



Alcohol Advertisements in Youth-oriented Magazines: Persuasive Themes and Responsibility Messages

Susan C. Hill, Steve R. Thomsen, Randy M. Page, and Nikki Parrott

ABSTRACT

Every year in the United States, health and social problems result from adolescents' use and abuse of alcohol. Alcohol use is associated with high-risk health behaviors and is a leading cause of death among adolescents. Research indicates that alcohol advertising influences drinking intentions for children and adolescents. Using content analysis of 486 advertisements, the focus of this study was to analyze persuasive themes and responsibility messages in alcohol advertising from a popular youth-oriented magazine over a three-year period. Findings indicate that product quality, humor, sex appeal, romance/relationships, and hanging out/partying were the most frequently used persuasive themes. Nearly 75% of advertisements included a responsibility message, but less than 1% included statements warning against underage drinking or encouraging the use of a designated driver. Chi-square analysis indicated a relationship between persuasive themes and the presence of responsibility messages. Given the susceptibility of youth to the emotional appeals of advertising, health education implementing media literacy and advocacy strategies can inform adolescents of the persuasive techniques and mixed messages used in advertising, and help develop skills to decrease their susceptibility to them.

INTRODUCTION

The use and abuse of alcohol by teenagers creates serious health and social problems in the United States each year. In 2003, 44.9% of 9th through 12th grade students reported consuming an alcoholic beverage in the past 30 days, and it is estimated that one in five 8th graders have done the same.^{1,2} In fact, adolescent drinkers are believed to account for nearly 20% of total alcohol consumption in the United States.³ When they drink, teenagers also are highly likely to engage in episodic heavy and binge drinking.² Results from the 2003 Youth Risk Behavior Survey (YRBS) indicate 28.3% of students in grades 9–12 reported binge drinking at least once during the past 30 days.¹

Alcohol use is a principal risk factor in the three leading causes of death among

adolescents, which are unintentional injuries (including motor vehicle crashes and drowning), suicides, and homicides. Adolescent drinking also is associated with violent gang activities, poor school performance, intimate partner violence, risky sexual behaviors, sexually transmitted diseases, sexual assault, and acquaintance or date rape.^{4,5}

A growing body of research suggests that alcohol advertising plays a major role in the development of normative beliefs, positive outcome expectancies, and drinking intentions for both children and adolescents.⁶⁻⁹ This is particularly true for those with limited personal experience with alcohol. One concern is the fact that alcohol advertisements often use tactics that include humor, youth-oriented themes, and young adult

actors or models, all of which increase their appeal to under-age audiences.^{6,10-14}

While the alcohol industry may argue that its advertisements are intended only to strengthen brand loyalty or encourage brand switching among adult drinkers, the

Susan C. Hill, PhD, is assistant professor, Department of Health Science, Brigham Young University, 221A RB, Provo, UT 84602; E-mail: sue_hill@byu.edu. Steve R. Thomsen, PhD, is with the Department of Communications, Brigham Young University, F-337 HFAC, Provo, UT 84602. Randy M. Page, PhD, is with the Department of Health Science, Brigham Young University, 110 FOB, Provo, UT 84602. Nikki Parrott is a community health graduate, Department of Health Science, Brigham Young University.



messages also may be affecting children and teenagers. Several studies have found that children and adolescents who are exposed to greater amounts of alcohol advertising are more likely to use, or intend to use, such products.^{7,9,15}

The alcohol industry routinely connects with large numbers of underage readers through magazine advertising.^{16,17} Snyder and colleagues, for example, analyzed advertising expenditures for 1997 and found that 22% of all alcohol advertising dollars were spent on magazine advertisements, primarily promoting distilled spirits. They reported that distilled beverage producers allocated nearly 89% of their advertising budgets to national magazines and that the heaviest advertising occurred during the December holiday season.¹⁷

