

# **BRANDED BOOZE IN MUSIC**

## **The Effects of Alcohol Product Placements in Music Videos on Memory, Attitude and Behavior**

**Shefali M. Kapadia**  
American University

**Professor Cristel A. Russell**  
Department of Marketing  
Kogod School of Business

University Honors  
Spring 2013

# Branded Booze In Music

## The Effects of Alcohol Product Placements in Music Videos on Memory, Attitude and Behavior

Shefali M. Kapadia

American University

**ABSTRACT:** References to alcohol and other illicit substances in the media are on the rise. A relatively unexplored medium is the music video. The following study measured the effects of product placements of alcohol in two music videos: Pitbull's "International Love" and Big Sean's "Dance (A\$\$)." Each video was manipulated to create a blurred condition, where the alcohol brand was blurred, and a cut condition, in which the product placement was completely removed, for a total of six possible conditions. The study found the highest brand recall among those assigned to Pitbull's original condition. The results also indicated a greater objection to Big Sean's video. Participants overall expressed a greater likability toward the artist Pitbull and the "International Love" song and video. None of the videos seemed to influence behavior in terms of likelihood to consume alcohol. The results of this study have implications for marketers in terms of effectiveness of product placements in music videos. The results are also useful to those who study the effects of negative themes in the media.

*"Blame it on the goose  
Got you feeling loose  
Blame it on Patron  
Got you in the zone  
Blame it on the a a a a alcohol  
Blame it on the a a a a alcohol  
Blame it on the vodka  
Blame it on the henny  
Blame it on the blue top  
Got you feeling dizzy  
Blame it on the a a a a alcohol  
Blame it on the a a a a a alcohol"*

These words are not in a guidebook on how to cure a hangover, nor are they part of a PSA to deter excessive alcohol use. Rather, they are lyrics from the song "Blame It" by Jamie Foxx. The number of references to alcohol and mentions of alcohol brands in music has been rapidly increasing. A study found that 30 percent of the *Billboard* Top 100 songs in 2008 contained references to drugs, alcohol or both, compared with only 12 percent in 1988 (Christenson, Roberts, & Bjork, 2012). Such messages in the media are likely to influence the attitudes and behavior of listeners (Christenson et al., 2012; Primack, Nuzzo, Rice, & Sargent, 2012). A research study with adolescents in New England found a link

between exposure to alcohol use in movies and alcohol initiation (Dal Cin, Worth, Dalton, & Sargent, 2008). A growing number of studies have concluded that representations of alcohol in mass media “may be among the strongest risk factors for adolescent alcohol use” (Primack et al., 2012, p. 558).

Recent research has shown the correlations between music and youth behavior and attitudes. A particularly strong connection has been observed between popular music and illicit substances, such as alcohol, tobacco and drugs. The average adolescent is exposed to several hours of music each day. Popular music “has emerged as the most frequent alcohol-related media exposure,” with an average of 13.7 instances of alcohol use per song hour (Primack et al., 2012, p. 558). Studies have shown that the frequency of alcohol references in music and normalcy of its portrayal influences listeners’ beliefs about alcohol. Christenson et al. (2012) found “strong evidence linking exposure to substance messages in music and music videos” with attitudes and behavior toward alcohol (p. 122). When viewers are exposed to the presence and consumption of alcohol in music videos, they may not only see substance use as normative, but also be encouraged to initiate behavior relating to the substance (Gruber, Thau, Hill, Fisher, & Grube, 2005).

## **PREVIOUS RESEARCH**

### **Theoretical frameworks**

#### *Social learning theory*

Researchers draw on social learning theory as an important framework for assessing the impact of alcohol messages and other illicit substances in music videos on viewers. Social learning theory posits that people develop attitudes toward certain behaviors based on their observations of the lives of celebrities, public figures or fictional characters depicted in the mass media. People often use the same products that characters use because they identify with them and want to have their same desirable characteristics (Balasubramanian, 1994). Seeing health risks and problem behaviors in the media desensitizes viewers, causing them to acquire a more positive attitude and the possible initiation of these behaviors (DuRant et al., 1997).

With respect to music videos and alcohol, someone who sees several instances of partying and alcohol usage may begin to think such behavior is acceptable and mainstream. The videos often serve as a source of information for the prevalence and function of alcohol in society (Dal Cin et al., 2008). Exposure to celebrities engaging in this behavior can cause viewers to acquire a more positive attitude about alcohol use and “emulate the substance use of these mass media models” (Gruber et al., 2005, p. 81).

Social learning theory becomes particularly evident when the scene involving alcohol has a positive feel. Research shows that the portrayal of substance use is more often positive than negative. An assessment of several music videos found that 76.9 percent of scenes containing alcohol use had a positive emotional tone (DuRant et al., 1997). The consumption of alcohol in music videos is “more likely to be celebrated than condemned” and is shown as fun and consequence-free (Christenson et al., 2012, p. 123). The scenes with alcohol were often linked to wealth, sex, popularity and partying; problems with

addiction or seeking treatment were rarely addressed (Christenson et al., 2012, Primack et al., 2012).

Product placements are particularly of note when discussing social learning theory. Marketers want to ensure that their product is placed in a positive environment that creates a good experience for viewers. In comparison with unbranded alcohol references, the branded references were even more commonly associated with positive social and sexual consequences (Primack et al., 2012). Product placements of alcohol are frequently luxury distilled spirit brands, which are associated with a wealthy, sexual and partying lifestyle, all of which are strongly desirable traits for viewers (Primack et al., 2012).

### *Narrative transportation theory*

Just as does social learning theory, transportation theory “provides a theoretical framework for understanding the persuasive effects of entertainment media” (Green & Clark, 2012, p. 477). Transportation theory assesses the impact of a narrative on one’s thoughts, attitudes and actions. Narrative does not only imply a written text; television shows, movies and music videos each contain a story or narrative that viewers follow. The level of transportation “describes the degree to which a person is in the experience” (Jensen, Imboden, & Ivic, 2011, p. 546). Past research has explored the persuasive impact of media for those who integrate themselves “into the world of the narrative and [become] involved with its protagonists” (Green & Brock, 2000, p. 701).

