

A qualitative study of college student responses to conflicting messages in advertising: anti-binge drinking public service announcements versus wine promotion health messages

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Abstract

Objectives The purpose of this study was to investigate how college students deal with conflicting health messages in advertising regarding binge drinking and wine promotion.

Method Phenomenological in-depth long interviews were conducted beyond the point of redundancy ($N = 16$).

Results The results of this study indicated that students' meaning making regarding the conflicting messages relied greatly upon how consistent either message was with their prior beliefs about alcohol. Additionally, not all students perceived the messages to be contradictory; these students saw the messages as being constructed for different purposes and as such incomparable. Overall, students who perceived conflict responded to the topic with apathy fueled by advertising skepticism.

Conclusion Employing qualitative methodology to understand how college students respond to conflicting messages

will assist health promotion practitioners develop more effective alcohol abuse prevention messages and provide suggestions for researchers for studying this phenomenon from other perspectives in the future. Implications are further discussed within.

Keywords Binge drinking · Students · Health messages · Contradiction

Introduction

The complex nature of health issues can leave consumers facing conflicting media messages about health behaviors. Advertising messages are consumption oriented, while many health messages often stress consumption restraint. Of particular concern in the present study is how college students deal with conflicting health information they encounter via advertising. College students are in a transitional period as they move from relying on parents to relying on themselves to make important decisions, including healthcare. Alcohol abuse is a serious health threat to young people during the transitional period; thus, this study examines how college students deal with conflicting alcohol health messages.

College students have been identified as an at-risk health population (Brenner and Gowda 2001; Blanco et al. 2008). Binge drinking, the excessive consumption of alcohol in a single episode has been noted as a significant health hazard for college students (White 2006). The frequency of intention to drink for getting drunk and to binge drink have increased among college students (Wechsler et al. 2000). A variety of physical and legal consequences of binge drinking are prevalent on college campuses (Beets et al. 2009; Usdan et al. 2008). Research has substantiated the

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assumption that college students typically engage in risky drinking behaviors to conform to what they perceive to be college norms (Neighbors et al. 2007).

Anti-binge drinking messages

Health campaigns utilizing public service announcements (PSAs) have been launched across college campuses in an attempt to curtail the increasing frequency of binge drinking among college students (Lederman and Stewart 2005; DeJong 2002; Turner et al. 2008). Pilling and Brannon (2007) identified that college students tend to respond positively to PSAs that are more tailored to them as an individual, meaning that positive responsiveness is contingent upon the extent to which students find these messages to be relevant and salient and prompt them to take action (Rimer and Kreuter 2006). Researchers are hopeful that these new campaigns will have an impact on college students' drinking behaviors; however, previous attempts of a similar nature have not been effective at reaching targeted audiences or changing their behaviors (DeJong and Atkin 1995; Foxcroft et al. 2003).

In addition, college students are exposed to alcohol advertisements which emphasize fun, relaxation, and health benefits associated with drinking (Nash et al. 2009). In accordance with social cognitive theory, individuals "exposed to positive portrayals of drinking alcohol are likely to mimic this behavior in hope of reaping the same rewards" (Hust 2006, p. 545), especially younger people who may not be able to differentiate between the reality of drinking consequences and the fantasy portrayed in advertising. Thus, college students simultaneously see anti-binge drinking messages emphasizing the risks of drinking alongside pro-alcohol messages emphasizing healthy benefits of drinking. Few studies have examined the impact these conflicting messages have upon college students.

Rationale

Upon exposure to contradictory messages, audiences are likely to experience depressing emotions and unstable cognition (Vardeman and Aldoory 2008). Covello and Peters (2002) stated that the people tend to consider media sources to be unreliable, responding to oversimplified and contradictory health information with "confusion, hyper vigilance, anxiety, stress, distrust of science and medicine" (p. 392). Being exposed to conflicting drinking messages, college students may also become confused about the messages, which may influence their attitudes and drinking behaviors. The purpose of this study was to examine how college students make meaning of conflicting health message related to drinking, through investigating the

overarching research question: how college students perceive and resolve the contradiction found in alcohol advertising and alcohol use/abuse PSAs? This study aimed to explore college students' drinking behaviors, their interpretations of conflicting messages, and to understand college students' knowledge, experience, and perceptions of the campaigns and health issues. Accordingly, two sub-research questions were proposed:

RQ1: What general responses do college students have toward wine-promoting and anti-binge drinking messages?

