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Embedded Alcohol Messages in Television Series: The Interactive Effect of Warnings and Audience Connectedness on Viewers' Alcohol Beliefs*

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Abstract

Objective—This research investigates whether warning viewers about the presence of embedded messages in the content of a television episode affects viewers' drinking beliefs and whether audience connectedness moderates the warning's impact.

Method—Two hundred fifty college students participated in a laboratory experiment approximating a real-life television viewing experience. They viewed an actual television series episode containing embedded alcohol messages, and their subsequent beliefs about alcohol consequences were measured. Experimental conditions differed based on a 2 (Connectedness Level: low vs high) × 2 (Timing of the Warning: before or after the episode) × 2 (Emphasis of Warning: advertising vs health message) design. Connectedness was measured, and the timing and emphasis of the warnings were manipulated. The design also included a control condition where there was no warning.

Results—The findings indicate that warning viewers about embedded messages in the content of a program can yield significant differences in viewers' beliefs about alcohol. However, the warning's impact differs depending on the viewers' level of connectedness to the program. In particular, in comparison with the no-warning control condition, the advertising prewarning produced lower positive beliefs about alcohol and its consequences but only for the low-connected viewers. Highly connected viewers were not affected by a warning emphasizing advertising messages embedded in the program, but a warning emphasizing health produced significantly higher negative beliefs about drinking than in the control condition.

Conclusions—The presence of many positive portrayals of drinking and alcohol product placements in television series has led many to suggest ways to counter their influence. However, advocates of warnings should be conscious of their differential impact on high- and low-connected viewers.

THIS RESEARCH INVESTIGATES whether and how warning viewers about the presence of embedded alcohol messages in the content of television programming affects viewers' drinking beliefs and whether audience connectedness moderates the warning's impact. Television series are regarded as an influential source through which consumers acquire knowledge and learn social behaviors (Collins et al., 2003), including drinking practices (Gerbner, 1995; Stockdale, 2001; Villani, 2001). A Centers for Disease Control (CDC) analysis of 3,719 television viewer surveys found that 57% of viewers acquired health-

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related knowledge from watching daytime and/or prime-time dramas (Beck et al., 2003). It is therefore important to understand how alcohol messages in the content of television series affect audiences' knowledge and attitudes about drinking. Understanding how beliefs and attitudes are shaped is important because previous research has shown that they are closely associated with drinking behavior (e.g., Chen et al., 1994; Grube et al., 1995; Grube and Agostinelli, 1999).

As evidenced in previous content analyses (Christensen et al., 2000; Mathios et al., 1998; Russell, 2006), portrayals of drinking and alcohol product placements abound in television series. Despite the alcohol industry's self-regulation of traditional advertising (Mosher, 2006), positive messages about alcohol are increasingly present in the content of television programs, often in the form of product placements. Product placement epitomizes the blurring of the lines between advertising and entertainment; it refers to the purposeful incorporation of a product into the content of entertainment programs (Russell and Belch, 2005). A federal government review of industry practices raised issue with the prevalence of alcohol placements and drinking references in television programming and the potential negative effects, especially in light of the medium's large audience base (Evans and Kelly, 1999).

Complicating this issue is the fact that television series also sometimes depict negative consequences of drinking, such as regrettable sexual intercourse, addiction, or feeling sick. Public policymakers increasingly advocate the use of entertainment-education techniques to communicate the risks associated with unhealthy behaviors (Singhal et al., 2004). In fact, pro- and anti-alcohol messages often occur within the same television series, and even the same episode (Blair et al., 2005), just as those regarding smoking (Pechmann and Wang, 2008).

Given the controversy over the presence of embedded alcohol messages in television programs, some have advocated the use of content warning messages. For instance, Commercial Alert, a nonprofit organization, has launched a petition requesting that television stations include clear and prominent disclosures of all product placements, so-called covert commercials (Commercial Alert, 2007). Such a measure would be similar to the graphic scenes and violence warnings that are currently displayed at the beginning and following commercial breaks of some television programs in many countries. These warnings are separate from the television rating guidelines and are not legally mandated. They are displayed at the discretion of the broadcaster. To date, no research has been conducted regarding the likely impact of these warnings.