According to the Center on Alcohol Marketing and Youth (CAMY), nearly one-half of all alcohol-related magazine advertising in 2001, based on total expenditures, was in 24 publications classified as “youth-oriented.” A youth-oriented classification describes magazines whose editorial profile indicates their primary intended audience is adult readers over the age of 21, and excludes publications edited specifically for the youth or teen market. CAMY classified a magazine as youth-oriented if its composition of readers between the ages of 12 and 20 was greater than 15.8%, the actual proportion of this age group in the U.S. population.¹⁶ These included widely read titles in music and entertainment (e.g., *Vibe*, *Spin*, *Rolling Stone*, *Entertainment Weekly*), sports (e.g., *Sports Illustrated*, *ESPN The Magazine*, *Car and Driver*), men’s lifestyle (e.g., *Maxim*), and women’s fashion (*Allure*, *Glamour*, *In Style*, *Essence*). According to CAMY, in 2001, 72 brands of alcohol placed more than 50% of their advertising dollars in youth-oriented magazines. Twenty-five of these brands placed 100% of the advertising in youth-oriented magazines. The largest expenditures were in *Sports Illustrated*, *Rolling Stone*, and *Entertainment Weekly*. Nearly 35% of *Rolling Stone*’s readers, and about 25% of those who read *Sports Illustrated* and *Entertainment Weekly*, are

between the ages of 12 and 20.¹⁶ Garfield and colleagues corroborate these findings, noting the 9,148 alcohol advertisements that appeared in 35 major publications between 1997 and 2001 may have reached a potential audience of 7.1 million adolescents.¹⁵

In response to growing pressure from health advocates, some brewers now voluntarily include caution, responsibility, or moderation statements in their advertisements. Currently, brewers are required under the 1988 Federal Beverage Label Act to include health warning statements only on alcohol beverage containers and packaging. Attempts to mandate warning messages in alcohol advertising, similar to what is required for tobacco advertisements have not been successful.¹⁸ Slater and colleagues pointed out that warning or responsibility messages in print advertisements are often separated from other content in such a way that they can be easily overlooked or even ignored.¹⁸

While numerous studies have examined television advertisements for alcohol, very few have analyzed magazine advertisements. A search of the literature revealed just three major studies, where the content of magazine alcohol advertisements were analyzed.^{15,19,20} Given the concerns expressed in the recent reports published by the CAMY, we thought it would be beneficial to re-examine the content of alcohol advertisements in magazines.

The purpose of this study was 1) to analyze persuasive themes that might make alcohol advertisements attractive to underage adolescent readers, and 2) examine the frequency, content, and location of responsibility messages within the advertisements. The content of alcoholic beverage advertisements appearing in 48 issues of *Rolling Stone* magazine from January 2000 through December 2002 were examined. *Rolling Stone*, a popular entertainment and music industry magazine, has been classified by the CAMY as a “youth-oriented” publication and has been identified as having a substantial number of teenage readers.¹⁶ In addition, *Rolling Stone* is the most widely recognized title for this genre and tends to have a general or broad market appeal so the advertise-

ments are likely to be representative of advertisements appearing in other general entertainment and music magazines.

METHODS

Sample

Our sample consisted of all alcohol advertisements appearing in all 48 issues of *Rolling Stone* magazine published from January 2000 through December 2002. The selection of *Rolling Stone* magazine was based on its inclusion as a “youth-oriented” publication in the 2002 CAMY report, and the availability of complete volumes of the targeted years chosen for analysis. As previously noted, of the 24 magazines classified as “youth-oriented,” CAMY identified *Rolling Stone* as having one of the highest percentages of readers between the ages of 12 and 20. Therefore, it was determined that the advertisements appearing in *Rolling Stone* would most likely be representative of the types of alcohol advertisements appearing in entertainment and music magazines widely read by adolescents.

Coding

Coding was conducted by members of the research team. Each advertisement for an alcohol product, including responsibility and corporate identity advertisements, were treated as the unit of analysis. Specific coding units included type of alcohol product, alcohol brand, implied consumption, persuasive theme, inclusion of a responsibility message, location of the responsibility message within the advertisement, size of type used for the responsibility message, and the inclusion of a qualifier/disclaimer within the responsibility message.

Alcohol product type. Coding identified the alcohol type based on four categories: 1) beer or malt liquor, 2) wine, champagne, or wine coolers, 3) distilled spirits, liquor, or pre-mixed cocktails, and 4) alco-pops, also known as flavored alcoholic beverages (FABs). These are sweet, fruit-flavored, malt-based drinks, such as Mike’s Hard Lemonade, Rick’s Spiked Lemonade, or Doc Otis’ Hard Lemonade, and have approximately 5% alcohol per volume.



