. Stat. § 311.070.1

1. Distillers, wholesalers, winemakers, brewers or their employees, officers or agents shall not, except as provided in this section, directly or indirectly, have any financial interest in the retail business for sale of intoxicating liquors, and shall not, except as provided in this section, directly or indirectly, loan, give away or furnish equipment, money, credit or property of any kind, except ordinary commercial credit for liquors sold to such retail dealers. . . .

Mo. Rev. Stat. § 311.070.4(10)

4. Notwithstanding other provisions contained herein, the distiller, wholesaler, winemaker or brewer, or their employees, officers or agents may engage in the following activities with a retail licensee licensed pursuant to this chapter:

. . .

(10) The distiller, wholesaler, winemaker or brewer may in an advertisement list the names and addresses of two or more unaffiliated retail businesses selling its product if all of the following requirements are met:

- (a) The advertisement shall not contain the retail price of the product;
- (b) The listing of the retail businesses shall be the only reference to such retail businesses in the advertisement;
- (c) The listing of the retail businesses shall be relatively inconspicuous in relation to the advertisement as a whole; and
- (d) The advertisement shall not refer only to one retail business or only to a retail business controlled directly or indirectly by the same retail business;

Mo. Code Regs. Ann. tit. 11 § 70-2.240(2)

(2) The term advertisement includes any advertisement through the media of radio, television, motion pictures, newspapers, magazines or similar publications or any sign or outdoor billboard or other printed or graphic matter

Mo. Code Regs. Ann. tit. 11 § 70-2.240(5)(G), (I)

(5) No advertisement of intoxicating liquor or nonintoxicating beer shall contain:

. . .

(G) Any statement offering any coupon, premium, prize, rebate, sales price below cost or discount as an inducement to purchase intoxicating liquor or nonintoxicating beer except, manufacturers of intoxicating liquor other than beer or wine shall be permitted to offer and advertise consumer cash rebate coupons and all manufacturers of intoxicating liquor may offer and advertise coupons for nonalcoholic merchandise in accordance with section 311.355, RSMo;

. . .

(I) A price that is below the retailer's actual cost.

The Marketing of Alcohol to College Students

The Role of Low Prices and Special Promotions

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- Background:**
Heavy episodic or binge drinking has been recognized as a major problem on American college campuses making an impact on the health, safety, and education of students. The present study examines the alcohol environment surrounding college campuses and assesses the impact on students' drinking. This environment includes alcohol promotions, price specials, and advertising at drinking establishments that serve beer for on-premise consumption as well as retail outlets that sell beer for off-premise consumption.
- Methods:**
The study used student self-report data from the 2001 College Alcohol Study (CAS) and direct observational assessments by trained observers who visited alcohol establishments in communities where the participating colleges were located. The analytic sample included more than 10,000 students as well as 830 on-premise and 1684 off-premise establishments at 118 colleges.
- Results:**
Alcohol specials, promotions, and advertisements were prevalent in the alcohol outlets around college campuses. Almost three quarters of on-premise establishments offered specials on weekends, and almost one half of the on-premise establishments and more than 60% of off-premise establishments provided at least one type of beer promotion. The availability of large volumes of alcohol (24- and 30-can cases of beer, kegs, party balls), low sale prices, and frequent promotions and advertisements at both on- and off-premise establishments were associated with higher binge drinking rates on the college campuses. In addition, an overall measure of on- and off-premise establishments was positively associated with the total number of drinks consumed.
- Conclusions:**
The regulation of marketing practices such as sale prices, promotions, and advertisements may be important strategies to reduce binge drinking and its accompanying problems. (Am J Prev Med 2003;25(3):000) © 2003 American Journal of Preventive Medicine

