



**Bryant University**

HONORS THESIS

# From Listening to Lyrics to Buying Brands: The Effectiveness of Lyrical Product Placement

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The Effectiveness of Lyrical Product Placement**

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## **Abstract**

Brand placement is a nonconventional medium for companies to use to help consumers gain brand awareness and ultimately purchase a product. The purpose of this study was to investigate brand placement in different genres of songs to identify the participants' degree of recall and recognition of these brands and determine if participants were enticed to purchase the brand, in order to draw conclusions of what genre and speed make a placement effective. Brand placement has been used in music videos, television shows and movies. Studies have seen a positive effect on purchase intent from these placements, yet there is a lack of information on the effectiveness of brand placements in song lyrics and the consumer's purchase intent. The methodology of this study was two-fold. First, a content analysis of the Billboard 2018 year-end top 50 songs for Rap and Country was conducted in order to collect data on the words per minute of the songs and use of brand placement. An experiment was then conducted with this newfound data to investigate consumer perspective on recalling products in songs based on words per minute, as well as purchase intent of those mentioned products. Participants were asked to listen to two songs from two genres at different speeds, and then recognize and recall which products they heard. The results found that Rap songs had the greatest average amount of brand placements and the highest category of these placements being Fashion brands. Also, the results found that participants were able to recall more brand when the speed of the song was regular, not at the double speed. Lastly, those who recalled more than three brands listened to music for more than two hours per week and also had a greater purchase intent. Overall, these results show that speed and recall affect purchase intent and therefore should be taken into consideration for advertiser. The most effective way to utilize lyrical product placement would be a slower paced Rap song, in order to create the greatest exposure and recall.

## Introduction

Through the intertwining of products and productions, marketers and media producers have been able to create mutually beneficial relationships. A product placement is defined as “the paid inclusion of branded products or brand identifiers, through audio and/or visual means, within mass media programming” (Karrh 1998). In other words, product placement can be considered “marketing without marketing”, as consumers are exposed to a product without a traditional visual advertisement (Wipperfurth 2005). One of the first pieces of evidence of product placement is in the 1945 film, *Mildred Pierce*, where Joan Crawford visibly drinks Jack Daniel’s whiskey (Reed 1989). Since then, film has become the dominant platform for products. The most notable impact can be seen from the placement of Reese’s Pieces in the 1982 movie *E.T.* Three months after the film was released, sales of Reese’s Pieces grew 66% (Reed 1989). In 2017, within the film industry in the United States, product placement accounted for \$8.78 billion, which was a 13.7% increase from 2017 (Mandese 2018). Through these product placements, producers are able to fund the production of their projects based of the revenue generated from the brands. On the other hand, brands are able to put their product out to the public in an indirect way. However, with placements in movies becoming commonplace, advertisers have looked to other platforms.

Another effective medium for marketers to place products in is music videos. In the past ten years, revenue from product placements in music videos has grown from \$15 million to \$20 million (Plambeck 2010). Lady Gaga is known for placing an abundance of brands in her music videos. One example of this is seen in her song, *Telephone*. The music video features Lady Gaga and pop legend Beyoncé, as well as nine products including Chevrolet, Polaroid, Wonderbread, and Miracle Whip (Nme & Nme 2010). In another Lady Gaga song, *Bad Romance*, Gaga

features eight products, including Burberry, Nintendo Wii, and even an HP laptop (Nme & Nme 2010).

With the introduction of products into movies and music videos, the interaction between consumers and brands has only grown. On average, an American is exposed to 3,000 traditional advertisements a day (Verklin and Kanner 2007). With this plethora of exposure, brands must create ways to stand out in the abyss of content, especially since it takes three exposures for an individual start to process and distinguish if the advertisement is relevant (Krugman 2000). Advertisers must work hard in order for their brand to stand out against the rest and to create a lasting impression with consumers.