Implied consumption. An advertisement was coded as implying consumption (yes/no) if it depicted characters who were about to drink, were in the process of drinking, or who had just finished a drink. Examples that indicated implied consumption included depictions of open containers, the pouring of beverages into a glass, or the presence of models holding or setting down partially filled, or full, glasses.

Persuasive themes. Each advertisement was coded for the presence (yes/no) of 15 different themes: humor, patriotism, romance, female bonding, male bonding, partying (both genders), achievement, rebellion, hedonism, participation in/watching sports, escape/adventure, product quality, improving the quality of life, ceremony, and sex appeal. These themes were adapted from the categories developed by Breed and DeFoe,¹⁹ Strickland, Finn, and Lambert,²⁰ Pinsky and Silva.²¹ Definitions of each theme are included in Table 1.

Responsibility messages. Advertisements were coded to determine the frequency of responsibility messages as well as the general content of the statement, the location of the message within the advertisement, and its relative readability based on font size.

Each advertisement was coded for the presence (yes/no) of a responsibility message. If a message was present, its content was categorized into one of eight categories: 1) don't drink if you are underage, 2) don't drink and drive/appoint a designated driver, 3) don't drink if you are pregnant or on medications, 4) talk to your children about alcohol, 5) get help if you have a drinking problem, 6) drink in moderation/know when to say when, 7) drink responsibly, and 8) don't drink.

Four categories were created to code for location of the message within the advertisement. These included: 1) the top half of the advertisement (above the main text or image), 2) within the main text or image, 3) bottom half of the advertisement (below the main text or image), and 4) vertically, near the interior margins. Five categories were utilized to code the size of the type

used for the responsibility message. These included: 1) same size as the largest type on the advertisement, 2) smaller than the headline type, but larger than the other (text) type, 3) same size as the other (text) type, 4) smaller than the other (text) type, but readable, and 5) agate type, small enough to be difficult to read.

Inclusion of qualifier/disclaimer. To determine if the responsibility messages used clever phrases or word plays that might mask or minimize the content of the responsibility message, we coded for the presence (yes/no) of a "qualifier/disclaimer." An example of a "qualifier/disclaimer" might include the message, "Remember, look out for your mates. Captain's orders." The meaning of this statement, which may be intended to promote responsible drinking or the selection of a designated driver, may not be readily apparent to younger readers, particularly if the advertisement's visuals depict young adults consuming alcohol in a party setting.

Reliability

Each member of the research team participated in the development of the coding book and coder training sessions. Definitions were developed for each of the coding units. To establish inter-coder reliability, a random sample of 10 advertisements from the overall sample frame were collected and coded independently by each team member prior to the start of the final coding process. Holsti's formula was used to calculate inter-coder reliability.²² The result was an average overall inter-coder reliability coefficient of .97.

RESULTS

In all, 486 advertisements were coded. The overall frequency of the advertisements varied seasonally, with the largest number of advertisements appearing October through December, and March during the Halloween, Christmas, and St. Patrick's Day holiday seasons. A relatively equal number of advertisements appeared in each of the three years: 169 (34.8% of the total) appeared in 2000, 174 (35.8%) in 2001, and 143 (29.4%) in 2002. 408 (84%) of the

advertisements were for distilled spirits, liquor, or pre-mixed cocktails and 66 (13.6%) of the advertisements were for beer or malt liquor products. These two categories accounted for slightly more than 97% of the total advertisements (Table 2).

Responsibility Messages

Table 3 indicates nearly three quarters of the advertisements included responsibility messages, the most frequent being "drink responsibly" (n = 310, 63.8%) followed by "drink in moderation/know when to say when" (n = 42, 8.6%). Less than 1% of the advertisements included statements warning against underage drinking or encouraging the selection of a designated driver, and none of the messages warned against drinking while pregnant or advised parents to talk to their children about drinking. Slightly more than one quarter of the advertisements (n = 127, 26.1%) included no responsibility message.