This research incorporates the persuasion knowledge model (Friestad and Wright, 1995) to test the impact of different warning conditions on viewers' responses to alcohol messages embedded in the content of television programs. An experiment is conducted to investigate whether prewarnings or postwarnings that emphasize the presence of either embedded advertising or embedded health messages in an episode of a television series affect viewers' drinking beliefs. Based on previous research, the moderating role of viewers' levels of connectedness with the television series is also tested.

Alcohol messages in television series

To document the nature of alcohol-related messages in the content of television programs, alcohol researchers have conducted content analyses of those programs. One key finding is that the messages contained in the television programs are often mixed. Positive messages about drinking include its association with humor, valued outcomes such as camaraderie and fun social times (Hundley, 1995), or other forms of positive endorsements (Blair et al., 2005). These positive messages are often fueled by the practice of product placement, and,

in fact, alcohol is one of the most actively placed product categories in television programs and movies in Hollywood (Russell and Belch, 2005); for example, in 1998, alcohol placements occurred in 181 television series at least once during the season (Evans and Kelly, 1999).

However, sometimes drinking is associated with negative outcomes, such as rapes, accidents, and deaths. The use of entertainment to educate audiences with health messages is increasingly popular in social marketing campaigns, such as drug and alcohol prevention or HIV/AIDS prevention. For instance, in 1998 the U.S. Congress passed a law authorizing the federal government to purchase antidrug public service announcements from networks that would donate as much time as the government purchased (National Youth Anti-Drug Media Campaign). Under a program of the White House Office of National Drug Control Policy, participating networks were allowed to resell advertising time already paid for by Congress if they incorporated antidrug storylines and dialogue into their programming (Goodman, 2006).

Thus the actual message about alcohol is often mixed. In fact, a study of the reality program *The Osbournes* showed that the same character who was at times endorsing alcohol was also depicted as rejecting alcohol (Blair et al., 2005). A similar pattern was found in a study focused on the teen television series *The O.C.*, where the messages about alcohol alternated between depicting positive and negative outcomes, both often within the same episode (Russell, 2006). This research incorporates the fact that television programs contain both pro- and anti-alcohol messages and experimentally studies conditions that affect how consumers process those messages and how their alcohol beliefs are in turn affected.

Role of audience connectedness

Previous research has shown that connectedness to television characters is a key to understanding the influence television may have on viewers (Russell et al., 2004). Connectedness refers to the intensity of the relationships viewers develop with television programs and the characters in those programs in a parasocial television environment (Russell and Puto, 1999). It extends beyond the individual episode viewing experience, typically measured by attitude toward and involvement with the episode, and captures the role of television series and their characters on individuals' personal and social identity. In particular, connectedness studies have established that the relationships viewers develop with television characters relate to the viewers' own consumption experiences and beliefs about consumption (Russell and Puto, 1999; Russell and Stern, 2006). Specifically, greater connectedness has been found to increase attention to and processing of the program (Russell et al., 2004). It was shown to be a stronger predictor of television influence than the overall amount of exposure to television, as posited by the cultivation paradigm of communications studies (O'Guinn and Shrum, 1997). Thus connectedness may be an important moderator of how alcohol messages in television programs affect consumers, with highly connected viewers relating more to the situations in the program. In turn, these highly connected viewers may be more affected by what they see happening to the characters and, as a result, form stronger expectations concerning the personal and social consequences that the characters' drinking will have.

Effect of warning messages

Previous research has found that forewarning produces resistance to persuasive attempts, as evidenced by less attitude change in the direction intended by the communication (Petty and Cacioppo, 1977; Wood and Quinn, 2003). In particular, forewarning increases the generation of counterarguments during the presentation of the persuasive communication, thus undermining its persuasive power (Fukada, 1986). However, one limitation of this line

of research is that it is usually evident that the stimuli being warned against are intended to be persuasive communications. It is less clear if or how forewarnings may moderate the effectiveness of messages that are embedded in the storyline of a program and where the persuasive intent may be less obvious to viewers.

The Persuasion Knowledge Model was developed to account for the fact that consumers develop knowledge about persuasion and use this knowledge to “cope” with persuasion episodes (Friestad and Wright, 1995). Persuasion knowledge refers to consumers' own theories about persuasion and includes beliefs about marketers' motives, strategies, and tactics; the effectiveness and appropriateness of persuasion tactics; and ways of coping with persuasion attempts. The model proposes that when individuals are exposed to a persuasive message (e.g., a sales presentation), they can potentially elaborate on three elements of the message: (1) the message content, (2) the persuasion agent or source of the message, and (3) the persuasion tactics used in the message. Warning messages placed before or after a persuasive communication may thus allow individuals to access persuasion knowledge and counterargue the message.