Because of the oversaturation of products in movies, music videos, and television shows, a new medium that has not yet been infiltrated with products is the actual lyrics of the songs, or lyrical product placement. In the United States population, 93% spend over 25 hours a week listening to songs, and specifically, the average teenager listens to three or more hours of music a day (Nielsen 2014). In a Billboard article titled, “The Newest Soundtrack to the World?”, meshing music and advertising was called, “the perfect marriage of commerce and art” (Billboard). This shows that music could be an effective channel for marketing, when executed correctly. With a high exposure rate, consumers will process the lyrics and the product placement, which advertiser hope will generate a future purchase. Using lyrics as a channel for product placement is fairly new, and there is not a lot of research that investigates its effectiveness. One example of the effectiveness of song lyrics as a marketing channel is in the song *Hey Ya* by OutKast. The song’s catchphrase, “Shake it like a Polaroid picture” lead to increase awareness of Polaroid cameras (Kim 2002). Similarly, in the 1908 song, “Take Me Out to the Ball Game” the famous baseball song links baseball with Crackerjacks, creating an

association in consumer's minds. Therefore, this study was conducted to examine the gap in the effectiveness of this medium of product placement, and to understand if the placements had a lasting impact on consumers. With the average exposure of 3,000 ads, product placements can be forgotten. This study aims to investigate this concept and determine if lyrics are a proper platform for placements, and if so, under what circumstances. This analysis also assesses the speed and genre of the song, to see if there is a more effective genre for product placement.

## **Literature Review**

### ***Product Placement***

New music is produced every day as artists adapt their styles and consumers change their attitudes. The music that is popular now is extremely different from what was popular last year, last decade, and sometimes even as short a time as last week. Because of this everchanging platform, studies must also be updated in order to produce the most relevant results. The first analysis of lyrical product placement was conducted by Friedman. The study looked at lyrical product placement between the years of 1940 and 1980 and found an increase in the 1970s of the amount of product placements (Friedman 1986). This analysis was then continued by Herd, who looked specifically into Rap music and the use of alcoholic brands. His study found an increase in brand mentions in 1994 (Herd 2005). However, due to the ever-growing nature of the music industry, another content analysis was conducted off of this information by de Gregorio and Sung in 2009. This study again looked at product mentions, however de Gregorio and Sung investigated the top ten songs for each month between January 1955 and December of 2002 for six different genres. Out of these songs, 151 songs included at least one brand mention, and out of those, 58.9% were Rap songs (de Gregorio & Sung 2009). De Gregorio and Sung also found an increase in the number and percentage of songs that included product placements over time. Between 1955 and 1964, only 1.95% of songs mentioned at least one brand (de Gregorio & Sung 2009). This amount increased to 18% between 1995 and 2002 (de Gregorio & Sung 2009). These results all showed an increase in product placements throughout the longitudinal study. Looking more specifically into the number of product placement within the different genres, Mohammed-Baksh and Callison found that within the years of 2004 and 2010, Rap songs still had the highest number of product mentions, followed by Country (Mohammed-Baksh & Callison 2014). Lastly,



and most recently, Craig, Flynn, and Holody looked at the Billboard year-end top 20 songs of six genres within 2009-2013 and found 73% of brand mentions were in Rap songs (Craig, Flynn, & Holody 2017). As previously mentioned, these studies include songs produced within the years of 1946-2013, and with the music industry always growing, there is a possibility of change within the last seven years for a different genre to surpass Rap with the greatest number of brands. Also, though these studies identify Rap as containing the greatest amount of product placements, these studies fail to investigate mentions in terms of the amount of words in each song and the speed of the song. Rap music is faster, with more words spoken per song, however there are no studies that investigate if this factor plays a role in lyrical product placements. With this information and need for current data, the following hypothesis was proposed.