Almost all of the responsibility messages appeared in the bottom half of the advertisements (n = 255, 71%) or vertically near or in the interior margins (n = 78, 21.7%) (See Table 4). In nearly 89% of the advertisements, the responsibility message was the smallest type on the page. Specifically, 53.5% of the advertisements (n = 192) used type that was smaller than the other type in the advertisement and 35.1% (n = 126) used agate type (See Table 4). These findings suggest that while most advertisements included a responsibility message, their location and type size would have made them difficult to find and read. In addition, 262 (73%) of the responsibility messages incorporated a "qualifier" or "disclaimer," further diminishing the potential impact of the statements. These qualifiers ranged from Beefeaters' "Please enjoy our quality responsibility," to Jim Beam's "Drink Smart." Often the "qualifier" or "disclaimer" interacted with the images in the advertisement. One advertisement for Bacardi rum, for example, portrayed a twenty-something male with a drink in his hand and a young woman sitting on his lap. A second young woman appeared to be performing a lap dance. The accompanying advertisement copy, in a

**Table 1. Description of Criteria for Coding Persuasive Themes**

Theme	Description
Humor	Use of humorous mannerisms, satire, sarcasm, physical humor (e.g., slapstick), jokes, irony, spoofs, parody, illogical or improbable situations.
Patriotism	Appealing to one's love or duty to country. Evoking memories of war, Sept. 11 attacks, jingoism, showing support for current war/military.
Romance/Relationships	Product use is associated with building social/emotional relationships among lovers, significant others, marriage partners.
Female Bonding	Examples include bonding, partying, socializing, hanging out, celebrating special occasions/events, and camaraderie among female friends only.
Male Bonding	Examples include bonding, partying, socializing, hanging out, celebrating special occasions/events, and camaraderie among male friends only.
Hanging Out/Partying	Social interaction of a non-sexual, non-romantic nature among both sexes.
Achievement	Product use will result in increased socioeconomic status, income, success, respect in the business world, or improved professional relationships. Product use is associated with an increase in self-esteem, confidence, or personal image.
Rebellion/Autonomy	Creating an identity that separates one from authority figures or general cultural norms. Being different; going against the norms.
Hedonism	Encourages letting oneself go, excessive self-indulgence, or abdication of normal responsibilities.
Sports	Associates product use with watching or participating in traditional sports (e.g., football, basket ball, baseball, hockey, auto racing).
Escape/Adventure	Associates product use with outdoor activities (e.g., rafting, mountain climbing, skiing, or extreme sports) or activities that lead to psychological escape, relaxation or release from the tensions of everyday life.
Product Quality	Advertisement focuses on characteristics and qualities of the product (e.g., size, cost, ingredients, availability, calories, taste).
Quality of Life	Generally an institutional advertisement that depicts how the company has been charitable, concerned about the environment, socially responsible, etc.
Ceremony	Product use is associated with rewarding one's self, weddings, anniversaries, graduations, holidays, etc.
Sex Appeal	Primary purpose of the advertisement focuses on the sexual appeal of the models appearing in the advertisement.

clear play on words, explained, "Laptops by day. Bacardi by night." The responsibility message continued the play on words, "By day or by night drink responsibly."

We also were interested in the potential differences in the inclusion and type of

responsibility messages across different alcohol types. Because of the infrequency of wine, champagne, and alco-pops advertisements, we limited our comparison to beer and distilled spirits/liquor. The data indicate (Table 5) an interesting difference

existed between these two types of alcohol. Beer advertisements were significantly less likely to include responsibility messages than advertisements for distilled spirits/liquor ($\chi^2 = 43.75$, d.f. = 1, $p < .01$) and the strength of the relationship between alcohol

**Table 2. Type of Alcoholic Beverages in Full-page Advertisements in *Rolling Stone* Magazine, 2000–2002 (N = 486)**

Alcohol Type	N	%
Beer/Malt Liquor	66	13.6
Wine/Wine Coolers/Champagne	2	.4
Distilled Spirits/Liquor/Pre-mixed Cocktails	408	84.0
Alco-pops/Flavored Malt Beverages	10	2.1

Table 3. Inclusion of Responsibility Messages in Full-page Advertisements for Alcoholic Beverages in *Rolling Stone* Magazine, 2000–2002 (N = 486)

Message	N	%
No message included	127	26.1
Don't drink if you are under age	3	.6
Don't drink and drive/appoint a designated driver	3	.6
If you have a drinking problem get help	1	.2
Drink in moderation ("know when to say when")	42	8.6
Drink responsibly	310	63.8

types and the inclusion of a responsibility message was moderate (Cramer's $V = .30$). As can be seen in Table 5, nearly three quarters of the beer advertisements did not include a responsibility message while nearly three quarters of the distilled spirits/liquor advertisements included a message, although 74.9% of them included a qualifier or disclaimer statement.