Introduction

Heavy episodic or "binge" drinking (the consumption of ≥ 5 drinks in a row for men and ≥ 4 for women, at least once in the past 2 weeks) has been recognized as a major problem on American college campuses by college presidents,¹⁻² alcohol researchers,³ the National Institute on Alcohol Abuse & Alcoholism (NIAAA),⁴ and the U.S. Surgeon General.⁵ Several national studies have found that approximately two out of five college students are binge drinkers.⁶⁻¹¹ Binge drinking has been associated with problems such as property damage, physical injuries, unwanted sexual advances, and encounters with po-

lice.^{9,11-13} In addition, binge drinking is associated with secondhand effects such as interruption of study or sleep, having to babysit a drunken student, or being victim of a physical and sexual assault.^{13,14} With regard to any type of alcohol consumption, it is estimated that 1400 college students die each year from alcohol-related injuries.¹⁵

Alcohol availability is associated with increased alcohol consumption among the general population as well as among young adults and older adolescents.¹⁶⁻¹⁹ Heavy alcohol consumption by college students and others is encouraged by a "wet" environment, in which alcohol is prominent and easily accessible.²⁰⁻²¹ Previous studies have documented the effect of price on alcohol consumption in the general population and among young adults and adolescents. In general, as the price of alcohol increases, consumption rates decrease.²²⁻²⁵ Conversely, as the price of alcohol decreases, consumption rates increase. Moreover, young people are more affected by price of alcohol.²⁶⁻²⁸ Alcohol outlets near college campuses commonly use various discounts and promotions to attract students, and alcohol promotions and specials may increase

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consumption. For example, Babor et al.²⁹ found that both heavy and light drinkers drank more than twice as much alcohol during simulated "happy hours" as they did during times without such promotions.

Some previous studies of price have used aggregated data of retail price that did not specifically take into account the unique marketing of the sale of alcohol surrounding the college campus.^{23,26} Other studies used "perceived alcohol availability," obtained directly from the respondents and possibly biased by the respondents' own drinking status.^{30,31}

The purpose of the present study was to describe the alcohol environment surrounding college campuses. Establishments selling alcohol for on-premise and off-premise consumption, alcohol promotions, price specials, and alcohol advertising were examined, as well as the effects of these environmental factors on students' drinking. Data from the 2001 Harvard School of Public Health CAS, which gathered drinking information on more than 10,000 students nationwide, were analyzed. In addition, detailed information on prices, specials, and promotions at individual stores surrounding the 119 college campuses was obtained from independent observations.

Methods

Study Design and Population

The 2001 CAS surveyed students at 119 colleges who participated in each of the three previous CAS surveys. The participating schools were located in 38 states and the District of Columbia. Administrators at each participating school provided a list of 215 subjects, who were randomly selected from full-time undergraduate students enrolled during the 2000–2001 school year using the same procedure conducted in previous CAS surveys.

Starting in February 2001, questionnaires were mailed to 25,585 students identified in December 2000 or January 2001 as attending the college. At the time of the mailing, some students were no longer in school due to withdrawal or leave of absence, and some had incorrect mailing addresses, thus reducing the target sample to 21,055 students. The response rate was 52% ($n=10,904$). Since the demographic characteristics of the student sample for each school may not be a perfect reflection of the true demographic characteristics of that school and could bias these results, data were weighted based on gender, age and ethnicity to account for colleges' varying sampling fractions. Details of the sampling methods and inclusion criteria are described elsewhere.^{9,11}

The sample of 119 colleges represented a national cross-section of students enrolled at 4-year colleges. Sixty-nine percent of the responders attended public colleges and 31% attended private colleges; this approximates the U.S. national distribution of 68% and 32%, respectively, for full-time 4-year college students.³² Forty-seven percent of responders attended large (>10,000 students), 23% medium-sized (5001–10,000 students), and 29% small (<5001 students) colleges. The U.S. national distribution is 37%, 24%, and 40%, respectively.³² The higher percentage of colleges with large enroll-

ments in this sample was due to the sampling procedure of probability proportionate to size. Sixty-nine percent of responders attended schools in large- or medium-sized cities, compared to 71% of students nationwide, and 13% attended religiously-affiliated schools, compared to 16% nationwide.³² Five percent of students attended all-women's colleges.