**H1:** Rap songs will have more brand placements than Country songs.

In the same study by de Gregorio and Sung, the results also found that automobiles were the largest product category mentioned in songs. Out of the 173 identified, 25.4% were automobile brands (de Gregorio & Sung 2009). Fashion/clothing was the second most popular with 17.3% (de Gregorio & Sung 2009). The study conducted by Mohammed-Baksh and Callison found the same results, with 38.14% of mentions being automobile brands (Mohammed-Baksh & Callison 2014). However, in the more recent study by Craig, Flynn, and Holody, the results found that clothing and shoes were the top mentioned category, with 26.5% of songs, followed by automobiles with 19.1% (Craig, Flynn, & Holody 2017). In looking at the difference in categories of brands between genres, this study also that Rap songs featured more clothing and shoe brands, while Country songs featured automobile brands (Craig, Flynn, & Holody 2017). These results have not been reinvestigated since 2013 and therefore need to be updated. Also, the difference between what category is mentioned the most between genres has

only been looked at more recently, which leads to a lack of current data. Based on this information, the following hypothesis was proposed.

**H2A:** Automobiles have the highest category of brand mentions in Country songs.

**H2B:** Automobiles have the highest category of brand mentions in Rap songs.

### *Perceptual Process*

Recall and recognition, and their relationship to advertisements, have become common areas of study for marketers since, as Geoffrey Percourt stated, “Advertising without recall is advertising without impact”. In order to get a consumer to purchase a product, they must first be aware of said product, through an advertisement, and for that ad to be successful, it must make a lasting impression on the consumer. Because of this process, advertisers have become obsessed with perception, in order to track effectiveness. Perception is the process by which one screens, selects, organizes, and interprets stimuli to give them meaning. In the case of marketers, this stimulus is an advertisement. The perceptual process is a four-step process from when the individual is exposed to a stimulus, all the way through their response (Organizational Behavior).

### Exposure

In the perceptual process, first the participant is exposed to the stimulus, such as an advertisement or a product placement (Organizational Behavior). In a study conducted by Danaher and Mullarkey, participants were exposed to a series of web pages for 20, 40, or 60 seconds each (Danaher & Mullarkey 2003). Then, participants were asked a sequence recall and recognition questions. The results found that those who were shown a higher exposure rates were able to recall and recognize the web pages better than those exposed at lower rates. In another study by Goldstein, McAfee and Suri, participants were exposed to an ad, one for Jeep and one for Netflix, at different exposure times, either 5, 10, 25, or 40 seconds, and then were asked

recognition questions (Goldstein, McAfee, and Suri 2011). The results found that those exposed to the ads for longer were able to recall more, which shows that higher exposure time promotes an increase in recall (Goldstein, McAfee, and Suri 2011). These studies focus solely on ads and web pages, and do not include a musical component. Because of a gap in the research, this study attempts to investigate the effect of ad placement within music. These studies found that increased exposure increases recall, and for the purpose of this study, the increase of exposure is correlated to an increase amount of music listened to during the week. Because of this, the following hypothesis is proposed.

**H1:** Participants that listen to music for more than 2 hours a week will be able to recall more products.

Another important factor in exposing a consumer to a product during the first part of the perceptual process is how many times they are exposed. In order for consumers to recall information, they form associations, which links the information to objects or experiences (Schacter 1996). When information is repeated, this number of associations increases, making it easier for consumers to recall (Fuentes et al. 1994). A study by Vuokko found that repetition of an ad increases awareness of the message and facilitates the consumer processing the information. Similarly, this study found that ad repetition enhances consumer's attitude and recall (Vuokko 1997). This study found that repetition increases recall, however it failed to evaluate this idea in the form of music. As previously stated, the average American listens to 25 hours of music a week. With this amount, consumers are bound to hear the same song more than once, increasing repetition. Because of the effect of repetition in memory and the amount of repetition of music on the radio, the following hypothesis was proposed.

**H2:** Participants who had heard the song before will recall more brands than those who have never heard the song.

### Attention

The next step in the perceptual process is attention, which is when consumers focus their attention on the stimulus in order to understand and comprehend the stimulus (Organizational Behavior). Studies have found that music stimulates memories, including one that found that music helps with recalling and remembering information (Wallace 1991). Music has an “attention-gaining value”, which allows it to be a useful tool for sharing information, or advertisements (Kellaris, Cox and Cox 1989). As seen from other studies mentioned previously, increases in exposure time allows for greater recall. This idea can be applied to speed of a song, as the faster the song the shorter the exposure time. In another study looking at the tempo of background music in television ads, the faster tempo reduced ad content recall due to the increased complexity of message processing which created a distraction in the attention step of the perceptual process (Oakes and North 2006). Due to these studies looking at increased exposure time and increased tempo affecting ad recall, the following hypothesis was proposed when applying these previous results to this investigation.