RQ2: What influence (if any) do these messages have upon college students' responses or decisions to drink or not, or quit drinking or not?

Method

Participants

Sixteen undergraduate students, eight males and eight females, from a southeastern university whose ages ranged from 21- to 25-years-old participated. Each participant had easy access to a drinking establishment and abundant accessibility to various media including television, radio, and internet.

Based upon participant responses, four of the participants (two males and two females) were non-drinkers. Of the participants who did drink, they reported varied drinking behaviors. Three participants (two males and one female) reported drinking a variety of alcohols (beer, wine, and hard liquor) and drank frequently, two or three times a week. Another nine participants (five males and four females) drank only on special occasions or on the weekend, once or twice per week. Among the weekend/special-occasion drinking group, male participants described drinking beer before football games or at big parties; females described drinking wine with friends when going out for dinner.

Procedure

Interviews were utilized to capture emic, thick descriptions of the participants' logical process of seeing the world (McCracken 1988; see Table 1 for interview guide). Participants were interviewed individually by a primary researcher (non-native English speaker) and a secondary researcher (native English speaker). For the sake of participant comfort, each interview began with relationship-building questions before proceeding into in-depth questions. Participants then were shown several advertising health messages regarding wine promotion and anti-binge

Table 1 Interview guide (Knoxville, TN, 2009)

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1. Please tell me about yourself (major, age, etc.)
 2. Please tell me about your health information-seeking behavior
For example: do you talk about health issues with friends?
*****Show the two alcohol messages*****
 3. Please describe your experiences with the messages of anti-binge drinking or wine promotion/how do you perceive them?
 4. Please tell me about your drinking behavior
 5. To what extent do you know about the dangers and benefits of drinking?
 6. What are your impressions when viewing the two messages concurrently?
 7. Could you comment on across the alcohol ads?
 8. How the ads will help or hinder your understanding of the issues or your future habits?
-

drinking PSAs (see [Appendix](#)). Textual and visual messages were proportionally provided.

Data were analyzed inductively through thematic analysis (Taylor et al. 1996). This inductive method primarily covers searching the transcriptions for themes and categories, constructing a working schema for preliminary cases, and then modifying and validating themes (Goetz and LeCompte 1984). “By engaging in phenomenology’s inductive, open process of discovery, researchers avoid problems associated with hypothetical investigations designed to solicit preconceived findings” (Cornett-Devito and Worley 2005, p. 318). Validity of results is achieved through two steps (Haley 1996). First, the interviews were audio-recorded and then verbatim transcribed to keep the accuracy of data. Second, a draft of the analysis was e-mailed to all participants to ask for their assessment. If unsatisfactory responses were returned, the analysis was adjusted according to the participants’ explanations.

Results

Research question one

Participants were asked to describe their experience with wine-promotion and anti-binge drinking ads and how they perceived these ads. Results reported here focused on students’ opinions in terms of attitudes toward alcohol ads and PSAs, and overlapping themes across alcohol ads and PSAs.

Some participants expressed strong impressions regarding beer commercials seen on TV and gave detailed descriptions of particular commercials. The general perceptions of these wine commercials were *funny* and *clever*.

Beer commercials...I’ve seen a lot of beer commercials. I think they’re funny. (#2)

I like some alcohol ads...because some of them are very clever and tend to use lots of cute animals. (#15)

Additionally, some participants perceived that the wine-promotion messages provided new information, which they had never heard before. They tended to perceive the information to be useful, but not necessarily credible.

When asked about their perceptions of the PSAs they had previously encountered or the PSAs that the researcher showed to them, most of them thought that PSAs got the point across. However, they also expressed that they did not like the message or that the message was not effective, because it was *corny*, *too extreme*, or *overdone*.

That’s pretty corny in my opinion. It makes a good point. There might be a better way of doing it. (#1)

This is intense though... I understand the message it’s trying to put out, but it’s to overdone. This one is crazy. (#2)

Like I think that they push it too far. I mean, just because you drink doesn’t mean you’re going to die, or get poisoned or what not, but of course I don’t agree with it, but I just think some of these are just too far. (#14)

In addition, some overlapping responses have been identified across participants’ responses toward both wine-promotion ads and anti-binge drinking PSAs: the match between participants’ prior belief/behavior and skepticism toward advertising. Evidence of these two themes is offered below.