Research has shown that transportation into a narrative can have effects on memory and attitude. Green and Clark (2012) wrote that attitude change through transportation occurs in four ways:

1. Reducing counterarguing
2. Increasing connections with characters
3. Increasing perceptions of realism
4. Heightening emotional experience

When considering alcohol in music videos, viewers who are greatly transported into the narrative may lose sight of the negative consequences of their behavior. Research found that a viewer “loses access to real-world facts in favor of accepting the narrative world” (Green & Brock, 2000, p. 702). As previously stated, music video scenes with alcohol are shown more often in a positive light than a negative one. A viewer immersed in the world of the video is likely to forget or ignore the negative consequences of drinking alcohol. Rather, the viewer will accept the reality of the narrative’s world and associate drinking alcohol with such attributes as sex and wealth. Green and Brock (2000) describe this psychological theory as “a subjective distancing from reality” (p. 702).

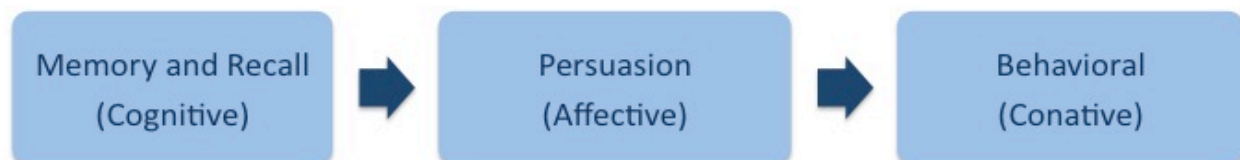
Because immersion into a narrative has shown to have such an impact on attitude change, marketers are likely to use product placements to take advantage of transportation effects (Green & Clark, 2012). Although studies on transportation have shown its effects on attitude, it is still unknown whether it can also impact a viewer’s behavior.

## Effects of product placements

With advertisers and marketers frequently searching for new ideas of how to gain product exposure, the use of product placement has skyrocketed in the last few years. Approximately 8.25 billion dollars were spent worldwide on product placements in 2012 – an increase of 2 billion dollars since 2009 (PQ Media, 2012). The most persuasive product placements integrate the product into the plot and involve the characters. When consumers perceive the product to be part of the lives of the characters, “it may lead to less counterarguing and ‘internal zapping’ – tuning out mentally” (Auty & Lewis, 2004, p. 699). This method could potentially remove the inherent bias that many consumers have to advertisements. The balance of being subtle yet not too subtle is key in determining the effectiveness of product placements.

Along with the growing advertising trend is an extensive amount of research related to product placements and their effects on consumers. While studying the effects, most researchers have used placements appearing in movies or television shows. Yet marketers have begun to integrate product placements into a great deal of new media, including video games, books and music videos. Due to their nature, music videos face far fewer government regulations than a network TV program or movie in the U.S. does. TV shows and movies have restrictions and receive ratings based on content. Yet music videos are available on YouTube for a wide range of audience to view.

Past studies have investigated the effects of product placements on consumers’ ability to recall a brand, the brand attitude and even behavior, in terms of likeliness to purchase or use a particular product. To assess the impact of product placements, researchers must look at three levels (Balasubramanian, 1994):



Until 2002, empirical studies of product placements measured effectiveness in terms of memory and recall (Russell, 2002). Yet it is important to assess all three levels, as they do not necessarily correlate with each other in an expected fashion. A consumer may recall a brand, but that does not necessarily mean he or she feels positively about the brand or is inclined to consume the product. Research has shown that the relationship between memory and attitude is not necessarily linear or straightforward (Russell, 2002). Thus, we must investigate the impact of product placement on memory, attitude and behavior in order create a full assessment of effectiveness.

### *Memory and recall*

As previously mentioned, brand memory and recall have been used the most frequently in measuring the effectiveness of a product placement. Past research has identified several

variables that affect recall. The physical placement of the product is a large factor. Researchers have divided visual product placements into two categories:

1. "On-set" placements are obviously displayed in the foreground
2. "Creative" placements are in the background of the main plot action (Balasubramanian, Karrh, & Patwardhan, 2006, p. 125)

Auty and Lewis (2004) noted that brand recognition and recall is better for a prominently placed product rather than one that appears in the background. Products that are simply part of a TV or movie set are less likely to be recalled than products that appear in the foreground. Even greater brand recall is generated when a product placement is paired with a character (Balasubramanian et al., 2006). The integration into the plot and interaction between the product and the character have shown to elicit the strongest brand recognition.

The nature of the product placement has also been shown to affect brand recall. A number of studies found that memory and recall were greater when the stimulus was spoken instead of being visually presented (Russell, 2002). Balasubramanian et al. (2006) confirmed that unaided recall was significantly higher when the placement was a "visual-plus-verbal message," compared to a stand-alone visual message (p. 126). From this research, it is evident that the most effective product placement for brand recall is an audio-visual placement. In addition, an audio mention of the brand without a visual depiction produced a higher recall than a visual placement without audio reinforcement (Balasubramanian et al., 2006). Thus, audio-visual placements generate the highest brand recall, followed by audio-only placements. Visual-only placements show the lowest brand recall.

In addition, familiarity with the plot or medium can affect recall. If consumers are familiar with the context, they "may be able to devote more attention to background details rather than attending to the plot" (Auty & Lewis, 2004, p. 702). Following this proposition, those who have seen a particular TV show, movie or music video several times may have a higher brand recall.

One additional factor affecting brand recall is a concept known as the von Restorff effect. This theory posits that something distinctive presented among a series of "homogenous items" will trigger memory and increase recall (Pick, Sweeney, & Clay, 1991, p. 924). Unfamiliar stimuli attract greater attention because they are incongruent with expectations (Balasubramanian et al., 2006). If a person is watching a video and does not expect a brand to appear, that person may be surprised and thus be more likely to later recall the brand. This effect shows that memory can be affected by a surprise factor (Balasubramanian, 1994).

### *Attitude*

Although fewer in number than those measuring recall, some studies have attempted to determine product placements' effects on brand attitude. As with recall, the context of the product placement is important for creating a positive effect on attitude. Marketers want to be sure to avoid a "negative paired-association that can damage a product's image"

(Balasubramanian, 1994, p. 38). Although a negative association could contribute to higher recall, it will also adversely affect brand attitude and potentially behavior.

In addition to the setting of the product placement, its relation to a character is important in positively affecting brand attitude. Product placements are “more effective when the featured brand is paired with a character who displays one or more desirable traits,” (Homer, 2009, p. 22). When the character using the product is seen as likable, brand attitude is also more favorable.

In regards to audio versus visual placements, the effects on attitudes strongly contrast the effects on memory. While recall is higher for audio placements, “well-integrated but visual-only placements appear to be more persuasive in changing attitudes” than audio placements (Auty & Lewis, 2004, p. 699).