**H3:** Participants exposed to the double speed version will recall less brands than those exposed to the regular speed.

### Perception & Interpretation

After the consumer has been made attentive of the stimulus, it is then perceived and interpreted by the participant, so that the individual can process the “message” of the stimulus (The Perceptual Process). The consumer processes the ad and looks to find more information in order to create an association between the brand and the product. This can be when the consumer

researches the brand to understand what the placement is all about. Studies have found that 88% of consumers conduct research before buying (Pymnts). This is because consumers are curious about every purchase they make. Also, with the world at their fingertips, consumers are able to research brands quickly in order to interpret their messages. However, this research can also be internal, as one type of “research” includes referring to a consumer’s memory to recall preconceived associations (Boundless). Therefore, with a greater recall of the brand, consumers could be more enticed to research the brand as they will want to learn more and develop these associations. Due to the great lack in studies of the relationship between recall and research intent, this study hopes to fill this gap. Also, there is little research on the effect of interpretation being connected to music. Lastly, there is little research on the effect of music and lyrical product placement in terms of brand research. Because of this information and the lack thereof, the following hypothesis was proposed.

**H4:** Participants who recall more than 2 products will be more enticed to research the brand.

#### Retention & Response

Lastly, the stimulus is retained, or a response is made, such as a purchase (Organizational Behavior). The stimulus has been processed by the individual and they have created an understanding of the brand which has developed into a memory (The Perceptual Process). Forbes found that 75% customers are more likely to purchase from a brand they recognize (Jallad 2019). The brand recall helps to create associations that the consumer will be reminded of at point of purchase. Another study found that increase in brand recall is one of the factors that influences consumer purchase (UK Essay 2018). Because of this, if a consumer is able to recall the product, they will be more enticed to purchase the product. Likewise, another study found that brand

recall and brand awareness were positively related to purchase intention (Chi et al. 2009). A study by Wang and Yang found that an increased brand awareness lead to a greater brand credibility and therefore purchase intent (Wang & Yang 2010). Though these studies address the idea that recall leads to increased purchase intent, they lack in applying this idea to product placements, and more specifically lyrical product placement. Therefore, this theory of increased brand recall increasing the purchase intent was translated to this study as the enticement to purchase the product and the following hypotheses were proposed.

**H5:** Participants who recall more than 2 products will have a greater intention to purchase a product.

## **Content Analysis**

### *Method*

#### Song Selection

The year-end songs for Rap and Country for the year 2018 were compiled from Billboard. These genres were chosen due to their differences in style and audience. The year-end data was selected so that there would be no overlaps of songs, however, multiple songs by the same artist were allowed. The year 2018 was selected because the second part of the study was conducted in November of 2019. Because of this, the 2019 year-end data was not available, and so the 2018 year-end data was the most recent available.

#### Screening of Song

All lyrics were taken from LyricFind (<https://www.lyricfind.com/>), and due to time restrictions, the songs were screened by the author for the presence of at least one brand mention. Songs were then categorized as either containing a product placement or not. Those that contained products were then identified, and the brands and categories of those brands were noted. In this study, a brand is defined by Friedman's definition of, "a distinctive commercial term used by a firm to identify and/or promote itself or one of its consumer products or services". Therefore, mentions of "tequila" were not included due to a lack of brand name. However, slang and abbreviations were included, such as "Lambo" for Lamborghini or "Benz" for Mercedes Benz. These song lyrics were then entered into a word counter (<https://wordcounter.net/>) to identify the amount of words per song.

## ***Results***

The Billboard top 50 year-end songs for Rap and Country were analyzed. Categories of products were broken into fashion, automobiles, food, entertainment, alcohol, pharmacies, tobacco, and firearms.