If participants had experience with the negative effects of drinking (e.g., family or friend drinking problem), they tended to hold a prior belief that there would be no benefits for drinking, which in turn made them suspicious of the wine-promotion message claims. In addition, participants who were non-drinkers also did not trust the health benefits of wine drinking.

One of my daddy’s brothers was an alcoholic and he did a lot of crazy things when he was drunk. It messed up his liver, he had liver problems and it

really messed him up bad.... I've seen commercials like this that wine is good and wine is best tasting wine. But I drink wine sometimes but I don't believe that it does all that. (#9)

Well, because I mean I've seen my friends I mean get alcohol poisoning. I've actually had to take my roommate to the hospital because of alcohol poisoning... I don't know. It's kind of funny...because it actually is pretty catchy once you're poisoned. That's funny... (#6)

When their prior beliefs or drinking behavior were consistent with the wine-promotion messages, they tended to acknowledge the wine-promotion message claims.

I think wine is one of the purest forms of drinking, you know, like you got wheat, you got all this in beer. It's kind of like heavy, so the healthier way to drink is the way I perceive it as and it's ok to have a glass or two at dinner. (#8)

Yes, I've actually heard that if you drink red wine you're less likely to have a heart attack as long as you drink a little every day. Um...I don't, but I definitely can see where that could have some truth behind it because I feel like my mother agrees with that. (#4)

Similarly, participants whose drinking behaviors (non-drinker) or prior beliefs (anti-drinking) were consistent with PSAs perceived the PSAs as good and trustworthy and would be more likely to agree with the PSA message.

I think some people get carried away with the college scene, partying all of the time, but you know...your grades start slipping or you're so dedicated to going out that you lose sight on your goals and what's important in life. I'm not a huge person on going out... I think they're [PSAs] good. (#3)

When participants had no prior knowledge about wine benefits or did not feel the topic related to them, they maintained a neutral response to the message.

I don't really know. I mean, I haven't really researched it. That's hard to say. I mean, I'm sure that it probably does help your heart in some way. I just don't really know what it does to your heart. (#12)

Some participants harshly criticized advertisements as being deceptive, misleading, or pretentious. They suggested that the messages were either trying to hide certain side effects in order to sell the products or had their own agenda.

I don't think they said the bad effects if you drink too much. If it is, then I don't think they portray that.

Attitude toward alcohol ads

1. "Humorous presentation"
2. Advertising serving as a new information provider

Attitude toward PSAs

1. Got the point
2. "Overdone" or "extreme"

Overlapping themes across alcohol ads and PSAs

1. Prior belief/behavior consistent/inconsistent with message claims
2. Typical advertising skepticism

Fig. 1 Sixteen college students' (ages 21–25) attitudes toward alcohol ads and PSAs (Knoxville, TN; 2009)

Versus the alcohol, it tells you all the negative things while the wine thing tells you if you drink a lot you'll have a long healthy life. You can get buzzed off wine. I have. So I don't think it's saying everything or portraying everything. (#10)

It [PSA] just seems like propaganda. (#13)

Also, even when participants admitted to the benefits of drinking wine, they expressed their belief that there was an underlying manipulative purpose behind the advertising. The results are summarized in Fig. 1.

Research question two

Participants were asked to share their impressions when viewing the two messages concurrently. Eleven participants reported that they perceived contradiction. Interestingly, the participants who perceived conflict reported two types of conflicts: message conflicts and cross-conflicts among cognitive and affective judgments. Participants were also encouraged to express how they dealt with the contradiction.

Some participants identified the conflict between the two messages because of the message directions. They noticed that one message emphasized benefits of drinking, whereas the other emphasized the negative effects.

They're kind of contradictory too: drink wine and you'll lead a long and healthy life and over here alcohol is a poison. (#1)

I think this has a negative outlook on alcohol and this has like a positive how it can be good for you and how this is the finest wine with special grapes so it's positive. (#6)

Instead of judging the conflicts based on message claims only, some participants compared the message claims with their own value systems. The interplay among their belief, feelings, and message claims created conflicting feelings. There were two types of conflicts perceived by participants:

agreed conflict and disagreed conflict. When participants believed both sides of the message, they expressed uncertainty toward the two messages, and reported indecision on how to act.