### *Behavior*

Among the three levels, effects of product placement on behavior, including purchase behavior and likelihood to use or consume the product, are the least studied in past research. Perhaps this is related to difficulty in creating a study that can accurately predict behavior. Auty and Lewis (2004) researched the effects of product placements in films on children’s behavior. The results of the study showed “a clear effect of product placement upon children’s incidental choice of drink” (p. 708). Yet this is just one experimental design; further studies need to be conducted in order to establish a more definitive connection between product placements and their effects on behavior.

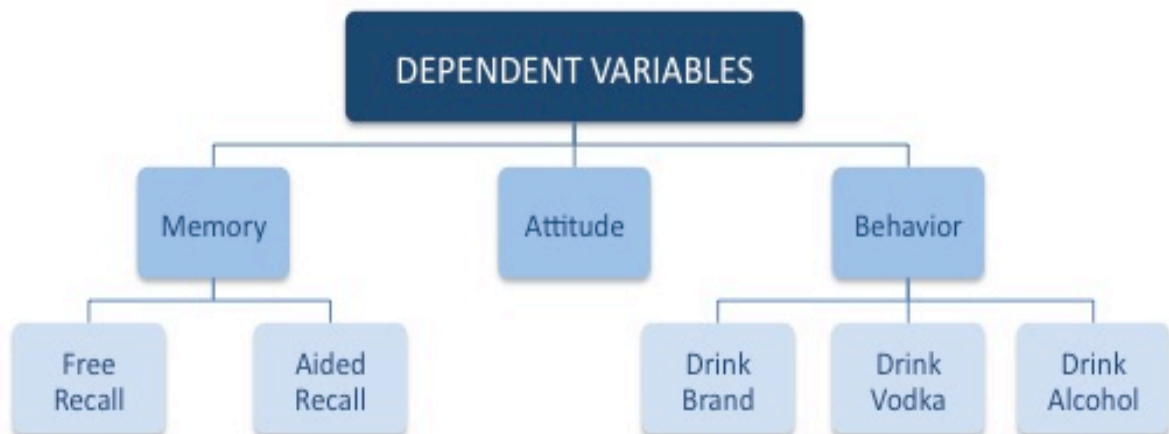
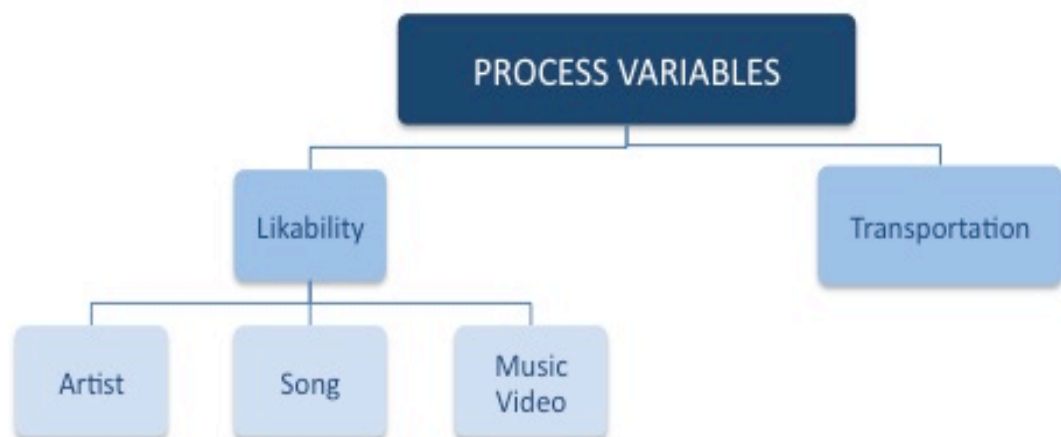
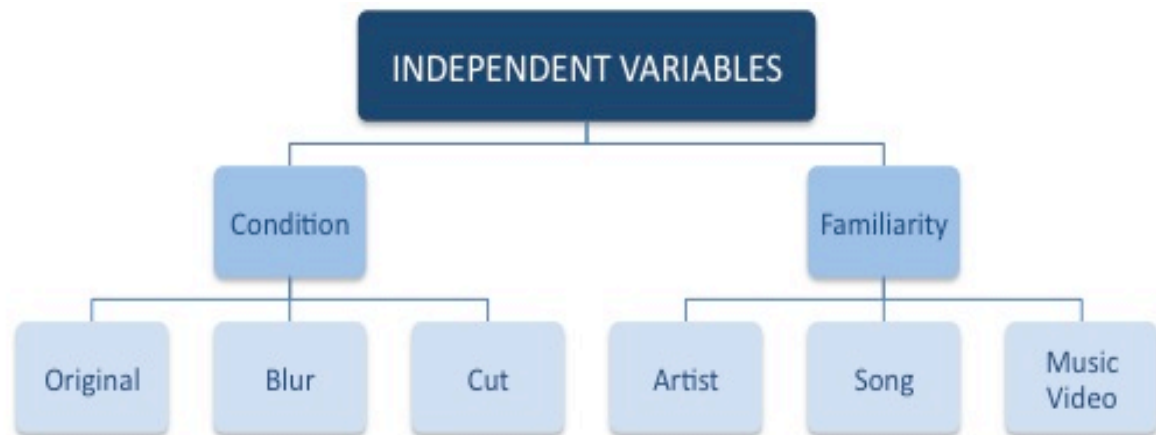
### **Reasons for research**

Despite the extensive research conducted over the last few years regarding product placement in movies and television shows, studies regarding product placements in music videos are quite rare. Music videos are continuing to grow in popularity, as are the product placements in them. Studies need to assess how this media outlet differs from television and movies. These “unexamined media vehicles provide fertile ground” for understanding the effects of products placements as a whole (Russell & Stern, 2006, p. 16).

Product placements of alcohol have also not been thoroughly researched. Some studies have shown that viewers react more negatively to placements in ethically charged settings, such as those involving alcohol, tobacco or drugs (Russell, 2002). The effects of alcohol product placements on attitudes and behavior are important in understanding reasons for risky alcohol behavior. The following study will address these issues.

### **HYPOTHESES**

The chart on the following page explains the variables used in the study. Several hypotheses were derived from the chart.





### *Hypothesis 1: Condition and recall*

If the participant watches the original condition, in which the alcohol brand appears, then there will be high aided and free recall of the branded vodka. If the participant watches the blurred condition, in which only the alcohol bottle appears but the brand is blurred, then there will be high aided and free recall of vodka and alcohol, but low recall of the branded vodka. Because of the von Restorff effect, we hypothesize that the blurred effect will draw attention and surprise participants, thus creating a high recall of some type of vodka or alcohol but not the specific brand name. If the participant watches the cut condition, in which no alcohol appears, then there will be low aided and free recall of the brand, vodka and alcohol.