Warnings work by heightening resistance to a persuasive message. Research conducted in the context of alcohol advertising has shown some success in increasing such vigilance, even among the usually skeptical teenage audience (Goldberg et al., 2006). In one study, sixth-grade students participated in five 50-minute lessons on alcohol advertisers' persuasive tactics and how to cope with them (Goldberg et al., 2006). Compared with a control group that did not receive this training, those students who had received the training demonstrated greater persuasion knowledge and coping behavior, and they were more negative toward alcohol advertisers. In a similar vein, research focused on smoking messages in movies has provided evidence that showing film viewers antismoking advertising before a movie with smoking scenes negated the otherwise positive effect of smoking scenes on viewers' images of smoking (Pechmann and Shih, 1999). The antismoking advertisement prompted viewers to be more critical and thus more resistant to the subsequent smoking messages.

One potential issue, however, is that, instead of allowing people to counterargue, prewarnings may instead increase interest in the subsequent message. For instance, studies have shown that adolescents exposed to violence warnings before seeing a movie were actually more interested in the film (Bushman and Stack, 1996). This so-called forbidden-fruit effect is based on principles from reactance theory (Brehm, 1972) whereby individuals who feel restricted from holding certain attitudes or engaging in certain behaviors are motivated to restore those lost freedoms. Because of these limitations, warning individuals not before but after exposure to the program message may be more effective, because it would allow them to reflect on the message to which they have just been exposed. This potentially useful public health alternative has not been previously explored.

Interactive effects of connectedness and warnings

An important moderator of whether persuasion knowledge increases people's resistance to persuasive attempts is distraction (Campbell and Kirmani, 2000). Distraction inhibits the dominant cognitive response to a persuasive communication (Petty et al., 1976). Distraction has also been shown to affect the impact of warnings preceding a persuasive communication. Chen et al. (1992) found that, even when forewarned subjects were personally involved with the issue at hand, distraction after a warning reduced resistance to the subsequent persuasive appeal.

Distraction from the warning is especially relevant to the processing of messages embedded within television programs. In particular, high levels of connectedness, which reflect engagement with the characters and transportation in the story, may also preempt viewers

from treating the embedded alcohol messages as persuasive attempts. Connected viewers who are immersed in the story (Gerrig, 1994) may not be able to draw from persuasion knowledge to “defend” against the persuasive attempt. Such interference inhibits viewers' ability to counterargue, and thus the effect of the warning is lost (Romero et al., 1996). In particular, warnings calling attention to a persuasive message in the content of the program will not be processed if viewers are distracted.

Based on the extant connectedness and warnings literature, this research proposes that the likely effectiveness of a warning will be influenced by the viewers' level of connectedness. Among low-connected viewers, it is hypothesized that the timing and emphasis of the warning will have different impacts on viewers' alcohol expectancies (beliefs about the positive and negative consequences of drinking) (e.g., Chen et al., 1994). Prewarnings should highlight the nature of the alcohol messages in the episode. Hence a forewarning about advertising (pro-alcohol) messages in the story is expected to raise viewers' attention to them and in turn improve their ability to discount them. Similarly, a warning about health (anti-alcohol) messages is expected to raise viewers' attention to the negative consequences of drinking.

Messages that emphasize the negative health consequences of drinking are expected to resonate with highly connected viewers, who care deeply about the television characters. On the other hand, highly connected viewers may discount warning messages about advertising content because they view the program content as part of real life and have been shown to be more welcoming of product placements (Russell and Puto, 1999). They are so vested in the characters' stories that they do not process the information contained in them as persuasive attempts. Therefore, they are less likely to be affected by advertising warnings than low-connected viewers. The effects of postwarnings have not been tested in previous research, but it is expected that they would allow viewers to reflect on the overall message of the episode and to modify their beliefs accordingly.

Method

Experimental design

An experiment was conducted based on a 2 (Connectedness Level: low vs high) $\times$ 2 (Timing of the Warning: before or after the episode) $\times$ 2 (Emphasis of Warning: advertising vs health message) design with a control condition with no warning. Connectedness was measured, and the timing and emphasis of the warnings were manipulated. A posttest-only design comparing the impact of different types of warnings to a control condition was preferred to a pretest and posttest design measuring a change in alcohol expectancies to avoid prompting the participants to the purpose of the study.