I do trust the information provided, because there have been so many studies done on the benefit of wine... I feel that alcohol could be viewed as a problem for some college aged students. Because there are numerous DUI's passed out and some college students actually have had alcohol poisoning... I feel that these two ads are conflicting and contradictory. (#15)

In terms of disagreed conflict, some participants disagreed with each message claim for personal reasons. Even if they might be aware of both the positive and negative sides of drinking, they considered personal experience and prior beliefs. As they already had internal inconsistency among their cognitions and affections toward the two issues, they tended to engage in cognitive and affective negotiations to attempt to reduce the dissonance by either believing new consonant cognition (drinking is good) or altering the importance of the issue (binge drinking is part of college life, so no big deal).

Yeah, maybe loosened inhabitation [is] sometimes a good thing, stress release would be a good thing from time to time. And I guess those things could be considered good things... over doing it, losing control, I mean to me that's the main problem. I've seen it happen. I've done it myself on occasions... Oh no doubt, yeah, definitely two conflicting messages. (#13)

Showing the wine-promotion and anti-binge drinking messages together made several participants feel confused. They reported different strategies to resolve the perceived contradiction. Some participants reported that confusion motivated them to search for more information from the internet, family, friends, or a medical professional.

I would do research and ask people, and see if they are true. (#11)

I guess I would devote more time to research it and hopefully come to a conclusion. I could talk to my doctor. If there was something that really concerned me I definitely wouldn't hesitate to ask him. (#5)

Instead of seeking more information, some participants tried to seek a middle ground to balance conflicting feelings.

You kind of find a medium where you show maybe drinking is okay and where you also give like the effects it's going to have. Like, pulling them together. (#8)

I think it preaches moderation and responsible drinking because all of these could happen, that's very true, but no one is going to get those problems from one or two drinks. (#4)

Additionally, some participants avoided addressing the conflict. They either chose to *listen to their own conscience* or judged by their own values to avoid confronting the perceived contradiction.

I guess you just have to kind pick your side - like which one you think is a good idea... But, I don't know, I guess you just have to pick your side that you agree with. (#6)

To me, I really don't buy into a lot of any of the messages that come out, cause um, I really, I try to live pretty independent and free thinking on my own. (#13)

Moreover, avoiding involved taking the most effortless strategy. Some participants tried to follow the *positive message*, because the positive message was easier and more pleasant to follow.

One thing I think, it's easier to follow the positive messages... It's easier to go with this it's good for me, it's positive. This is going to make you happier. (#1)

Conversely, five participants found no contradiction because they perceived that the messages were targeting different types of alcohols (wine vs. beer) or different groups of people (older vs. young people), or different quantities of drinking. These findings are summarized in Fig. 2.

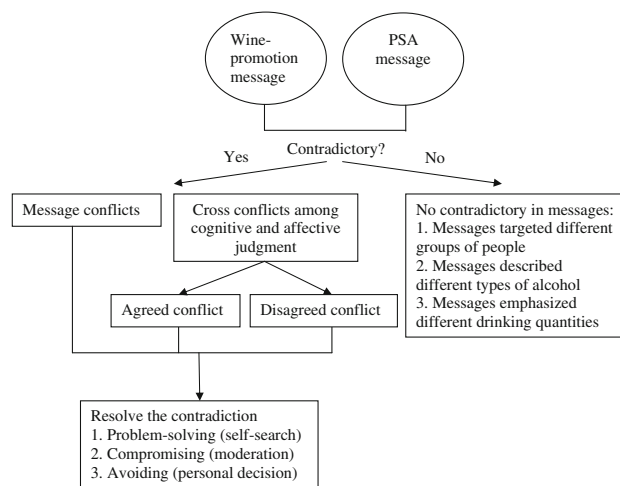


Fig. 2 Sixteen college students' (ages 21–25) responses toward mixed drinking messages (Knoxville, TN; 2009)

Discussion

The study identified how college students with a variety of drinking behaviors make sense of wine promotion and anti-binge drinking ads. In addition, participants held varied opinions toward alcohol ads and PSAs: alcohol ads were *funny* and could provide new information; PSAs delivered the message to audiences, but *push it too far*. Two overlapping themes were identified: participants' responses toward a particular message relied on the match between their prior belief/behavior and message claims; additionally, participants were aware of the manipulative feature of advertising.