### *Hypothesis 2: Condition and attitude*

If the participant watches the original condition, in which the alcohol brand appears, then there will be a more negative attitude toward product placements. If the participant watches the blurred condition, in which only the alcohol bottle appears but the brand is blurred, then there will be a more positive attitude toward product placements. If the participant watches the cut condition, in which no alcohol appears, then there will be a more positive attitude toward product placements.

### *Hypothesis 3: Condition and behavior*

If the participant watches the original condition, in which the alcohol brand appears, then there will be a greater likelihood to want to drink the brand of vodka (Voli or Grey Goose). If the participant watches the blurred condition, in which only the alcohol bottle appears but the brand is blurred, then there will be a greater likelihood to want to drink vodka, but not the specific brand.

### *Hypothesis 4: Gender and objection*

The primary artists of both music videos are males, and many of the visuals in the videos portray women as subordinate, sexual objects. Due to the nature of these themes, we hypothesize that if the participant is female, then there will be a greater objection to the music video in all video conditions.

### *Hypothesis 5: Transportation and behavior*

If the participant watches the original condition, in which the alcohol brand appears, and has a high transportation score, then there will be a greater likelihood to want to drink the branded vodka, vodka and alcohol. If the participant watches the blurred condition, in which only the alcohol bottle appears but the brand is blurred, and has a high transportation score, then there will be a greater likelihood to want to drink vodka and alcohol, but not the specific brand of vodka.

## METHOD

The background for this project began with an analysis of the content and lyrics of Top 40 Music Videos for the week of February 26, 2012. The preliminary study looked for visual indications of alcohol and tobacco, and analyzed lyrics for references to alcohol, drugs and tobacco. The study found that two songs' lyrics referenced marijuana. One video showed an image of cigarettes, and ten videos had images of alcohol. In total, five of the forty videos contained product placements of an alcohol brand (Kapadia, 2012).

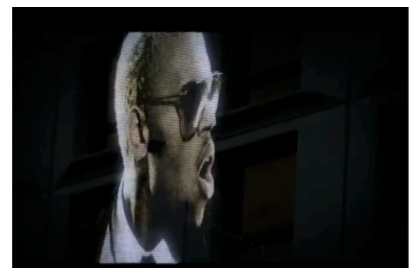
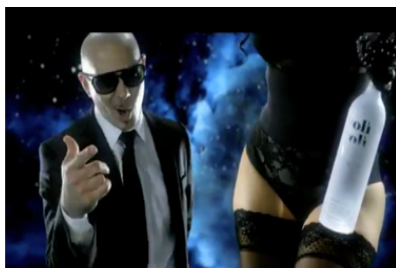
Two videos were selected from the five: Big Sean's "Dance (A\$\$)" and Pitbull's "International Love." Both videos contain a primary and secondary artist. In "Dance (A\$\$)," Big Sean is the primary artist and Nicki Minaj is the secondary artist. In "International Love," Pitbull is the primary artist and Chris Brown is the secondary artist.

Big Sean's video contains product placements of Grey Goose Vodka. At 0:42 and 3:30, a woman in the music video pours Grey Goose Vodka into a glass. At 3:05, a faded image of a Grey Goose Vodka bottle appears in the foreground. Pitbull's video contains placements of Voli Vodka. At 1:41 and 1:53, a woman holds a bottle of Voli Vodka in the foreground. At 2:03 and 2:06, she pours Voli Vodka into a glass.



*Screenshot of Pitbull's "International Love" video at 2:06*

In order to test the effectiveness of the product placements in terms of memory, attitude and behavior, the two selected music videos were manipulated using the video editing software Final Cut Pro 7. Each video was manipulated into two different versions: a cut version and a blurred version. In the cut version, any frame showing the product placement was removed and replaced with another frame from the music video. Thus, participants assigned to a cut condition of either music video saw no Grey Goose or Voli Vodka bottles. In the blurred version, brand names were blurred out so that viewers can see a bottle that clearly resembles vodka or alcohol but no brand is evident. The manipulations created in total six different conditions: the original, the blurred and the cut for each music video.



*Screenshots of Pitbull's "International Love" video at 1:41*

*(From left to right: original condition, blurred condition, cut condition)*



Screenshots of Big Sean's "Dance (A\$\$)" video at 0:42  
 (From left to right: original condition, blurred condition, cut condition)

## Sample

Participants included a selection of 288 university students enrolled in either MKTG 250 or MKTG 300, two introductory level marketing classes at American University. A description of the study was sent to the professors and students in the marketing classes. These students are required to participate in a study in order to receive class credit. The students were told that they would be assigned a 5-digit ID that does not link back to their personal information, and their survey answers would be anonymous. The participants were asked to indicate their age, race and gender on the survey.

There were 144 participants who identified as male, 138 who identified as female, and 6 who did not select a gender. The majority of participants were born between the years 1987 and 1994, thus making them ages 18 to 26 during the time of the study. Less than two percent of participants reported being born before 1987. About 70 percent of participants described their race as White.

## Study

The students participated in the study in the Kogod Behavioral Lab at American University. Several weeks prior to the study, students were asked to fill out a few pre-screen questions regarding their drinking habits. The participants were asked:

1. How often have you had one or more whole drinks (not just a sip or taste) of an alcohol beverage (i.e., beer, wine, wine cooler, or liquor)?
2. On how many days in the past 30 days have you felt drunk?
3. On how many days in the past 30 days did you have 5 or more whole drinks in a row?

The results from the pre-screen questions found that 21.1 percent of the participants had not had any alcohol in the past 30 days. Previous drinking was used as a control variable in the analyses with drinking-related dependent variables.

Upon arriving to the Behavior Lab, the participants were provided a computer and set of headphones to complete the study. The participants were seated at individual computer stations separated by cubicle dividers so that they could not see other students' computer screens. The participants were randomly assigned one of the six conditions. They

were then asked to watch the music video and answer survey questions regarding their reactions to the music video and their drinking habits.