The stimulus was a real episode of the television series *Two and a Half Men* (THM) that had aired 2 weeks before the study. THM was selected based on previous content analysis findings that the series contained the most prominent messages about alcohol of all prime-time serial programs in the United States. Each 22-minute episode contains an average of more than 5 minutes of visual depictions of alcohol and two and a half auditory references to alcohol (Russell, 2006). The series features the life of two brothers, Charlie and Alan, who live together along with Alan's 10-year-old son. Charlie is single and a womanizer who regularly goes to bars to find women. Alan, a chiropractor, is divorced and has a hard time with women.

The storyline of the episode selected for the experiment prominently featured alcohol and included both positive and negative messages about it. All forms of alcohol (i.e., beer, wine, and distilled spirits), including several recognizable brands, were present in every scene

setting, thus providing justification for the advertising warning. The consumption of alcohol made Alan extremely drunk and hungover in front of his child while at the same time allowing him to express his true feelings, thus providing an ideal externally valid case of mixed messages about alcohol in television series.

All participants were informed that the purpose of the study was to examine perceptions of the realism of television programs and that they would watch a sitcom episode and then respond to questions about aspects of the show that might influence their perceptions of realism. This was the only information provided in the control condition. In the other conditions, participants read additional instructions either just before or just after the episode (timing manipulation) that emphasized the presence of either advertising or health messages (emphasis manipulation) in the content of the episode. In the advertising emphasis conditions, the instructions stated, "Sometimes marketers and advertisers persuade television producers to have the characters communicate specific messages about their products because, for them, it is a good way to advertise their products." In the health emphasis conditions, the instructions stated "Sometimes government and public policy advocates persuade television producers to have the characters communicate specific messages about certain harmful behaviors because, for them, it is a good way to promote social and health messages." All instructions concluded with "You may notice such messages in the episode" if the warning preceded the episode or "You may have noticed such messages in the episode" if the warning followed the episode.

Respondents comprised 250 Southern California university students (mean age = 22.2 years; 54.8% females) who participated in the experiment for course credit. The experiment was conducted in a computer lab, and each participant was seated at an individual viewing station equipped with headphones where they read the instructions, watched the episode, and completed the questionnaire. The questionnaire began by asking whether they had seen the episode before. A series of Likert-like scale item questions followed concerning their attitude toward the episode (three items on a 7-point scale: likeable to not likeable, cool to uncool, good to bad; $\alpha = .96$), involvement with the program (six items on a 7-point scale, relevant to irrelevant, exciting to unexciting, interesting to boring, important to unimportant, appealing to unappealing, involving to uninvolving; $\alpha = .90$), and Russell et al.'s (2004) connectedness with the program (16 statements such as "I relate what happens in THM to my own life," or "I would love to meet the characters of THM" anchored by 1 [strongly disagree] and 5 [strongly agree]; $\alpha = .87$).

Then a series of questions assessed the respondents' general beliefs regarding alcohol consumption. The alcohol expectancies measure (Grube et al., 1995) was administered by asking respondents to indicate how likely (from 1 [very unlikely] to 5 [very likely]) it is that each of eight positive ($\alpha = .91$) and eight negative ($\alpha = .83$) consequences would happen to them personally if they were to drink three or four whole drinks of alcohol. The level of perceived alcohol plot connection to the storyline of the episode was measured on a three-item scale (Russell, 2002) ($\alpha = .78$), as a control variable. Respondents also rated their attitude toward product placement in general on a five-item scale adapted from previous research (Gupta and Gould, 1997) ($\alpha = .71$; e.g., "The presence of products in television programs makes them more realistic," "I do not mind if advertisers place their products in television programs"). Two items were used to check the warning manipulation (the instructions "made me more aware of the potential influence of TV programs on viewers" and "emphasized the possibility that messages could be incorporated in the story line") ($\alpha = .87$).

The questionnaire concluded with measurement of the respondents' own alcohol consumption by asking them to report how often, in the past 30 days, they had one or more

whole drinks; on how many days they felt drunk; and on how many days they had five or more whole drinks in a row. These measures are all common indicators used in alcohol research and comprise a reliable overall indicator of alcohol consumption ($\alpha = .86$). Finally, demographic information was collected. Participants were fully debriefed at the end of the session.

