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Article

Self-Regulation of Beer Advertising: A Comparative Analysis of Perceived Violations by Adolescents and Experts[†]

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Abstract

Aims: We assessed the impact of the 2010 revisions to Brazil's self-regulatory alcohol marketing code using expert and adolescent raters.

Methods: Five popular TV beer ads were selected. Ads were rated based on the 2010 Brazilian self-regulatory marketing code. The expert group ($N=31$) represented health-related professions; the adolescent group ($N=110$) were public high school students.

Results: At least 1 ad violated 11 of 17 guidelines included in the study. Ratings by experts and adolescents were similar. Both found violations in all sections of the self-regulatory code, but significant group differences were seen in applying the section that prohibits the promotion of excessive alcohol consumption, with experts identifying more violations than adolescents.

Conclusion: Beer ads in the sample systematically violated the self-regulatory standards for alcohol advertising in Brazil according to both experts and youth. Public policies for more effective restrictions and prohibitions in alcohol ads should be considered.

INTRODUCTION

In 2012, 5.1% of the global burden of disease was attributable to alcohol, and alcohol appears to be related to 3.3 million deaths each year (WHO, 2014). Among the global strategies to reduce harmful alcohol consumption, the protection of vulnerable populations, such as children and adolescents, from exposure to alcohol advertising is one measure that may be effective. Research suggests that exposure to alcohol ads is associated with positive alcohol expectancies among adolescents and has been linked to increased alcohol consumption and alcohol-related problems among adolescents (Stacy *et al.*, 2004; Snyder

et al., 2006; Collins *et al.*, 2007; Henriksen *et al.*, 2008; Faria *et al.*, 2011; Grenard *et al.*, 2013; Rhoades and Jernigan, 2013). Adolescents have also been found to present positive affective responses to ads.

Brazil's alcohol industry developed a self-regulatory marketing and advertising code in 1970 in collaboration with the advertising industry. The code's purpose is to promote responsible advertising of alcoholic beverages and avoid negative impacts on vulnerable populations (Vendrame *et al.*, 2009). The rules and restrictions in the Brazilian code are based on two core principles: protecting children and adolescents by prohibiting ads from being directed at this audience

and prohibiting encouragement of abusive or irresponsible consumption of alcoholic beverages. The code contains 17 guidelines designed to regulate alcohol ads in accordance with these principles.

Studies in a number of countries, including the USA, the Netherlands, Australia and Brazil, have shown that self-regulatory systems are ineffective at preventing code violations in alcohol advertising (Jones, 2000; Jones and Donovan, 2002; Room *et al.*, 2005; Anderson, 2008; Vendrame *et al.*, 2009; Vendrame and Pinsky, 2011; Babor *et al.*, 2013). Recent efforts by the industry to revise self-regulatory codes generally have resulted in fewer code violations, but only as a consequence of more lenient guidelines (Babor *et al.*, 2010a,b). Moreover, studies have typically not included members of vulnerable populations, instead relying on expert ad raters, yet advertisements may be interpreted more severely by experts, who may have tendencies to see violations even in situations where moderate levels of drinking occur (Babor *et al.*, 2010a,b). Alternatively, adolescents may perceive excessive drinking as normal, and therefore tend to underreport code violations (Proctor *et al.*, 2005). Thus, comparisons of ad ratings between expert raters and members of vulnerable populations become crucial to determining the true effectiveness of marketing regulation guidelines.

In the global context, self-regulation of alcohol marketing is being promoted by industry-sponsored organizations, such as the International Center for Alcohol Policies (ICAP). ICAP (2014) offers detailed advice on how to develop and implement self-regulatory codes through a series of guides and 'tool kits' that are available on their website. The industry's overt and active support for self-regulation in the face of mounting empirical evidence that self-regulation is ineffective has led to global concerns among public health agencies about accountability.