### Country

Out of the top 50 year-end Country songs, 24% (12 songs) contained at least one brand mentioned. These included automobiles, fashion, and tobacco. Automobiles were 42.9% of brands mentioned, followed by fashion brands at 23.8%. The average number of brands mentioned per song was 1.7. With the placement of these brands, 83.3% of these songs mentioned brands in the verses of the lyrics, while 25% mentioned the brands in the chorus of the song. The average amount of words per minute was 97 words per minute, with a maximum words per minute of 182 words per minute and a minimum of 52 words per minute.

### Rap

Out of the top 50 year-end Country songs, 74% (37 songs) contained at least one brand mentioned. These included fashion, automobiles, and food and drink. Fashion was 48.9% of brands mentioned, followed by automobiles at 27.3%. The average number of brands mentioned was 3.8. With the placement of these brands, 100% of these songs mentioned brands in the verses of the lyrics, while 27% mentioned the brands in both the verses and the chorus of the song. The average amount of words per minute was 137 words per minute, with a maximum words per minute of 252 words per minute and a minimum of 89 words per minute.



**Hypotheses**

The first hypothesis stated that Rap would have more brand placements than Country songs. This hypothesis was supported, as seen in Table 1 below. Out of the Billboard year-end Rap and Country songs for the year 2018, 26% of Country songs (13 songs) had at least one brand placement, while 74% of Rap song (37 songs) had at least one brand placement. This supports the hypothesis as Rap songs had more product placements. Likewise, the average words per minute for Rap songs was 168, while the average for Country songs was 97 words per minute, further supporting the hypothesis because Rap songs had more words per minute. Therefore, it can be concluded that Rap songs have more brand mentions than Country songs because they have more words per minute and more words allows for more products to be mentioned.