The participants were asked to rate on a scale their familiarity with the song, artist and music video. They were asked a series of questions regarding their attitudes toward the primary and secondary artists. Six questions asked about a positive attitude toward the artist ( $\alpha = .88$ ) and two questions about a negative attitude toward the artist ( $\alpha = .83$ ). Because of profanity and other content that may be viewed as offensive, we asked five questions regarding a positive attitude toward the video ( $\alpha = .885$ ) and four questions measuring participants' objection to the video ( $\alpha = .904$ ). The participants were asked six questions about their immersion and transportation into the video ( $\alpha = .918$ ). Three questions each assessed participants' positive attitude toward the product placements in the video ( $\alpha = .828$ ) and negative attitude ( $\alpha = .878$ ). They were also asked three questions about how likely they were to drink alcohol in the next month ( $\alpha = .947$ ). Participants were asked how much they liked the song, their likelihood to drink vodka and their likelihood to drink specific brands of vodka. In addition, we measured their free recall (open ended) and aided recall (recognition) of brands they observed during the music video.

## RESULTS

### Pre-existing attitudes toward artists and songs

#### *Familiarity*

After watching the music videos, participants reported their familiarity and attitudes toward the artists and songs in the videos. The results show overall that participants were significantly more familiar with the artist Pitbull and his song "International Love" than with the artist Big Sean and his song "Dance (A\$\$)." Despite being more familiar with Pitbull and his song, participants were equally unfamiliar with both music videos. On a scale of one to five for familiarity, participants averaged a score of 1.788 and 1.750 for familiarity with the music videos. This is a good finding, as it makes it unlikely that participants would notice the manipulations to the videos.

**TABLE A1**

<b>Familiarity with Primary Artist (artist, <math>p=.000</math>)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	3.442	3.588	3.723
Big Sean/Nicki Minaj	3.021	2.959	2.880

**TABLE A2**

<b>Familiarity with Secondary Artist (not significant)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	3.577	3.725	3.745
Big Sean/Nicki Minaj	3.771	3.490	3.575

**TABLE A3**

<b>Familiarity with Song (artist, p=.043)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	3.212	3.569	3.277
Big Sean/Nicki Minaj	3.229	2.959	3.100

**TABLE A4**

<b>Familiarity with Video (not significant)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	1.788	1.824	1.553
Big Sean/Nicki Minaj	1.750	1.776	1.850

*Attitude*

In addition to being more familiar with Pitbull, participants revealed a significantly more positive attitude toward Pitbull than Big Sean, and a significantly more negative attitude toward Big Sean than Pitbull. Participants also said that they like the song “International Love” more than the song “Dance (A\$\$)” ( $p=.006$ ).

One odd finding is the mean result of Negative Attitude Toward Secondary Artist. In this variable, participants were asked two questions regarding their dislike of either Chris Brown or Nicki Minaj. Participants reported a significantly more negative attitude toward Nicki Minaj, but only in the cut condition of the video. We are unsure as to why this particular condition yielded more negative attitudes toward the secondary artist in comparison to the other conditions.

**TABLE A5**

<b>Positive Attitude Toward Primary Artist (artist, p=.000)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.391	2.340	2.431
Big Sean/Nicki Minaj	2.069	2.085	1.838

**TABLE A6**

<b>Negative Attitude Toward Primary Artist (artist, p=.039)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.250	2.363	2.281
Big Sean/Nicki Minaj	2.458	2.469	2.763

**TABLE A7**

<b>Positive Attitude Toward Secondary Artist (not significant)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.013	2.242	2.524
Big Sean/Nicki Minaj	2.135	2.204	2.025

**TABLE A8**

<b>Negative Attitude Toward Secondary Artist (artist * video, p=.020)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.731	2.471	2.344
Big Sean/Nicki Minaj	2.208	2.571	2.738

**TABLE A9**

<b>Likability of Song (artist, p=.006)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	3.288	3.137	3.511
Big Sean/Nicki Minaj	2.917	2.878	2.800

### **Responses to the music videos**

In terms of responses to the music videos, the measures show that participants held a significantly more positive attitude toward Pitbull's "International Love" video, and significantly more objection to Big Sean's "Dance (A\$\$)" video, which aligns with their attitudes toward those artists.

Due to some of the images and references made in the videos, it is possible that gender could play a role in objection to the video. We hypothesized that females would have more objection to the videos than males because of the way women are shown and portrayed in both videos. Although the females reported slightly higher objection scores, no significant differences were found regarding objection between males and females.

**TABLE B1**

<b>Positive Attitude Toward Video (artist, p=.012)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	3.962	3.824	3.927
Big Sean/Nicki Minaj	3.319	3.510	3.360

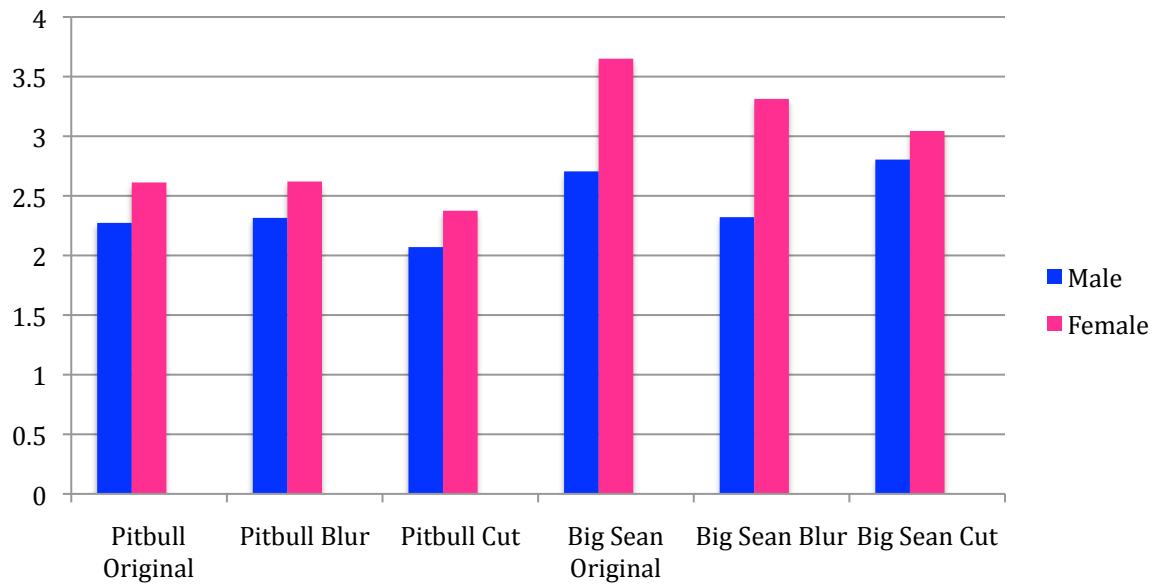
**TABLE B2**

<b>Objection to Video (artist, p=.000)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.457	2.500	2.239
Big Sean/Nicki Minaj	3.203	2.755	2.906

**TABLE B3**

<b>Objection to Video by Gender (not significant)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	Male: 2.273 Female: 2.612	Male: 2.315 Female: 2.620	Male: 2.070 Female: 2.375
Big Sean/Nicki Minaj	Male: 2.705 Female: 3.650	Male: 2.321 Female: 3.313	Male: 2.804 Female: 3.044

### Objection to Video by Gender



The mean transportation score into the videos was significantly higher for Pitbull's video than for Big Sean's. However, both transportation means were relatively low. Participants were asked six questions regarding their narrative transportation into the video, on scales of one to seven. For both videos, means ranged from two to four. Thus transportation into the music video overall was low.