In Brazil, there is growing interest in developing methodologically sound rating scales to evaluate alcohol ad content for the purpose of protecting vulnerable populations and prohibiting practices that encourage irresponsible consumption (Vendrame *et al.*, 2010) and to facilitate the creation of a more effective system for monitoring alcohol advertising content and better evaluations of the effectiveness of self-regulatory advertising codes. Although such a scale has previously been developed (Babor *et al.*, 2008; Vendrame *et al.*, 2010), its application has been limited, with only one previous study reporting its use (Vendrame *et al.*, 2010), and Brazil's self-regulation marketing codes have since been revised. Therefore, the purpose of this study was to apply an updated rating scale designed to detect violations in the National Council of Advertising Self-Regulation's (Conselho Nacional de Autorregulamentação Publicitária—CONAR) alcohol advertising code and to determine if code violation rates and raw scores differ between adolescent and expert raters.

METHODS

Thirty unique beer advertisements were aired between November 2010 and March 2011. These ads were collected in a database, and the five most popular 30-s beer ads, as determined by a separate sample of 150 Brazilian public high school students, were evaluated in this study. This method of ad selection has been used previously (Vendrame *et al.*, 2010). The ads shown to participants were as follows:

1. Skol; 'Soccer Fans': young male fans holding and consuming beer are shown in several humorous situations, including in stadiums and pubs.
2. Itaipava; 'Beach': a song associates Itaipava beer with several situations happening on the beach, including young people with cups full of beer and young women wearing bikinis.

3. Antártica; 'Famous Actors and Beer Truck': a famous singer and a young actress are seated at a table in a bar, each toasting with a glass full of beer, whereas a famous comedian refuses to drink, saying that he must drive because his car is new. The singer and actress tease him, and the comedian then appears driving a truck full of beer, telling the others to come to his house later to drink more beer.
4. Kaiser; 'Sincerity': three young women are in a bar, holding cups full of beer. One of the women says, 'It would be nice if men were more sincere.' Several scenes are shown where men say honest things that do not please women. At the end, the women say, 'Better not.' The ad ends with a young woman with a bottle of beer and the narrator saying that 'Kaiser is always delicious.'
5. Brahma; 'Brazilian Warrior': several scenes are shown associating different daily situations (e.g. relaxing after work, washing a car) with beer, while a famous *pagode* singer (Zeca Pagodinho) sings the lyrics 'A Brahma drinker is a warrior.'

Participants

Thirty-five Brazilian expert raters, with expertise in education, health and public health law and whose activities are related in some way with children and adolescents, were invited to participate. These experts represented teachers, researchers, physicians, lawyers and judicial officials. An email invitation explaining the purpose and procedures of the study was sent to prospective expert participants. Thirty-one experts accepted the invitation, consented to participate in the study and were provided access to an online questionnaire and the videos of the selected ads (participation rate = 88.5%). Among the expert sample, 53.3% were men, and the average age was 41.3 years.

Adolescent raters consisted of 110 students in their first or second year of high school. Students attended one of two public schools located in downtown São Bernardo do Campo/SP. This city is part of the metropolitan area of São Paulo, and it is the most populous and economically developed region in Brazil, supporting ~22% of the Brazilian population. São Bernardo do Campo has similar socioeconomic and demographic characteristics as São Paulo. All classrooms in each school with first- or second-year high school students were invited to participate. Student participation was predicated on passive parental consent and explicit authorization by the school principals. Among the adolescents, 52.7% were male, and the average age was 15.8 years.

Measures

A questionnaire was designed to assess compliance with the content guidelines of the Brazilian self-regulatory alcohol advertising code (CONAR, 2011). Each guideline within the Brazilian self-regulatory advertising code was covered by at least one question in the questionnaire. If the guideline contained multiple sub-guidelines, multiple questions were developed. For example, according to Rule 1, the advertisements should be structured in a socially responsible way. This rule was covered by the following question: this post was structured in a socially responsible way. To answer, respondents selected a response option on a 0–10 Likert scale, where 0 = strongly disagree, 5 = neither agree nor disagree (neutral) and 10 = strongly agree. For some guidelines, such as Guideline 2.1, which states that advertisements must be intended solely for adults, the scale was reversed for violation coding, but the rule-question-scale structure of 10 points was maintained. The questionnaire was based on previous work performed by Vendrame *et al.* (2010).