Persuasive Themes

Product quality was the most frequently used persuasive theme for all advertisements (35.6%), followed by humor (24.3%), sex appeal (22.8%), romance/relationships (16.9%), and hanging out/partying (10.7%). When beer advertisements were compared with distilled spirits/liquor advertisements, there were some interesting differences. While both utilized product quality and humor, the most dramatic difference was in the use of sex appeal and romance themes for the distilled spirits/liquor advertisements and the use of more male-oriented themes for the beer advertisements. The most frequently used theme in beer advertisements was product quality (51.5%), followed by humor (31.8%), hanging out/partying (9.1%), and male bonding (7.6%). The most frequently used theme

in the distilled spirits/liquor advertisements was product quality (32.8%), followed by sex appeal (25.5%), humor (23%), and romance/relationships (18.6%). In general, spirits/liquor advertisements were significantly more likely to use sex appeal as a theme than beer advertisements ($\chi^2 = 12.12$, $d.f. = 1$, $p < .01$; Cramer's $V = .16$).

The relationship between persuasive themes and the presence of responsibility messages in beer and distilled spirits/liquor advertisements also was examined. We found that beer advertisements without a responsibility message were nearly four times more likely to use humor than distilled spirits/liquor advertisements without responsibility messages ($\chi^2 = 13.54$, $d.f. = 1$, $p < .01$; Cramer's $V = .34$). Not surprisingly, distilled spirits/liquor advertisements without responsibility messages were about four times more likely than beer advertisements without responsibility messages to use sex appeal as a persuasive tactic ($\chi^2 = 9.73$, $d.f. = 1$, $p < .01$; Cramer's $V = .29$). With the exception of product quality, both beer and spirits/liquor advertisements are likely to use persuasive themes that are of interest and liked by underage readers. Distilled spirits/liquor advertisements rely pri-

marily on themes related to sex and romance. Beer advertisements frequently rely on humorous messages. Nearly 86% of the beer advertisements employing humor as a persuasive theme did not include a responsibility message. On the other hand, nearly 80% of the distilled spirits/liquor advertisements using sex appeal as a persuasive theme included a responsibility message.

Implied Consumption

Overall, 113 (23.3%) of the advertisements depicted or implied the consumption of alcohol. Nearly 17% of the beer advertisements and 24.5% of the distilled spirits/liquor advertisements showed or implied consumption. No statistically significant association between alcohol type and implied consumption was found.

Of those advertisements that depicted or implied consumption, 26.3% did not include a responsibility message. A comparison of the association between implied consumption and the presence of a responsibility message for the two primary alcohol types (beer and distilled spirits/liquor) yielded a similar pattern to what had previously emerged. Distilled spirits/liquor advertisements depicting or implying consumption were nearly twice as likely as beer advertisements with implied consumption to include a responsibility message ($\chi^2 = 8.15$, $d.f. = 1$, $p < .05$). Only 36.4% of the beer advertisements depicting or implying consumption included a responsibility message compared to 79% of the spirits/liquor advertisements.

DISCUSSION

Magazines such as *Rolling Stone* that have a high concentration of youth readers are considered by media planners as excellent channels for reaching the youth population. We found that alcohol advertising was pervasive in *Rolling Stone*, with an average of about 10 full-page alcohol advertisements per issue. The fact that advertisements for distilled spirits, liquor, or pre-mixed cocktails made up 84% of all the alcohol advertisements is not surprising given the fact that 77% of overall distilled liquor advertising expenditures go to maga-



zines.²³ It also was not unexpected that the proportion of advertisements for beer or malt liquor products (13.6%) accounted for a much lower proportion of the advertisements in *Rolling Stone*. This is consistent with the fact that magazines are second to television as an advertising outlet for beer and/or malt liquor products.²⁴