**TABLE B4**

Transportation (artist, $p=.008$ )			
	Original	Blur	Cut
Pitbull/Chris Brown	3.506	3.428	3.194
Big Sean/Nicki Minaj	2.597	2.830	2.571

### Memory of product placements

#### *Free recall*

Free recall of brands varied greatly among the different video conditions. Nearly 30 percent of participants who watched the original version of Pitbull's video were able to recall that Voli Vodka appeared in the music video. In contrast, the remaining five conditions had no free recall of this brand, which is logical since it did not appear. Almost 15 percent of participants assigned to Big Sean's original video were able to recall Grey Goose Vodka. Small percentages of participants (less than six percent) recalled Grey Goose Vodka in video conditions where the brand was not shown.

As noted earlier, more than 20 percent of the participants identified themselves as non-drinkers. Perhaps had the study involved only participants who drink alcohol, there might have been more familiarity with alcohol brands and thus a higher free recall of the brands in the music videos.

**TABLE C1**

<b>Free Recall of Voli Vodka (all factors, p=.000)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	28.8%	0%	0%
Big Sean/Nicki Minaj	0%	0%	0%

**TABLE C2**

<b>Free Recall of Grey Goose Vodka (artist, p=.019; video * artist, p=.024)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	0%	5.9%	0%
Big Sean/Nicki Minaj	14.6%	4.1%	5.0%

In addition to recall of the brands, we analyzed participants' free recall of vodka and alcohol overall. The analysis of vodka recall included the two brands appearing in the videos, as well as other vodka brands, such as Smirnoff and Absolut, and just the word "vodka." Free recall of vodka was still highest among the original videos. In the original condition videos, 48.1 percent assigned to Pitbull and 25 percent assigned to Big Sean recalled vodka. The free recall of alcohol included any brand of alcohol, such as Grey Goose Vodka, any type of alcohol, such as beer, and the word "alcohol." The highest recall was in Pitbull's original condition, with 59.6 percent.

The lowest recalls of vodka and alcohol occurred in Pitbull's cut condition. Only 2.1 percent of participants in Pitbull's cut condition recalled vodka, and 6.3 percent recalled alcohol. Big Sean's blurred condition also had a low recall of vodka and alcohol, with 8.2 percent.

A surprisingly large percentage (17.5 percent) of participants assigned to Big Sean's cut condition recalled seeing vodka in the video, even though all frames including a vodka bottle were eliminated from the video. In addition, 22.5 percent of these participants recalled seeing some type of alcohol. Big Sean's song and video allude many times to partying and drinking. There are several images of red cups, and words referencing alcohol appear in the video. Perhaps the themes in this video lead many of the participants to believe that they were seeing a vodka bottle or alcohol, when in fact they did not.

**TABLE C3**

<b>Free Recall of Vodka (video, p=.000; video * artist, p =.002)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	48.1%	15.7%	2.1%
Big Sean/Nicki Minaj	25.0%	8.2%	17.5%

**TABLE C4**

<b>Free Recall of Alcohol (video, p=.000; artist, p=.044; video * artist, p=.000)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	59.6%	17.6%	6.3%
Big Sean/Nicki Minaj	25.0%	8.2%	22.5%



Upon reviewing the results, we found that many participants assigned to Big Sean's condition noted Michael Kors as a brand in the free recall. Nicki Minaj sings repeatedly about the fashion designer and brand Michael Kors. However, no Michael Kors products actually appear in the video; this is only an audio mention of the brand. 14.6 percent of participants assigned to the original condition recalled the brand Michael Kors. Interestingly, this is the same percentage that recalled Grey Goose Vodka. The manipulations in the blurred and cut videos did not affect the placement of Michael Kors. Thus, there are no significant differences between the video conditions.

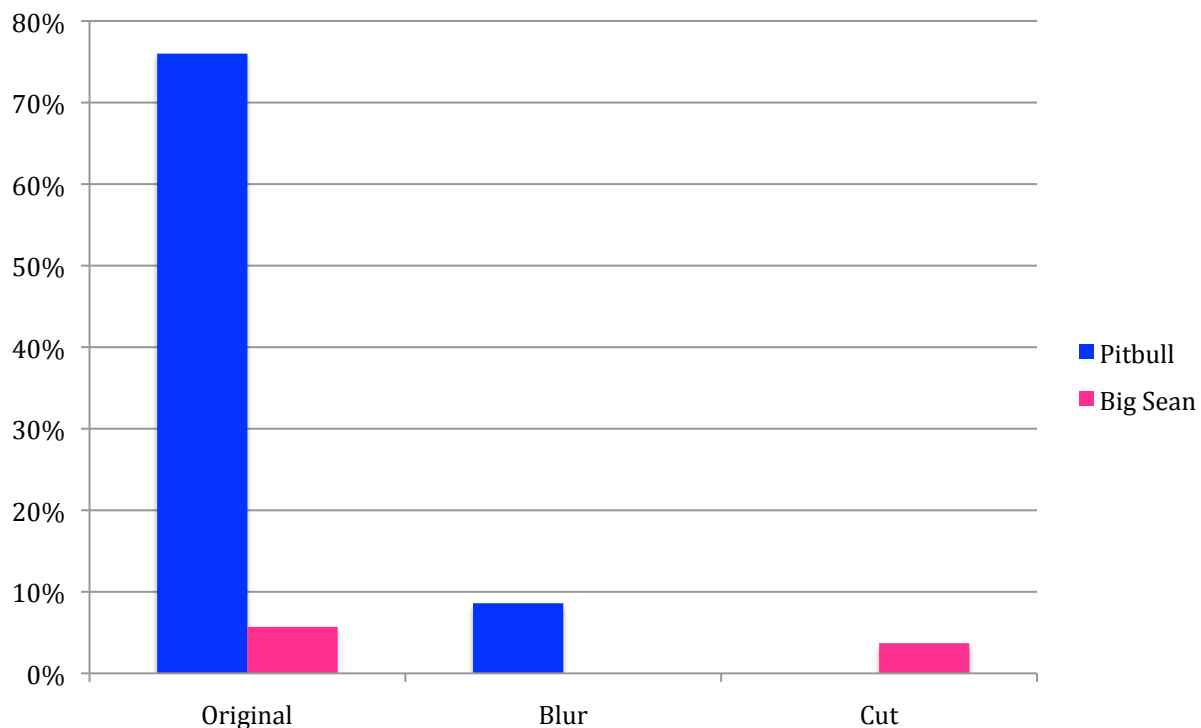
**TABLE C5**

<b>Free Recall of Michael Kors (artist, p=.000)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	0%	0%	0%
Big Sean/Nicki Minaj	14.6%	10.2%	10.0%