Alcohol Environment Assessment

Alcohol environment assessments of neighborhoods surrounding the college campuses were conducted at each of the 119 participating colleges. Battelle Centers for Public Health Research and Evaluation was contracted to conduct the field observations. A marketing systems group was subcontracted to provide a sample of on- and off-premise beer venues within a 2-mile radius of participating colleges using the self-reported Standard Industrial Classification code. The radius was determined using the street address of the campus. Telephone screening of each establishment in the sample was conducted to make sure that they sold or served alcohol. Off-premise establishments were defined as retail outlets that sold beer (e.g., liquor stores, convenience stores, groceries) for off-premise consumption, and on-premise establishments were defined as drinking establishments that served beer (e.g., bars, clubs, restaurants) for on-premise consumption.

Unobtrusive observations were conducted in both on- and off-premise establishments. In the off-premise establishments, the data collectors monitored the availability of a variety of pack configurations of beer (singles, 6-, 12-, 24-, and 30-can packages, party balls [beach-ball-sized beer containers that hold about 55 12-oz glasses of beer or 2.5 cases of 12-oz cans], and kegs); the lowest price of 12- and 24-packs and the brands offering those low prices; beer promotions such as volume discounts, coupons, and special prices; the presence of alcohol protective messages (e.g., age-of-sale warnings and health-related messages); the level of exterior and interior advertising; and other characteristics (including the presence of security or police, the ability to sell beer on Sundays, the availability of delivery, the presence of a drive-up window, and hours of operation). Similarly, with on-premise establishments, data collectors noted serving sizes, prices, and interior and exterior signage in addition to promotions, activities, and events that might attract students.

Due to time constraints, the number of off-premise establishments observed per site was limited to 20, and the number of on-premise establishments observed per site was limited to 8. If there were more establishments than needed, the observers were instructed to visit those closest to campus or frequented by the students. In some areas, it was necessary to expand the radius to capture at least two on- and off-premise establishments. Among 119 schools, a total of 1690 off-premise establishments were observed. On-premise establishment data for three college campuses were not available (two colleges were located in "dry" towns, with the closest on-premise venue was at least 15 miles away, and observers were not able to complete the observations for one college campus due to the late hours at which the establishments opened). A total of 830 on-premise establishments were observed among 116 colleges.

Field data collectors received more than 22 hours of training, including both classroom instruction and supervised practice in the community. In addition, each observer's

competence in the study protocol was certified before data collection began. Furthermore, an inter-rater reliability study was undertaken as a measure of quality control. The proportion of agreement among observers was assessed using repeated measurements³³ as multiple observers independently collected data in 16 venues. This test demonstrated inter-rater agreement in 1395 out of 1508 items, for an overall level of agreement of 92.5%.

Measures

College binge-drinking rate. Heavy episodic or binge drinking has been defined as the consumption of at least five drinks in a row for men or four drinks in a row for women during the 2 weeks preceding their completion of the questions.^{11,34} A college's binge drinking rate was the percentage of students classified as binge drinkers on the basis of the aggregated self-report responses of students at that school to the binge drinking questions.

High school binge drinking. Students were asked: "During your last year in high school, how many drinks did you usually have when you drank alcohol?" A high school binge drinker was defined as usually having five drinks for men or four drinks for women.

Past 30-day drinking rate and annual drinking rate. A college's drinking rate for the past 30 days and annual drinking rate was the percentage of students who had a drink in that time period based on the aggregated self-report responses of students to the question: "When did you last have a drink?"

Total number of drinks in the past 30 days. Two variables were used to measure this outcome: (1) the number of occasions the respondent had a drink of alcohol in the 30 days before the survey, and (2) the number of drinks the respondent usually had on those occasions. A drink was defined in the questionnaire as either a 12-oz bottle or can of beer, a 4-oz glass of wine, a 12-oz bottle or can of wine cooler, or a shot of distilled spirits (either straight or in a mixed drink). Possible responses to the number of occasions were 0, 1–2 occasions (coded as 1.5), 3–5 occasions (coded as 4), 6–9 occasions (coded as 7.5), 10–19 occasions (coded as 14.5), 20–39 occasions (coded as 29.5), and 40 or more occasions (coded as 40). Those students who did not drink in the past 30 days were coded as usually drinking zero drinks.