Not only can alcohol advertisers be accused of advertising in media whose audiences consist largely of underage consumers (e.g., magazines with high youth readership such as *Rolling Stone*) but they also can be legitimately criticized for producing print advertisements that appeal to underage consumers. The findings from this study also support this criticism and concern because persuasive themes that appeal to teens such as humor, sex appeal, and hanging out/partying were frequently used in the content of the advertisements that were analyzed. The content analysis also revealed interesting differences between distilled spirits/liquor advertisements and beer/malt liquor advertisements. While both product categories commonly used product quality and humor as persuasive appeals, sex appeal and romance themes were used more frequently in distilled spirits advertisements, whereas advertisements for beer, which is often a gateway beverage for young drinkers, contained more male-oriented themes such as hanging out/partying and male bonding. In addition, younger male models were used more often in beer advertisements, which is interesting not only because youth consume more beer than distilled spirits,^{2,25} but the prevalence of binge drinking is also higher among adolescent males than females.¹ These emotional appeals (sex, hanging out/partying, male bonding, romance) portray an image that young people may identify as being associated with the alcoholic product being advertised.²⁶ Young people are particularly susceptible to this type of image-based advertising and more sensitive to it than adults.²⁷ Additionally, liking an ad, finding it appealing, and believing that one is the intended audience for an ad may increase the attention given to that ad by

	N	%
Location		
Top half of the advertisement	21	5.8
Within the main text or image	5	1.4
Bottom half of the advertisement (below main text or image)	255	71.0
Vertically, near the interior margins	78	21.7
Size		
Same size as largest type on advertisement	4	1.1
Smaller than headline type, but larger than other type (text)	9	2.5
Same size as other type (text)	28	7.8
Smaller than other type (text), but readable	192	53.5
Agate, small enough to be difficult to read	126	35.1

Table 5. Inclusion of Responsibility Messages in Full-page Beer and Distilled Spirits/Liquor Advertisements in *Rolling Stone* Magazine, 2000–2002

Message	Beer (N = 66)		Spirits/Liquor (N = 408)	
	N	%	N	%
No message included	48	72.7	127	26.1
Don't drink if you are under age	1	1.5	3	.6
Don't drink and drive/appoint a designated driver	2	3.0	3	.6
If you have a drinking problem get help	0	0.0	1	.2
Drink in moderation ("know when to say when")	1	1.5	42	8.6
Drink responsibly	14	21.2	310	63.8

young audiences.^{28,29}

Sometimes, the very elements that make the advertisements appealing to adults also make them entertaining for children and teenagers. Aitken found that among 10- to 12-year-olds in Scotland, beer and lager advertisements were most frequently mentioned as their favorites. The primary reasons given for this included the use of humor, popular music, and characters with appealing personal and physical qualities.⁶ Several other studies also have found that use of humor increases the overall appeal of advertisements by underage audiences.^{11,12} Furthermore, Jones and Donovan found that radio alcohol advertisements using persuasive themes relying on humor and popular culture may foster the belief among underage audiences that they are, in

fact, the intended audience.¹⁰

Austin and her colleagues have used the Message Interpretation Process (MIP) to explain how children and adolescents interpret alcohol advertising, and how this interpretation process influences the potential effects created by exposure. The MIP model assumes that children and adolescents are curious about alcohol and, as a result, engage in an active, logical decision-making process as they attend to and interpret advertising messages. This process involves assessing the realism of the advertisement, the advertisement's perceived similarity to the child's own life, and the degree to which it reflects personal experiences. The higher the level of perceived similarity, the more likely the child is to identify with, want to be like, or engage in



the same behaviors as the characters in the advertisement. The more a child identifies with the advertisement, the more desirable the portrayed characters and activities become. The greater the identification and desirability toward the characters and activities, the stronger the expectancies for drinking become.^{28,29} Several recent studies support this link between expectancies and anticipated drinking behavior in children, adolescents, and young adults.^{7,8,28-30}

Our findings suggest that alcohol companies are not effective stewards when it comes to warning about the potential health and safety consequences of alcohol use, and warning the public about the minimum drinking age of 21. Three-quarters of the advertisements analyzed included “responsibility messages,” although the characteristics of the messages probably reduce their impact. One characteristic used in the messages is that of small type, thus reducing the probability that a magazine reader will notice, find, or read the message. Also, “qualifiers” or “disclaimers” and vague or meaningless warnings such as “drink responsibly” or “drink in moderation/know when to say when” further diminish the potential impact of these messages. It is telling that less than 1% of the advertisements analyzed included statements against underage drinking or encouraging assigning a designated driver when drinking, and none of the advertisements advised parents to talk to their children about drinking or warning pregnant women against drinking. Clearly these messages do not encourage specific responsible behaviors when it comes to drinking the advertised products.