*Aided recall*

Among participants assigned to the original condition, 76.6 percent were able to recall Voli Vodka in Pitbull's video. Only 8.6 percent thought they saw Voli Vodka in the Pitbull blurred condition, and 3.7 percent in the Big Sean cut condition.

***Aided Recall of Voli Vodka***



The aided recall of Grey Goose Vodka was not as clearly defined as Voli Vodka. Participants assigned to the original condition had a 52.6 percent recall of Grey Goose Vodka in Big Sean's video. Among those assigned to Big Sean's blurred condition, 26.5 percent recalled seeing Grey Goose Vodka, and 35.7 percent reported seeing it in the cut condition. As stated earlier, the false recall of Grey Goose Vodka could possibly be due to alcohol-related themes present throughout the video.

Some participants assigned to Pitbull's video also recalled Grey Goose Vodka. In the original condition, 23.7 percent reported seeing Grey Goose Vodka, 30 percent in the blurred condition and 21.6 percent in the cut condition. It is possible that the participants were more familiar with the brand Grey Goose than Voli, and they mistakenly took the blurred vodka bottle to be of a different brand. Overall, however, there was still a significantly higher aided recall of Grey Goose Vodka among the Big Sean videos than the Pitbull videos.

**TABLE C6**

<b>Aided Recall of Grey Goose Vodka (artist, p=.038)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	23.7%	30.0%	21.6%
Big Sean/Nicki Minaj	52.6%	26.5%	35.7%

## **Attitudes and behavior toward the practice of product placement**

### *Attitudes*

In contrast to many of the previous trends we have observed, participants had a significantly more positive attitude toward the product placements in Big Sean's video as compared to Pitbull's. The attitudes also varied significantly by condition. Attitudes toward product placements were most positive in the blurred conditions. Attitudes were most negative in the original conditions. The visible presence of brand names in the video is likely to negatively affect attitudes toward product placements. On the other hand, blurring a brand in the video may actually increase the positive attitude toward product placements, as it shows viewers that the video is not commercialized and trying to sell them something.

**TABLE D1**

<b>Positive Attitude Toward Product Placement (video, p=.004) (artist, p=.086)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.276	2.660	2.333
Big Sean/Nicki Minaj	2.475	2.844	2.483

**TABLE D2**

<b>Negative Attitude Toward Product Placement (video, p=.032)</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.571	2.209	1.993
Big Sean/Nicki Minaj	2.291	2.088	2.200

## *Behavior*

After watching the music videos, participants proved no more likely to want to drink alcohol, vodka or a specific brand of vodka than they reported in the pre-screen. Although the results were not significant, participants assigned to Pitbull's original condition reported a slightly greater desire to drink alcohol than those assigned to Pitbull's blurred or cut conditions. This pattern also applies to the likelihood to drink vodka and likelihood to drink Voli Vodka.

Big Sean's music video appears to have the opposite effect. Those assigned to the cut condition reported the greatest likelihood to want to drink alcohol, vodka and Grey Goose vodka. As mentioned earlier, this is likely due to the nature and themes in the video. With both artists, the likelihood to drink alcohol was lowest in the blurred conditions.

**TABLE D3**

<b>Likelihood to Drink Alcohol (alcohol1, <math>p=.000</math>; alcohol2, <math>p=.004</math>) Controlled for pre-screen questions on drinking behavior</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	4.980	4.724	4.779
Big Sean/Nicki Minaj	5.003	4.925	5.014

**TABLE D4**

<b>Likelihood to Drink Vodka (alcohol1, <math>p=.000</math>) Controlled for pre-screen questions on drinking behavior</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	3.356	3.204	3.226
Big Sean/Nicki Minaj	3.325	3.038	3.575

**TABLE D5**

<b>Likelihood to Drink Voli Vodka (not significant) Controlled for pre-screen questions on drinking behavior</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	1.456	1.230	1.342
Big Sean/Nicki Minaj	1.465	1.342	1.513

**TABLE D6**

<b>Likelihood to Drink Grey Goose Vodka (alcohol1, <math>p=.000</math>) Controlled for pre-screen questions on drinking behavior</b>			
	Original	Blur	Cut
Pitbull/Chris Brown	2.387	2.579	2.570
Big Sean/Nicki Minaj	2.631	2.460	2.825

## DISCUSSION

### Main findings and implications

The purpose of this research was to assess the impact of alcohol product placements in music videos on viewers' memory, attitude and behavior. The study used the cut conditions of the videos as a control to compare to the original and blurred versions. The results overall showed greater likability and a more positive attitude toward Pitbull and his video "International Love." In addition, participants had a higher recall of the branded products in Pitbull's video. They also had a higher recall of vodka and alcohol in general. In contrast, participants reported lower likability and more negative attitudes toward Big Sean and his video "Dance (A\$\$)."

Many of our hypotheses were proven true by the results of the study. Participants who watched the original conditions of the videos had higher free and aided recall of either Voli Vodka or Grey Goose Vodka than those who watched the blurred and cut conditions. The participants assigned to the original conditions also recalled vodka and alcohol more frequently than those in the blurred and cut conditions.

Russell (2002) and Balasubramanian et al. (2006) found differences between recall of visual and audio product placements, with audio placements being more memorable than visual ones. Although not the main purpose of our research, Big Sean's video allowed us to test recall of audio placements (Michael Kors) as compared to visual placements (Grey Goose Vodka). The results showed that in the original condition, participants recalled both equally. Thus this finding did not support previous research that audio placements are more memorable than visual ones.

Our hypotheses on condition and attitude toward product placements also proved true. Those assigned to the original condition had a more negative attitude toward the product placements in the video. The blurred condition resulted in the most positive attitude toward product placements. The cut condition did not seem to indicate a clear positive or negative attitude.