When confronted with contradictory alcohol messages, participants perceived different types of conflicts. Their judgment of the contradiction was based on the oppositional claims, or was the result of their cognitive and affective judgments. In addition, when they engaged in cognitive and affective processes to understand the messages, they felt agreed-value conflict if they believed both messages' claims or experienced conflict due to their internal struggle among their cognitive judgment, affective judgment and message claims. Participants then adopted one of three strategies to resolve the conflict: self-search, find a middle ground, or pick one claim to avoid the conflict. On the other hand, some participants reported no contradiction, because they perceived the two messages to be different in terms of targeted audiences, products, and endorsed quantities.

Although this study delved deeply into a variety of sense-making processes, the data were derived through qualitative, in-depth interviews among undergraduates from a single campus. College students are more educated and typically have better problem-solving skills than their non-student peers; therefore college students are not representative of all young adults. As such, the results cannot guarantee generalizability. Additionally, although varied drinking patterns emerged among participants, this study did not examine some personal characteristics, such as tolerance level, that may explain students' varied responses towards the two health messages. Despite the present limitations of the study, a number of theoretical and practical implications can be drawn from the data.

Theoretical consistency

Consistent with cognitive dissonance theory (Festinger 1957), stating that cognitive dissonance is generated when an individual perceives cognitions that are inconsistent

with one another, these findings revealed that the mismatch between participants' prior beliefs/behaviors and a message resulted in dissonance, which generated mixed responses toward the wine-promotion messages, PSA messages, and perceived conflicts. Additionally, students continuously attempted to understand the health issues by comparing their beliefs and feelings with the messages to negotiate between their cognitive and affective elements. Previous studies have provided support for college students' negotiation between their cognitive and affective judgments about binge drinking (e.g., Treise et al. 1999; Wolburg 2001).

Kilman and Thomas (1977) developed an instrument to examine how people handle conflicting situations and identified five conflict-handling modes. Our data revealed that college students, when perceiving conflict, adopted strategies that were similar to three of Kilman and Thomas (1977) conflict-handling modes: problem-solving, compromising, and avoiding.

Practical implications

Participants criticized the PSAs as being too extreme, serious, and scary. Janis and Feshback (1953) found that the extreme attempts made audiences develop strong barriers that led them to ignore the threat. Therefore, extreme negative presentations in binge drinking prevention messages may turn audiences away and thereby fail to achieve the coveted opinion change. In addition, some participants adopted the *avoiding* strategy to deal with perceived conflicts by following positive wine-promotion messages, because the PSAs contained too much negativity. These findings provided support for designing two-sided binge drinking prevention messages that include both positive and negative elements in the message.

As dissonance theory states, people attempt to reduce cognitive dissonance by changing the relative proportions of consonant and dissonant elements (O'Keefe 2002). Thus, binge drinking prevention messages should be aware of this mechanism and prepare well-equipped messages by describing the examples of the possible existing dissonant cognitions about drinking situations in messages. People also tend to reduce dissonance by altering the importance of the issue or the elements involved (O'Keefe 2002). Similarly, Heider's balance theory (1946) proposes that when tensions arise inside people, they attempt to reduce tensions through self-persuasion. Thus, college students can reduce dissonance or restore the balance among cognitive elements by deciding that binge drinking is part of

the college experience. Alcohol abuse prevention messages should capture this tendency in their message design strategy.

Moreover, binge drinking prevention messages should take into account various situational scenarios where people get drunk, damage property, drink alcohol with energy drinks, and engage in drunk driving or unsafe sex to create *specific* claims based on each situation. A reoccurring criticism of PSAs was that the message claims were too broad. The broader the claim, the less it captures real life. Therefore, binge drinking prevention messages should address particular issues or situations. By illuminating the positive aspects of drinking (e.g., taking off stresses, temporarily making social networks active, etc.), it is possible for message recipients to relate these situations to their life and understand the fact that the benefits of excessive drinking cannot outweigh the consequences.