Procedure

Data were collected from the expert raters from August to November 2009. Unique login information was provided to each rater for the online rating platform, and the questionnaire and videos were accessible at all times during the study period. All ad-specific questions were required to be answered prior to the participant viewing the next ad, and raters were prompted to answer any missing questions. Each ad could be viewed up to three times, and reminder emails were sent if more than 15 days had elapsed since their last login and the survey remained incomplete. As a result, there were no missing expert rating data.

Adolescent raters completed the rating survey using pen and paper questionnaires between the end of the second semester in 2009 and the beginning of the first semester of 2010. The evaluations followed the same procedure in each of seven classrooms: after watching each ad twice, students completed the questionnaire. After the questions were completed, the next ad was played. The anonymity of the participants was ensured by assigning a unique identification number on each questionnaire. The five ads were projected on a movie screen, allowing each adolescent in a given classroom to view the ads simultaneously, and all ads were rated in a single session.

Data analysis

Violations of the self-regulatory alcohol advertising code were determined by first dichotomizing each variable, where scores between 0 and 5 indicated no violation and scores greater than 5 indicated a violation. Subsequently, for each of these variables, a chi-square test was performed to identify differences in ratings by reviewer status.

The exact binomial test was chosen to determine whether the proportion of positive responses, and consequently the proportion of negative responses, differed significantly from 0.5. This procedure was derived from a similar analysis developed by Vendrame *et al.* (2010). A guideline was considered violated when a slight majority of the respondents answer in the direction of a perceived violation. Statistical Package for the Social Sciences (SPSS) software for PC, version 20 (Armonk, NY: IBM Corp.) was used for all the analyses.

Ethics approval

The study procedures were approved by the Behavioural Research Ethics Committee of the Federal University of São Paulo—UNIFESP/CAEE: 08905812.8.0000.5505. Experts provided written informed consent. School principals completed a written consent form authorizing the survey after which parents received information about the research, including study objectives, date of data collection and the telephone number of researchers. Parents were then asked to respond if they did not support their child's participation. No forms were returned. All the students in the selected classes were invited, and those students who were present on the days when data collection occurred were included in the survey.

RESULTS

All alcohol ads violated one or more guidelines of the Brazilian self-regulatory alcohol advertising code, according to the expert and adolescent raters. Ads contained violations in 11 of the 17 guidelines included in the CONAR code. Both groups identified violations in both basic principles of the code.

Three patterns between the expert and adolescent ratings were observed: in some instances, both groups found no violation; in some instances, both groups reported violations; and in some instances, only one group, typically the experts, reported a violation, mainly in the

guideline set of the second code principle (prohibiting encouragement of abusive or irresponsible consumption of alcoholic beverages). For example, responses to rule 3.k (prohibition of portrayals of alcohol consumption associated with changes in emotional balance, use of firearms or aggression) for Ad 1 were significantly different ($P < 0.001$), with experts rating the ad significantly higher (6.3, violation) than adolescents (1.8, no violation) (Table 1). Yet, significant majorities of expert and adolescent raters agreed that each ad violated the guideline set of the first code principle (protecting children and adolescents by prohibiting ads from being directed at this audience). For example, the ads contained slogans that appealed to drinking (all ads, $P < 0.001$), contained actors under 25 years old (all ads, $P < 0.001$), encouraged heavy drinking (Ad 2, adolescents, $0.021 > P > 0.011$; all others ads, $P < 0.001$), suggested being drunk is acceptable (Ad 2, adolescents, $0.021 > P > 0.011$; all others ads, $P < 0.001$), showed people drinking (Ad 4, adolescents, $0.021 > P > 0.011$; all others ads, $P < 0.001$) and suggested beer consumption is a sign of maturity (Ad 4, adolescents, $0.021 > P > 0.011$; all others ads, $P < 0.001$). Significant minorities of both groups of raters agreed that each ad contained an effective social responsibility message (all ads, $P < 0.001$), targeted only adults (all ads, $P < 0.001$) or used images and music that target only adults (all ads, $P < 0.001$). Experts also had a slight tendency to perceive more encouragement of excessive alcohol consumption, while adolescents tended to interpret the ads as depicting normal drinking occasions, such as for Ad 2. Here, for the question 'Encourages irresponsible drinking', adolescents did not perceive a violation (4.8), whereas experts did (6.4, $P < 0.001$).