On-premise establishment index score. The on-premise establishment index included the summed score of eight items; each was dichotomized as yes versus no for beer specials, special promotions in the following 30 days, low sale prices (for single drinks, pitchers or the largest volume), interior signage of alcohol promotions, exterior signage of alcohol promotions, no interior signage of alcohol warnings, no exterior signage of alcohol warnings, and any age verification policies.

Off-premise establishment index score. The off-premise establishment index included the sum of a score of five items; each was dichotomized as yes versus no for the sale of kegs or party balls, low sale prices on 12- or 24-packs of beer, any beer promotions, exterior advertisements "all over the place," and interior advertisements covering "all over the place."

Total alcohol environment score. The total alcohol environment (the "wetness") score was the sum of the on- and off-premise establishments' index scores.

Data Analysis

The analytic sample included 10,823 students at 118 colleges. One college for which data about on-premise establishments were not available was dropped. At 118 college sites, 1684 off-premise establishments and 830 on-premise establishments were observed. The percentages of the characteristics for on- and off-premise establishments were reported, and the average percentage of these characteristics for each college campus was calculated. Pearson correlation coefficients were used to examine the association between the average percentage of these characteristics for each college campus and college binge-drinking rates among 118 schools.

Multiple regressions were conducted to examine whether the on- and off-premise establishment index scores and total alcohol environment scores had effects on the total number of drinks consumed by students in the past 30 days. Generalized Estimating Equations (GEE)^{35–36} were used to obtain robust standard errors of the estimated regression coefficients of the multiple regression models fit to the clustered outcomes from the study sampling scheme. Standardized scores (mean=5, SD=2) were used for on- and off-premise establishment index scores and total alcohol environment scores in the regression models. Since the overall response rate to the survey was 52%, the potential for bias from the nonresponse rate may have been introduced in the regression estimates. The association between colleges' response rates and their binge-drinking rates was examined by means of Pearson correlation coefficient, and was not significantly different from zero ($r=0.170$, $p=0.064$). As a precaution, however, the authors controlled for college response rate in the final model.

Results

Off-Premise Establishment Characteristics and College Binge-Drinking Rates

Among 1684 off-premise establishments surrounding 118 college campuses, about half of the establishments sold 24- or 30-can cases, almost a quarter of the off-premise establishments sold kegs, and about 5% of the off-premise establishments sold party balls (Table 1). The availability of large volumes of beer (24- or 30-can cases, party balls, or kegs) was associated with higher binge-drinking rates: Colleges with higher percentages of establishments selling large volumes of beer had higher binge-drinking rates.

Average prices for 12-packs of beer and 24-packs of beer were \$6.08 (\$2.79–\$11.29) and \$11.74 (\$5.89–\$24.00), respectively. The average price of a 24-can case

Table 1. Off-premise characteristics and the association with binge-drinking rate

Variables	% (N=1684)	Correlation ^a (n=118)	p value
Type of beer sold			
6-pk 12 oz cans	97.7	-0.17	0.073
12-pk 12 oz cans	93.6	0.01	0.881
24-can case	55.5	0.28	0.003
30-can case	43.3	0.25	0.006
Party ball	5.3	0.22	0.015
Beer kegs	23.1	0.33	<0.001
Promotions			
Volume discounts	15.3	0.21	0.025
Cents-off coupons	2.6	0.22	0.018
Advertised special price offer	61.3	0.37	<0.001
Freebies (e.g., calendars, mugs)	0.7	0.18	0.047
Mail-in coupons or points	1.7	0.07	0.421
Other	4.0	0.003	0.970
Any of above	63.1	0.35	<0.001
Alcohol protective message			
Alcohol sale warning	45.6	0.13	0.172
Alcohol health-related message	7.6	0.009	0.921
General age-of-sale warning	53.5	0.11	0.218
Any of above	74.2	0.15	0.117
Store interior advertising/logos			
Free from any alcohol advertising/logos	13.5	-0.23	0.0114
Only in sections where items are sold	48.8	-0.12	0.1934
Alcohol ads/logos in other areas of store	22.7	0.06	0.4865
Alcohol ads/logos covering all available space	15.0	0.26	0.0052
Store exterior/property advertising for alcohol			
No advertisement	36.5	-0.29	0.0012
Discreet	22.8	0.13	0.1652
Moderate	22.7	0.09	0.3373
All over the place	18.0	0.16	0.0746
Other store characteristics			
Is alcohol sold on Sunday	62.7	-0.16	0.090
Is delivery available	7.1	0.195	0.035
Off-premise index score (mean score)	1.50 (1.17)	0.39	<0.001