Results

Overall, participants enjoyed viewing the episode, reporting a positive attitude toward the episode (mean = 5.22) and experiencing high involvement (mean = 4.43). Neither involvement nor attitude toward the episode varied by condition as indicated by a series of 2 (Timing of Warning) $\times$ 2 (Emphasis of Warning) analyses of variance (ANOVAs) where no effects were significant (all F 's < 3.11 , 1/245 df, $p > .05$). The manipulation check showed that the warning had significantly raised participants' attention to the embedded messages and their potential influence compared with the control group (mean = 3.43 vs 2.99; $t = 2.60$, 248 df, $p < .05$). There were no differences between conditions in how much respondents felt that alcohol was connected to the plot of the episode (F 's < 3.82 , 1/234 df, $p > .05$); they all perceived it to be a central component of the story (mean = 4.62). Only 7.2% of the participants had seen the episode before the study, and the findings were substantively the same whether these participants were included. As such, they were retained in the analyses. As in previous research (Russell et al., 2004), attitude toward the episode and involvement with the episode were significantly correlated with connectedness (r 's = .64 and .63, respectively). Because connectedness was measured after exposure to the experimental treatments, an ANOVA was conducted to ensure that overall connectedness means did not differ across conditions (the four warning conditions and the control condition). Indeed, there were no significant differences ($F = 1.11$, 4/245 df, $p > .05$), indicating that the warnings did not change pre-existing connectedness to the television series and characters. Participants were divided into high and low connectedness based on a median-split on their connectedness score (median = 2.38; interquartile range: 1.94–2.94). Each of the experimental cells consisted of at least 20 participants.

The dependent variables were the alcohol beliefs subscales; two scores were computed by averaging the positive beliefs and the negative beliefs. The two subscales were not significantly correlated ($r = -.07$, $p > .05$), thus indicating that positive and negative beliefs about alcohol operate independently. A warning would be considered effective if it produced significantly lower positive beliefs and/or significantly higher negative beliefs than were observed in the control condition.

The two alcohol dependent measures were analyzed using a 2 (Connectedness Level) $\times$ 2 (Timing of Warning) $\times$ 2 (Emphasis of Warning) multivariate analysis of covariance (MANCOVA). In addition, for each level of connectedness, a series of planned contrasts was conducted to test the significance of differences in dependent measures between each experimental condition and with the control condition. Alcohol consumption, age, and gender were controlled for by including them as covariates in the analyses. The MANCOVA revealed a significant three-way interaction between connectedness level, emphasis of warning, and timing of warning ($F = 3.14$, 2/232 df, $p < .05$). As illustrated in Figures 1a and 1b, there was a significant main effect of connectedness on positive beliefs ($F = 4.13$, 1/233 df) qualified by the three-way interaction ($F = 6.31$, 1/233 df, $p < .05$). The advertising prewarning reduced positive beliefs but only for the low-connected viewers (3.57 vs 4.10 in the control condition), as expected. For the high-connected viewers, the opposite effect was observed, with even greater positive beliefs (4.33 vs 4.18 in the control condition). As documented in previous research (Russell and Puto, 1999), highly connected viewers were more positive toward the practice of product placement than low-connected

viewers (4.08 vs 3.81; $F = 6.90$, 1/234 df, $p < .05$), and these differences were not affected by the warning manipulations (all other F 's < 1.42 , 1/234 df, $p > .05$). The postwarning with a health emphasis also produced lower positive beliefs among low-connected viewers (3.75) but not among highly connected viewers (4.20). Neither the health prewarning nor the advertising postwarning affected positive beliefs.

For negative beliefs, the analysis revealed a significant interaction between connectedness and warning emphasis ($F = 4.48$, 1/233 df, $p < .05$). As seen in Figure 2, health emphasis warnings produced more negative beliefs about drinking among highly connected viewers compared with a no-warning condition (2.59 vs 2.32), regardless of the timing of the warning. Thus, as expected, warnings that emphasized the health aspects of the alcohol message in the episode resonated with highly connected viewers, successfully yielding more negative beliefs about the consequences of alcohol. In contrast, warnings that emphasized the pro-alcohol stance in the episode did not affect highly connected viewers' negative beliefs (2.23), but compared with the control condition, they produced more negative beliefs among low-connected viewers (2.57 vs 2.41), again regardless of timing.