DISCUSSION

Overall, the results show that the two groups (experts and adolescents) detected a considerable number of content guideline violations in five of the most popular beer ads in Brazil, despite the implementation of a more lenient marketing code. To the extent that these five beer ads are representative of popular brands among youth, these content violations support the conclusion that television beer advertising in Brazil is failing to meet the two general principles of the Brazilian self-regulatory alcohol advertising code. This casts significant doubt on the effectiveness of industry self-regulation to protect vulnerable populations.

The ambiguous nature of the code was exacerbated in 2010 by changes promulgated by CONAR. For example, whereas the previous version of the code prohibited the exploitation of eroticism, the revised version stipulates that 'any appeal to sensuality will not constitute the main appeal of the ad.' It is important to note that these changes affect efforts to conduct objective reviews of the guidelines, such as this study, efforts by advertisers to follow the guidelines and efforts by industry representatives and governments to monitor compliance. Since the instrument for this study was constructed based on the actual rules in the code, it is possible that these ambiguities themselves may have resulted in artifacts given the difficulties that such language invokes. It is noteworthy, then, that the act of restricting focus to the efficacy of extant policies and methods fails to consider the possibilities for potential new public policy alternatives that could better protect the public interest.

Even with the code modifications that were made between the initial study (Vendrame *et al.*, 2010) and the current study, a trend of code non-compliance among beer ads was demonstrated. For example, participants in both studies found significant violations of Rule 1 even after substantial revisions prior to the second study. Previously, the rule stated that an advertising 'slogan should not bring

Table 1. Guideline violations identified by teens and experts in each of five beer ads (% endorsing a question indicative of a violation)

25 Questions (covering 17 guidelines)	Average rating: positive response for Brazilian self-regulatory code violation ^a (%)									
	Ad 1—Skol Soccer Fans		Ad 2—Kaiser Sincerity		Ad 3—Itaipava Beach		Ad 4—Antartica Actors and Beer Truck		Ad 5—Brahma Brazilian Warrior Truck	
	Teens	Experts	Teens	Experts	Teens	Experts	Teens	Experts	Teens	Experts
Slogan with drinking appeal	84.1*	88.7*	89.0*	94.5*	99.0*	97.8*	86.1*	95.0*	91.0*	87.3*
Social responsibility message ^b	27.0*	16.2*	25.7*	29.5*	24.4*	13.0*	29.7*	33.1*	28.3*	28.0*
Targets adolescents	79.0*	82.3	81.4	79.6	84.7	96.0	80.9	77.1*	79.0*	87.2*
Actors/characters <25 years old	73.7*	72.1*	81.0*	79.1*	85.5*	89.0*	79.8*	66.1*	79.0*	75.5*
Age of principal character/actor ^c	21.3	20.0	20.2	21.4	20.2	18.9	21.9	24.5	20.1	18.4
Targets only adults ^b	24.5*	14.0*	24.6*	20.5*	22.6*	9.2*	24.1*	25.8*	23.0*	13.9*
Images/music target only adults ^b	22.7*	13.1*	24.0*	23.1*	21.1*	13.2*	24.2*	10.1*	24.5*	17.4*
Encourages heavy drinking	66.4*	70.4*	56.0**	69.2*	68.4*	89.0*	64.3*	82.1*	61.2*	80.8*
Encourages irresponsible drinking	57.9**	66.8*	48.1	64.1*	58.6**	86.6*	59.0**	73.1*	59.9**	78.2*
Suggests that being drunk is acceptable	65.5*	79.1*	59.9**	68.4*	66.1*	85.5*	63.5*	75.9*	64.4*	84.5*
Sensuality is the main focus	57.5**	13.0	41.0	84.5*	81.3*	97.0*	65.2*	32.8	41.5	29.1
Explores eroticism	40.5	16.2	33.5	80.9*	75.0*	97.8*	55.3**	43.1	44.0	32.1
Appealing image or situation	56.5**	55.1**	42.1	74.5*	66.8*	93.5*	52.2	59.9**	60.1*	66.2*
Actresses/characters treated as sex objects	44.0	29.7	35.7	85.0*	75.1*	93.9*	58.1**	56.3**	44.2	46.0
Shows people drinking	74.5*	89.9*	71.6*	94.2*	72.5*	95.3*	59.5**	90.9*	65.3*	92.0*
Shows people getting drunk	35.1	85.5*	66.5*	70.9*	55.2**	70.0*	52.2	55.0**	62.8*	73.7*
Suggests that consumption of beer is a sign of maturity	62.9*	77.2*	60.9*	77.2*	68.7*	70.3*	59.9**	72.0*	63.3*	88.9*
Beer consumption contributes to professional or social success	40.0	63.9*	64.9*	81.3*	47.6	89.4*	59.0**	75.5*	66.2*	91.9*
Athletes or celebrities are attractive to minors	66.5*	29.1	44.9	29.0	48.1	27.2	62.1*	93.9*	77.0*	86.7*
Person who does not drink would be overlooked in the situation shown	62.3*	76.9*	63.7*	81.3*	62.2*	87.2*	58.8	82.9*	64.5*	83.1*
Disregards moderate drinking	55.9**	67.4*	42.1	68.6*	61.7*	87.5*	58.0**	84.8*	60.0*	75.5*
Suggests consumption due to positive health effects	47.0	70.1*	45.1	83.8*	58.9**	83.4*	55.2**	62.1*	75.9*	70.0*
Suggests that drinking and driving is acceptable	19.0	16.6	25.5	14.4	15.7	13.1	35.1	48.9	34.5	32.1
Beer consumption is associated with driving cars or motorcycles	49.1	15.0	36.5	9.3	12.0	8.1	57.8**	61.0 ^b	32.7	28.6
Consumption is associated with changes in emotional balance, use of firearms or aggression	18.9	63.0*	24.3	14.3	24.7	14.5	30.0	26.4	36.0	19.9