^aPearson correlation coefficients were used to examine the association between college binge-drinking rates and average percentage of off-premise characteristics at 118 colleges.

of beer was negatively associated with binge-drinking rate ($r=-0.24$, $p=0.009$); that is, the lower the price, the higher the college binge-drinking rate. The same was not found for the average price of a 12-pack of beer.

About 63% of the off-premise establishments offered promotions such as volume discounts, advertised price specials, or coupons. These promotions were significantly correlated with college binge-drinking rates. More than half of the off-premise establishments displayed warnings in the stores, but the correlation of displaying an alcohol protective message with binge-drinking rates was not statistically significant.

Both interior and exterior advertising were correlated with college binge-drinking rates. For campuses with more off-premise establishments that were free from alcohol advertising, the college binge-drinking rates were significantly lower.

The off-premise establishment index score was also significantly related to college binge-drinking rates

($r=0.39$, $p<0.001$). The results indicated that campuses with higher off-premise establishment index scores had higher binge-drinking rates.

On-Premise Establishment Characteristics and College Binge-Drinking Rates

Among the 830 on-premise locations surrounding college campuses, the prices for a single drink, pitcher, or the largest volume were significantly correlated with college binge-drinking rates: The lower average alcohol sale price among on-premise establishments surrounding the college campus, the higher the college binge-drinking rate (Table 2).

About 73% of the on-premise locations offered specials on weekends, and about 45% of the on-premise locations were offering promotions in the next 30 days. The presence of weekend beer specials was highly correlated with college binge-drinking rates, and on-premise establishments planning alcohol promotions

Table 2. On-premise characteristics and the association with college binge-drinking rate

Variables	\$4.47 (\$0.01–13.50)	Correlation ^a (n=116)	p value
Price	Mean Price (range)		
Single	\$1.95 (\$0.25–7.00)	–0.36 ^b	<0.0001
Pitcher	\$5.48 (\$0.01–13.50)	–0.25 ^b	0.01
Largest volume	\$4.47 (\$0.01–13.50)	–0.39 ^b	<0.0001
Beer Specials on Thursday, Friday or Saturday			
Free	1.6	0.07	0.429
Free with purchase of something else	1.8	0.07	0.431
2 or 3 for single price	11.0	0.14	0.129
"All you can eat/drink" at single price	3.3	0.19	0.04
Special price	72.5	0.42	<0.001
Any of above	73.4	0.42	<0.0001
Promotions in next 30 days			
Merchandise promotions	9.1	0.09	0.355
Special price of alcohol	35.3	0.34	0.0002
Sponsored entertainment/event	24.4	0.22	0.015
Other	4.4	0.10	0.31
Any of above	45.0	0.37	<0.0001
Age verification			
Identifications manually checked at door	41.5	0.15	0.105
Identification device checked at door	1.5	–0.0004	0.99
Identifications manually checked at table	78.4	0.13	0.166
Identification device checked at table	1.8	0.04	0.649
Underage prohibited	28.0	–0.09	0.33
Any of above	94.3	0.2	0.02
Exterior alcohol promotion (volume discount, promotion/event, price special)	30.4	0.24	0.011
Exterior age warning (must be age 21 to drink, must be age 21 to enter)	26.1	–0.09	0.3319
Interior alcohol promotion (volume discount, promotion/event, price special)	48.3	0.13	0.16
Interior age warning (must be age 21 to drink, must be age 21 to enter)	49.9	–0.02	0.8110
On-premise index score (mean score)	3.71 (1.80)	0.42	<0.0001

^aPearson correlation coefficients were used to examine the association between college binge drinking rates and average percentage of on-premise characteristics at 118 colleges.