Despite having significant effects on memory and attitude, the results did not indicate any significant changes to participants' behavior. This is an important implication when reviewing the findings in relation to Balasubramanian's model. The results show that product placements in a music video affect the processes of memory and attitude, but do not necessarily affect behavior.

In addition, this finding contrasts a lot of previous research regarding the media and behavior. Gruber et al. (2005) found that media is likely to influence behavior, as people like to emulate the actions of celebrities. Research has also found links between exposure to alcohol use in movies and alcohol initiation in adolescents (Dal Cin et al., 2008). The majority of this research, however, examines the behavior of adolescents as young as twelve. Perhaps the education level and age of our sample impacted their desire to mimic the behavior of celebrities.

Those who advocate for cultivation theory believe "frequent viewing of media messages increases the likelihood of the adoption of ideas or beliefs reflected in media portrayals," including substance use (Gruber et al., 2005, p. 81). Cultivation theory focuses on cumulative exposure to themes in the media. This implies that if viewers watch several music videos that include references to alcohol, it is possible that their likelihood to drink

would increase. We did not ask participants how often they watch music videos, and the majority was unfamiliar with the video used in the experiment. Therefore, we could not measure any potential effects based on cultivation theory. At the same time, the prevalence of media messages regarding alcohol can create clutter, thus eliminating the von Restorff effect. The noise and clutter would then actually make viewers less likely to drink alcohol.

## **Limitations**

A main limitation of this study was our sample. Although the sample size was adequate, the overall sample was not representative of a general population. The sample was skewed to an age of group of mostly 18 to 25 year olds, and 70 percent of the participants described themselves as white. The sample only included marketing students at American University, thus many of them likely had similar socioeconomic classes and shared interests.

In addition to the sample, Big Sean's "Dance (A\$\$)" video yielded some unusual results. Although all visuals of the Grey Goose Vodka bottle were eliminated from the cut condition, many participants said they remembered seeing alcohol or vodka in the video. Big Sean's video still includes many references to alcohol, which may have created noise for participants watching the video.

The clutter in Big Sean's video eliminated any possibility for surprise or distinctiveness, and thus negated the von Restorff effect. In the process of transportation, "all mental systems and capacities become focused on events occurring in the narrative" (Green & Brock, 2000, p. 701). The clutter and noise of Big Sean's video may have made it more difficult for viewers to focus on events in the narrative and thus feel transported into the video. These two theories explain why recall of Voli Vodka was clearly higher in Pitbull's original condition than any of the five other conditions, whereas the recall of Grey Goose Vodka was not as well defined. The noise in Big Sean's video also explains why many participants remembered Michael Kors in the free recall.

## **Future research**

Future research should attempt to correct some of the limitations in this study. The same study could be conducted with a more diverse and representative sample, to see if the results are skewed by demographics.

Our study measured attitudes toward product placements across the various conditions, but did not address brand attitudes. Additional studies could look at the correlations between likability and attitude toward the artist and attitude toward the placed brands. Prior research has shown that in movies and television shows, a greater brand attitude is achieved when the product is paired with a favorable character (Homer, 2009). In music videos, we can equate the concept of characters to the artists. It is likely that if participants have a more favorable attitude toward the artists, they will also report a more positive attitude toward a brand in the artist's video.

Finally, the analysis did not address many of the process variables involved in the study. For example, does a higher narrative transportation score result in a greater likelihood to drink the brand? Does familiarity with the music video result in greater recall of branded products? These and other unanswered questions can be addressed through more detailed statistical analysis.

## REFERENCES

- Auty, S., & Lewis, C. (2004). Exploring children's choice: the reminder effect of product placement. *Psychology & Marketing*, 21 (9), 697-713.
- Balasubramanian, S. K. (1994). Beyond advertising and publicity: hybrid messages and public policy issues. *Journal of Advertising*, 23 (4), 29-46.
- Balasubramanian, S. K., Karrh, J. A., & Patwardhan, H. (2006). Audience response to product placements: an integrative framework and future research agenda. *Journal of Advertising*, 35 (3), 115-141.
- Christenson, P., Roberts, D. F., & Bjork, N. (2012). Booze, drugs, and pop music: trends in substance portrayals in the Billboard top 100 -- 1928-2008. *Substance Use & Misuse*, 47, 121-129.
- Dal Cin, S., Worth, K. A., Dalton, M. A., & Sargent, J. D. (2008). Youth exposure to alcohol use and brand appearances in popular contemporary movies. *Addiction*, 103, 1925-1932.
- DuRant, R. H., Rome, E. S., Rich, M., Allred, E., Emans, S. J., & Woods, E. R. (1997). Tobacco and alcohol use behaviors portrayed in music videos: a content analysis. *American Journal of Public Health*, 87 (7), 1131-1135.
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79 (5), 701-721.
- Green, M. C., & Clark, J. L. (2012). Transportation into narrative worlds: implications for entertainment media influences on tobacco use. *Addiction*, 108, 477-484.
- Gruber, E. L., Thau, H. M., Hill, D. L., Fisher, D. A., & Grube, J. W. (2005). Alcohol, tobacco and illicit substances in music videos: a content analysis of prevalence and genre. *Journal of Adolescent Health*, 37, 81-83.
- Homer, P. M. (2009). Product placements: the impact of placement type and repetition on attitude. *Journal of Advertising*, 38 (3), 21-31.
- Jensen, J., Imboden, K., & Ivic, R. (2011). Sensation seeking and narrative transportation: high sensation seeking children's interest in reading outside of school. *Scientific Studies of Reading*, 15 (6), 541-558.
- Kapadia, S. (2012). Advertising and the top 40: an analysis of alcohol product placements in music videos. *American University*.
- Pick, D. F., Sweeney, J., & Clay, J. A. (1991). Creative advertising and the von restorff effect. *Psychological Reports*, 69, 923-926.
- PQ Media. (2012). *PQ Media Global Product Placement Spending Forecast 2012-2016*. Stamford, CT.
- Primack, B. A., Nuzzo, E., Rice, K. R., & Sargent, J. D. (2012). Alcohol brand appearances in US popular music. *Addiction*, 107, 557-566.
- Russell, C. A. (2002). Investigating the effectiveness of product placements in television shows: the role of modality and plot connection congruence on brand memory and attitude. *Journal of Consumer Research*, 29 (3), 306-318.
- Russell, C. A., & Stern, B. B. (2006). Consumers, characters and products: a balance model of sitcom product placement effects. *Journal of Advertising*, 35 (1), 7-21.