Discussion

Messages about alcohol are prevalent in the storylines of television series (Russell, 2006), and with them the potential to affect viewers' alcohol beliefs. Although the messages sometimes emphasize the risks associated with drinking, pro-alcohol messages, those associating alcohol with positive outcomes, are a means for alcohol advertisers to bypass their own self-imposed regulations (Mosher, 2006) and to operate under the radar of viewers. The continuing presence of such messages in the content of television series such as *The O.C.* or *THM* is of special concern given the series' popularity with young audiences (Posner, 2004). Limiting exposure to positive portrayals of alcohol is an important component of prevention campaigns, and although efforts have been made to reduce alcohol advertisements on television, little has been done to abate alcohol depictions contained in television programming (Jernigan et al., 2005). Product placement is considered a gray area in this respect, and the alcohol industry's strong presence in the entertainment realm is a clear indication that it realizes the potential of these nontraditional forms of advertising its products (Russell and Belch, 2005). As a result, it is important to find mechanisms to counter their influence.

The findings of this experiment indicate that warning viewers about embedded messages in the content of a television series can impact their beliefs about alcohol. Several limitations must be acknowledged. First, findings based on a sample of college students cannot be readily generalized to the entire television viewing audience; therefore, it is important that the findings be replicated in other segments. Although college students provide a homogeneous sample adequate for assessing differences in experimental treatments (Peterson, 2001), they may be more skeptical and resistant to persuasion in general. Second, the experimental procedures employed did not include an assessment of the viewers' own perceptions of the valence of the embedded alcohol messages. Third, the manipulation check for the warnings assessed whether warned participants paid greater attention to the embedded messages and their potential influence but not whether the health and advertising warnings yielded different interpretations. Future studies should thus delve further into the interpretations of and meanings derived from both embedded messages and the warnings surrounding them.

Notwithstanding these limitations, this study provides important qualifiers to previous research findings that showed that warnings can trigger cognitive defense and bias the processing of the subsequent message (Chen et al., 1992). In fact, this study reveals that

several important conditions must be met for the warning to effectively lower viewers' positive beliefs about alcohol and its consequences.

First, warnings about advertising messages in the episode affected only low-connected viewers. Not only did these warnings produce lower positive beliefs about drinking compared with the no-warning condition, but they also produced greater negative beliefs, hence successfully shifting the overall opinion about drinking. However, highly connected viewers, who have developed parasocial relationships with the television characters, were not affected by the advertising warnings. They were also more welcoming of product placements. In fact, not only were highly connected viewers resistant to the warnings in general, but, in the advertising prewarning condition, they demonstrated a reactance effect (Brehm, 1972), with even greater positive beliefs than in the no-warning condition. Therefore, it is important to note the potential for forewarning messages to have the opposite effect on viewers' beliefs than is intended.

Second, even among low-connected viewers, advertising warnings can produce greater negative beliefs about alcohol, but reducing positive beliefs about alcohol requires the right combination of timing and emphasis of the warning. Only the pre-advertising and the post-health message warnings generated significantly lower positive beliefs about alcohol compared with the no-warning condition.

These are interesting findings from a public policy standpoint. Advocates of message warnings should be conscious of the differential impact of forewarning on high- and low-connected viewers. A forewarning about alcohol product placements in a television program, as advocated by Commercial Alert, may effectively reduce the effect of those placements among low-connected viewers, but it will instead increase their impact on highly connected viewers. This suggests that media literacy training, focused on educating viewers about the potential influence of embedded advertising messages, could be a successful strategy for low-connected viewers but that it might backfire for highly connected viewers.

A more effective solution for highly connected viewers appears to be to counteract the effects of embedded messages with postwarnings that emphasize the negative health effects of drinking. Not only would this strategy allow a less diluted message because the health information would not compete with potential embedded pro-alcohol messages, but it would also abate the controversy over the inclusion of anti-alcohol messages in the actual storylines of television series (Berschadsky, 2001; Goodman, 2006). To maximize the chances of viewers actually seeing a postwarning message before switching the channel or turning off the television at the end of a show, postwarning messages could be displayed at the end of the final commercial break, right before the final segment of the program, or in a split-screen format while the final credits roll.

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Figure 1a.
Positive beliefs about drinking after program exposure among low-connected viewers

Figure 1b.
Positive beliefs about drinking after program exposure among highly connected viewers

Figure 2. Negative beliefs about drinking after program exposure. The data were collapsed across timing of the warning because the factor was not significant.