^bCorrelation between mean price and binge-drinking rate.

in the next 30 days were also significantly correlated with college binge-drinking rates. College campuses with more on-premise establishments offering weekend beer specials or special promotions had higher binge-drinking rates.

More than 90% of the on-premise establishments had established policies to verify the age of their patrons. Observed use of age verification policies in the establishments was correlated with higher binge-drinking rates. Likewise, colleges with more exterior advertising of alcohol promotions had higher binge-drinking rates. However, interior alcohol promotion advertising was not correlated with college binge-drinking rates.

The on-premise establishment index score was also significantly related to college binge-drinking rates ($r=0.42$, $p<0.0001$). The results indicated that campuses with higher on-premise establishment index scores had higher binge-drinking rates.

Total Alcohol Environment

The mean total alcohol environment score for the 118 colleges was 5.18 ± 1.76 . The authors examined whether or not the total alcohol environment scores among 118 colleges varied by region, enrollment size, and urban–rural area. The results showed significant regional differences ($F_{(3)} = 6.67$, $p<0.001$). The north-central region had significantly higher scores (mean= 6.12 ± 1.76) than the south (mean= 4.97 ± 1.55) and west (mean= 4.09 ± 1.44), but not the northeast region (mean= 2.13 ± 1.76). The total alcohol environment score did not differ significantly by school size: categorized as <1000 (mean= 4.31 ± 2.05), 1000–5000 (mean= 4.97 ± 1.78), 5000–10,000 (mean= 5.49 ± 1.61), and >10,000 (mean= 5.28 ± 1.77) ($F_{(3)} = 1.21$, $p=0.309$). There was also no significant difference between rural (mean= 5.53 ± 1.77) and urban (mean= 5.06 ± 1.72) areas, ($F_{(1)} = 1.65$, $p=0.202$).

Table 3. Total alcohol environment and colleges' drinking rate ($n=118$)

Variables	Total alcohol environment score	
	Correlation coefficient	<i>p</i> value
Binge-drinking rate	0.49	<0.001
Past 30-days drinking rate	0.41	<0.001
Annual drinking rate	0.35	<0.001

The association between the total alcohol environment score and the student's drinking rate was examined (Table 3). The results showed that the total alcohol environment score was significantly correlated with college binge-drinking rates ($r=0.49$), past 30-day drinking rates ($r=0.41$), and past-year drinking rates ($r=0.35$). The higher the alcohol environment score, the higher the percentage of binge drinkers, past-30-day drinkers, or past-year drinkers on campus.

Alcohol Environment Around College Campuses and Number of Drinks Consumed by Students

The association between the number of drinks consumed by students in the past 30 days and the alcohol environment around college campuses was examined (Table 4). The results showed that the off-premise establishment index score was positively associated with the total number of drinks consumed by the students in the past 30 days, adjusting for gender, underage status, race, and response rate. Students from schools with higher off-premise establishment index scores consumed more drinks in the past 30 days. The effect of the on-premise establishment index score was not significant. The total alcohol environment index score was positively associated with the total number of drinks consumed by the students. To decrease the likelihood that selection bias results in more pre-college binge drinkers attending colleges with higher rates of heavy drinking, the relationship between the total alcohol environment and number of drinks consumed among students who did not binge drink in high school was

examined. The results for high school nonbinge drinkers were similar to the results shown in Table 4 (the estimate of total alcohol environment score was 1.20 [0.35], $p=0.0005$).