^aThe positive ratings for violation were included, whose proportion was significantly greater than the proportion of negative responses. Below 53%, there was no significant difference in relation to the proportion of negative responses.

^bVariables indicating inverse violation. In these cases, below 47% indicated violation.

^cThe rule prohibits that character and/or actor looks younger than 25 years old.

* $P < 0.001$; ** $0.021 > P > 0.011$.

consumer appeal', whereas the modified version stipulated that 'Since alcoholic beverages are a product for restricted consumption and improper for certain publics and situations, the advertising shall be structured in a socially responsible manner, without deviating from its major purpose of promoting the brand and its features, provided that any imperative consumption appeal and the exaggerated offer of units of the product in any ad, either by text or image, directly or indirectly shall be prohibited.' Interestingly, even though the modified version enhanced the complexity of the rule and supported a larger number of potential interpretations, the rule was violated in all ads as reported by both groups of raters.

The study methodology allowed a comparison between the expert and student groups since they answered the same questionnaire and evaluated the same ads. After the first study, our aim was to establish whether experts and adolescents would have similar interpretations of the rules with respect to a representative sample of ads and also whether the results of the first study represented isolated violations or whether the violations might represent an actual trend or style of advertising. The consistent results across the two studies tentatively

support both the aims. There are recurrent violations of several of the rules reported in both studies and reported by both participant groups in the current study, reflecting an advertising strategy that is in conflict with the intent of the code and that pushes the boundaries of the current regulatory system for alcohol advertising.

One of the purposes of this study was to refine previously used methodologies and to consider the viability of independent monitoring as an alternative to CONAR's industry-led approach. As in the previous study, the instrument and methodology allowed for efficient, effective and rapid assessment by the participants. These data provide support that alternatives to the current system could better monitor alcohol ads.

The results of this study are compatible with studies in other countries. Systematic reviews conducted by the study's authors found that in countries that adopt alcohol ad self-regulation, code violations are the norm (Vendrame and Pinsky, 2011).