The findings also showed that the perceived advertising skepticism made people doubt the information credibility, but the perceived contradiction motivated people to seek information. Therefore, putting additional credible information sources in the binge drinking prevention messages will not only add credibility but also satisfy people's need to seek credible information to resolve their conflict.

Future research

As aforementioned, this study did not examine personal differences, such as tolerance level, which may have altered participant's perspectives on binge drinking. Future

research should examine potential relationships between these personal characteristics, conflict resolution regarding conflicting messages, and decision making behaviors with regard to binge drinking. Furthermore, when conflict exists between college students and family sources (parents), it would be interesting to study which health value students will follow. In light of preposterous health messages in the media, family members also can be victims who feel confused by conflicting messages. It is expected that the health values can be conflicting among family, media, and medical information, so that future studies should examine those factors.

In all, developers of alcohol abuse prevention messages should recognize that college students' complex structure of understanding and decision-making regarding conflicting drinking messages is based on different levels of negotiation between the advertising claims of health information and students' belief and feeling toward the issue. Moreover, the advertising practitioners should bear in mind that they should call on the target audience to take specific actions which fit with the audience's beliefs and perceptions (DeJong 2002).

Conflict of interest The authors declare that they have no competing interests.

Appendix

Wine promotion advertisements



...the leading IV fat emulsion starts with special soybeans

Special grapes distinguish world-class wines... special soybeans distinguish Intralipid®, the world's most widely accepted IV fat emulsion. And like fine wine, Intralipid soybeans of choice, are grown from a unique balance of climate, soil and carefully planned planting and harvesting.

Complex Climate of Great Vineyards
The highest quality grapes grow only in regions with ideal soils, optimal, gradual temperature changes, winter temperatures rarely fall below -10°C, spring nights never drop to frost levels that can damage vulnerable vines, and summer temperatures rarely rise above 30°C.

Unique soil, location
Selections of time and area that choose vine specific grape varieties, in part, from the influence of the soil and one of the vineyard's.

From such subtleties as position of the vineyard on a slope, altitude of the vineyard, soil angle, soil

enter the quality of the grape—and the wine. In Beaucastel, where grapes are formed by increases of sedimentary layers, vines growing in one layer on a hillside may yield four grapes that vary from a few hundred seeds/stone or less.

Precise harvesting
As harvest time approaches, experts use the appropriate instrument to exactly select the finest grapes will yield the best wine.

The Intralipid Difference: Highest Quality Soybeans
The secret one that makes its special grapes grow into producing the finest, Canadian Grade #1, yellow-green soybeans, from which Intralipid is made.

Unique soybean climate, location
For years, Intralipid has been made only from the finest soybean grown in the special climate of Iowa and Ontario in southern Ontario, Canada, where from May planting to October harvest, Intralipid level soybean plants are easily exposed to temperatures below 30°C or above 10°C. This temperature provides

an ideal growth stimulating temperature and also prevents natural control of disease organisms that can harm soybean quality.

As with grapes, rainfall levels and temperature determine food intake quality. In southern Ontario, where rainfall is consistent throughout the soybean season, growers can make achieve the optimum 13-15% moisture content that characterizes Grade #1 soybeans.

Rich, fertile soil
The soil of southern Ontario contains an optimum mixture of fertile clay, silt and sand. Year-round moisture of such crops as corn, soybeans, peas and wheat allows consistent nitrogen levels and ample trace elements, and encourages the thick cycles of capillary and aeration that might compromise poor growth or nutrition. When soybean growing regions rarely can have of more than one other year-rounding harvest.

Specially level soybeans for IV emulsion
The Canadian growers who produce soybeans for Intralipid have specialized in the development of consistent, high-grade soybeans for more than 50 years. These special soybeans differ from the "crude grade" beans used in the commercial production of cooking oils, margarine, food additives, and as protein products such as soybean concentrate.

Thus, no other IV fat emulsion can be produced the same as Intralipid... because no other fat emulsion starts with the Intralipid.

Intralipid® IV Fat Emulsion
Cutter Medical
Cutter Laboratories, Inc., Boston, CA 9025
Cutter Laboratories, Inc., Boston, CA 9025

"Groundbreaking."
—The Daily Telegraph (UK)

The Red Wine Diet

Drink wine every day and live a long and healthy life

Roger Corder

Contains the latest scientific research

Anti-binge drinking advertisements



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