With this in mind, two limitations should be noted. First, the analysis was based on just one popular magazine title, *Rolling Stone*. *Rolling Stone* was selected because it has one of the highest circulation figures for youth-oriented publications and because we had access to complete volumes for all three years of interest to us for this study. Attempts to obtain complete volumes of other large-circulation, youth-oriented titles in the entertainment and music category (e.g., *Vibe*, *Spin*) were unsuccessful,

even after contacting publishers in hopes of purchasing back issues for the years 2000 through 2002.

Because advertisers and advertising policies vary from magazine to magazine, our conclusions are not intended to be generalized to other entertainment and music magazines. However, many of the advertisements coded for this study were included in national print campaigns and, as such, appeared in numerous titles across many different magazine categories.

Second, we realize media exposure is only one of many predictive risk factors associated with teenage drinking. Most multivariate models developed to predict adolescent alcohol use suggest that media exposure tends to be less influential than other risk factors such as peer drinking, perceived norms, proneness to deviance, parental drinking, and family pathology.^{31,32} An important consideration, however, relates to the teenager’s relative experience with alcohol in both family and social settings. One recent study, for example, reported that media exposure was far more likely to influence the normative beliefs and drinking expectancies of non-drinking teenagers, particularly those who also reported having no friends who drank, than teenagers who had previously tried alcohol or who had friends who drank.³³

Implications for Health Education

Since youth consume more beer than distilled spirits/liquor,^{2,25} it is of concern that beer advertisements are much less likely to include a responsibility message than advertisements for distilled spirits/liquors. Although producers voluntarily place responsibility messages on advertisements, health educators can advocate for stronger messages that encourage more responsibility as well as messages that have textual characteristics large enough to be noticed and read. Health educators should realize that responsibility messages as currently used hold little promise as a deterrent to adolescents when it comes to making decisions about drinking. In fact, such messages and warnings may have a reverse effect and make a product more attractive to young people.^{34,35}

Findings from this study support the benefit of health education strategies that incorporate media literacy efforts to help young people understand the persuasive intent and strategies used by alcohol companies in product advertising. Youth need to understand that advertisements attempt to sell more than a product; they also sell images (e.g., drinking is humorous, sexy, fun) that can shape attitudes, expectancies, and choices. They need to learn to be skeptical and think critically about advertisements in order to reduce personal vulnerability to alcohol messages. Developing critical thinking skills to actively negotiate the meaning of messages by questioning and challenging assumptions and assertions portrayed in advertisements can be fostered through effective health education.

For example, the issue of mixed messages often addressed when teaching decision-making and effective communication skills can be incorporated with media literacy. Many alcohol advertisements contain mixed messages directed toward youth. One example would be an advertisement that contains a responsibility message, but uses images depicting or implying consent to drink by showing fun, exciting, appealing, enticing, scenes/scenarios making it attractive for underage youth to drink illegally. Teaching young people how to effectively deconstruct alcohol advertisements has the potential to reduce young people’s image-based expectancies about drinking (i.e., increases sex appeal, social approval, good times, fun).

Recommendations for future research include exploring how young audiences read and interpret the responsibility messages and persuasive themes in alcohol advertising, and whether or not they assimilate the intended message. In addition, it would be useful to discover what alcohol responsibility messages would actually be most effective with underage youth.

In conclusion, it is understood that *Rolling Stone* magazine targets an adult audience, but the fact remains that a good portion of the readership are adolescents. With this in mind, balancing the rights of adver-



tisers with the need to protect vulnerable audiences places a responsibility on health educators to advocate for policy change regarding responsibility messages and teaches strategies that can assist students in reducing their susceptibility to persuasive messages in alcohol advertising.

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