Since alcohol is no ordinary commodity, the alcohol industry's central role in Brazil's self-regulatory code, including formal review and revision of the code, may constitute a conflict of interest. At the

very least, this role has not resulted in procedures or standards that adequately take into account public health interests. The industry's interest in increasing alcohol sales and having greater access and appeal to a young demographic are directly related to serious public health issues and social harm (Narchi, 2005; Caetano and Laranjeira, 2006; Jernigan, 2009; Babor *et al.*, 2010a,b; Hastings *et al.*, 2010). Prevention policies, independent from industry influence, should be considered to better control alcohol advertising, including enhanced advertising restrictions and prohibitions.

Among these measures, it is important to consider independent monitoring of alcohol ads as a means to protect vulnerable populations, such as youth, and as a method for documenting industry marketing strategies. The results described here and in previous studies (Vendrame *et al.*, 2010; Vendrame and Pinsky, 2011) show that recent changes in Brazil's self-regulatory code did not change code compliance within the industry. Babor *et al.* (2008, 2013) tested a new method of independent monitoring of ads that is practical, accurate and that could be considered as a basis for a reformed public policy.

It is not sufficient to just document issues in regulating advertising content, however. Efforts must be initiated to build public and government supports for implementing more effective measures. For example, in research that examined 329 Australian newspaper items mentioning alcohol advertising restrictions over 24 months, Fogarty and Chapman (2012) concluded that restrictions on alcohol advertising currently have low newsworthiness as a standalone issue and suggest that future measures need to better define the exact nature of required restrictions, anticipate opposition and address forms of advertising beyond televised sport if exposure to advertising, especially among children, is to be reduced.

On the other hand, the alcohol industry attaches strategic importance globally to advertising self-regulation, particularly in countries with immature markets like Brazil (Caetano and Laranjeira, 2006), because it allows the industry to avoid legislative restrictions that might negatively impact access to global markets and increased sales. For instance, ICAP was formed as a lobbying agency to represent the world's largest alcohol producers. ICAP's (2014) 'policy tool kit' (i.e. the 'Blue Book') recommends that its members take all possible measures, including lobbying politicians, for developing self-regulation in countries that have not yet adopted this approach. In countries that already use self-regulation, the industry should take steps to ensure that the system is maintained. ICAP provides additional information on how to challenge attempts to legislate regulation of alcohol advertising. For example, a chapter on 'alcohol marketing and youth' states that the balance of evidence does not support a direct cause and effect relationship between alcohol marketing and consumption levels or patterns or hazardous consumption, despite research to the contrary (ICAP, 2014).

Self-regulation in Brazil is defended by several non-governmental organizations established by the alcohol industry (Instituto Milenium, 2014; Palavra Aberta, 2014). Characteristically, the alcohol industry tends to distort the debate in Brazil, arguing on the basis of defending freedom of expression and commercial free speech. Despite this, Brazil's Federal Constitution, which guarantees freedom of expression, states that ads for alcoholic drinks should be regulated by law, and differentiates the concepts of freedom of expression and the right of companies to advertise their products. Even though the industry lobby continues to be strong within the Brazilian National Congress and recently prevented the passage of legislation regulating beer ads, the Attorney General of the Republic filed a direct action of unconstitutionality before the Brazilian Supreme Court, asking the court to compel Congress to regulate alcoholic beverage advertising (STF, 2014).

It is important to note that the code violations found in this study occurred in television ads that represent a well-established, highly visible, well-understood and highly supervised promotional medium. If the self-regulatory codes are not being implemented effectively in a highly monitored medium, important questions are raised about new media, particularly social media platforms, that have a large industry presence (Jernigan and Rushman, 2013).

There are limitations to this study. First, expert and adolescents raters viewed and rated the ads in unique environments, online vs. a classroom setting. This may affect the study results, particularly for adolescents raters as conscious or subconscious reactions to the ads may influence the perceptions of other adolescents nearby. Additionally, the limited number of ads selected from a limited time frame constrains our ability to calculate the prevalence of code violations among all Brazilian beer advertisements.

CONCLUSIONS

The current study demonstrates that experts and adolescents agree that the most popular beer advertisements among Brazilian adolescents contain numerous violations of Brazil's alcohol self-regulated marketing code. Based on this evidence and related research, we advise that evidence-based alternatives to self-regulation be considered, including independent monitoring of alcohol advertisements and strict legislative restrictions of alcohol marketing practices.

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