Conclusions

In examining the marketing of alcohol in the communities surrounding college campuses, it was found that alcohol specials, promotions, and advertisements were prevalent in the alcohol outlets around college campuses. Approximately three quarters of on-premise establishments offered specials on weekends, and almost half of the on-premise establishments and more than 60% of off-premise establishments offered some type of beer promotion. The results indicated that the "wet" alcohol environment around campuses—including lower sale prices, more promotions, and alcohol advertising at both on- and off-premise establishments—was correlated with higher binge-drinking rates on the college campuses. In addition, the alcohol environment was directly associated with the number of drinks consumed by the students in the past 30 days. Examination of the relationship of the alcohol environment and drinking among high school nonbinge drinkers suggests that it may be the "wet" alcohol environment surrounding the colleges and not the self-selection of students who choose to attend these colleges that is the basis for increased alcohol consumption. The authors found that the lower the price of beer in the surrounding community, the higher the binge-drinking rate at the college. This is consistent with previous findings that alcohol consumption by young people (in this case, college students) is affected by price. In line with this are the findings that alcohol promotions, price specials, and large-volume discounts are associated with higher binge-drinking rates. Surprisingly, a positive association was found between checking identification in on-premise establishments and college binge-drinking rates. There may be two possible explanations. First, since age verification is an enforcement issue, there may be increased enforcement efforts in those communities with higher rates of problem

Table 4. Alcohol environment and total number of drinks

Variables	Model 1		Model 2		Model 3	
	Estimate (SE)	<i>p</i> value	Estimate (SE)	<i>p</i> value	Estimate (SE)	<i>p</i> value
Intercept	-7.68 (7.09)	0.279	-3.72 (5.99)	0.534	-5.48 (5.78)	0.272
Off-premises index score	1.68 (0.51)	<0.0001				
On-premises index score			1.24 (0.72)	0.084		
Total alcohol environment score					1.60 (0.62)	0.009
Gender	15.02 (1.15)	<0.0001	14.96 (1.17)	<0.0001	14.94 (1.16)	<0.0001
Underage	-1.00 (0.99)	0.314	-0.85 (0.99)	0.379	-1.01 (0.95)	0.2882
White	12.24 (1.10)	<0.0001	12.48 (1.27)	<0.0001	11.92 (1.25)	<0.0001
Response rate	0.12 (0.16)	0.434	0.08 (0.16)	0.602	0.09 (0.15)	0.531

drinking among college-aged students. Second, on-premise drinking establishments in low binge-drinking communities cater to nonstudents, perhaps experiencing less pressure to apply age verification measures.

Efforts to reduce problems associated with college binge drinking have focused primarily on education and changes in behavior. However, the results of this study suggest that the regulation of marketing practices (e.g., sale prices, promotions, and exterior advertisements) may be important strategies.

Previous studies on alcohol pricing have often used broad, aggregate data that did not capture specific environmental factors surrounding college campuses. The current study included more detailed factors, such as weekend price specials, promotions, and large-volume discounts, which specifically target college populations. Others studies have used respondents' perceptions and recall of alcohol marketing practices to describe the alcohol environment.^{30,31} These can be influenced by the respondents' own drinking behaviors. The present study obtained direct observations by trained observers about the marketing practices of alcohol establishments near the college campuses. Thus, the data about students' own drinking and about the marketing practices in the surrounding communities came from two independent sources.

The results of this study must be viewed within the context of its limitations. First, the CAS is subject to the limitations of self-report surveys. However, such surveys have been widely used and are considered generally valid in examining alcohol responses.³⁷⁻³⁸ Second, potential bias may have been introduced through nonresponse. However, several procedures were used to test for this in both surveys, with no evident effect on the findings. While it is not possible to fully eliminate the potential of bias introduced through nonresponse, the authors tried to minimize the impact through weighting procedures. In addition, the impact of the response rate was examined through dichotomized or categorical analyses, and no significant relationship was found. Furthermore, the binge-drinking rates reported in this study were almost identical to those found in other national surveys^{6-8,10} of tobacco use^{6-8,39,40} and illicit drug-use rates.⁸

Finally, since this is a correlational study, causality cannot be determined. Marketing practices that reduce cost may increase drinking levels, and heavy drinking by students may induce bars and restaurants to cater to and compete for their patronage through price lowering promotions. However, it is harder to maintain that high demand lowers prices.

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CERTIFICATE OF SERVICE

I hereby certify that on October 18, 2018, an electronic copy of the foregoing Addendum was filed via the Court's electronic filing system and served upon all counsel of record.

/s/ Joshua M. Divine
Deputy Solicitor