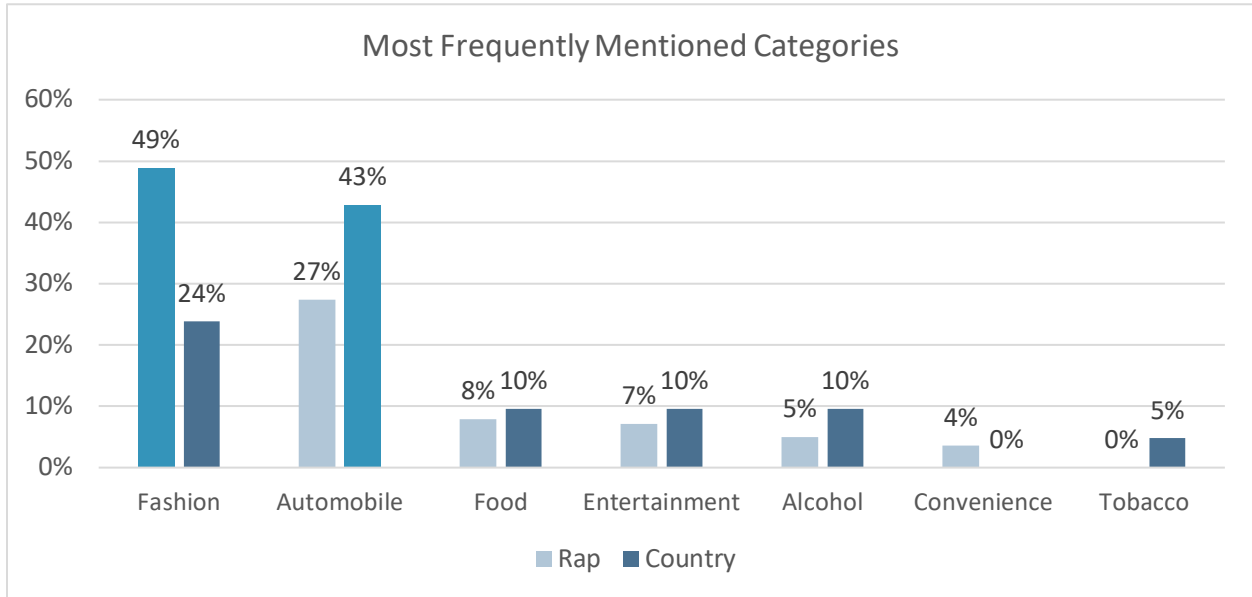
**Table 1: Content Analysis Results**

<b>Genre</b>	<b>Average Words per Minute</b>	<b>% Featuring Brands</b>	<b>Average # of Brands Mentioned</b>	<b>Most Frequent Category</b>	<b>Most Frequent Brand</b>
<b>Rap</b>	168	74%	3.76	Fashion	Gucci
<b>Country</b>	97	26%	1.77	Automobiles	Chevrolet

Hypothesis 2A was that automobiles would be the category with the highest number of mentions in Country songs and hypothesis 2B was that automobiles would be the category with the highest number of mentions in Rap songs. From Table 1, hypothesis 2A was supported, but 2B was not. This is because fashion was the most frequently mentioned category in Rap songs. In the Country songs analyzed, 42.9% of the brands mentioned (9 out of the total 21 brands) were automobile brands. Out of the automobiles referenced, Chevrolet was the most frequent brand, appearing in 15.4% of songs with brand placements (2 songs). However, the second part of this hypothesis was not supported because the most frequent category for Rap songs was fashion brands. Fashion brands were 48.9% (68 of the total 139 brand mentions). The most

frequent fashion brand was Gucci with 11.7% (8 mentions), followed by Saint Laurent and Rolex tied with 7% of all product mentions (5 mentions).

**Exhibit 1: Breakdown of Categories of Brand Mentions**



## **Experiment**

### ***Method***

An experiment was conducted to understand the relationship between recall and recognition. Participants were asked about their music preferences, including when and where they listen to music and on what platform. Then, the participants were exposed to two songs and asked to recall and recognize which brands they heard. The genre to appear first was randomized, as well as which speed the participant was exposed to, either the regular speed or the double speed version. The songs *I Lived It* by Blake Shelton and *Psycho* by Post Malone were selected due to the amount of product placements and the number of words per minute in each song. After the participants were exposed to the song, they were asked about their purchase intent, as well as influences that go into their buying behavior. Lastly, participants were asked demographic questions.

### **Song Speed**

The songs *I Lived It* by Blake Shelton and *Psycho* by Post Malone were sped up 2x by using AudioTrimmer (<https://audiotrimmer.com/audio-speed-changer/>) at the tempo 2x (double speed). The files were then downloaded into MP3s.

### **Population and sampling**

The participants in the experiment were Bryant University students within the ages of 18-24. This sample was collected due to the convenience of acquiring this group. This experiment was executed in the Marketing Behavioral lab at Bryant University during the fall semester of 2019.

### ***Results***

A total of 158 students participated in this experiment, 90 males and 67 females (58:42). One participant preferred not to answer about their gender. This closely reflects the student population of Bryant University which has a male to female ratio of 60:40 (US News). All participants were within the ages of 18-24.

**Hypotheses**

The first hypothesis stated that participants that listen to music for more than two hours a week will be able to recall more products. This was based off the literature that higher exposure rates allowed for greater recall. This hypothesis was supported. When looking at those who did not recall any products, 100% of these respondents indicated that they listened to 0 to 1 hours of music a week. When looking at those who indicated they listen to 2-6 hours of music, the percent of participants that were unable to recall decreased to only 69%. This means that the percent of respondents who were able to recall one or more product increased from 0% to 31%. Similarly, of those who were able to recall five products, these respondents listened to 10 or more hours of music. This supports the hypothesis that those who listened to more than two hours of music were able to recall more products. When running a statistical analysis of a paired samples test with unequal variances, a p value of 0.038 was found, which means that this analysis was statistically significant.

**Table 2: Number of Hours Listened vs. Numbers of Products Recalled**

	0-1 Hour	1-2 Hours	2-6 Hours	6-10 Hours	10+ Hours		
0 Products	100%	81%	69%	77%	76%		
1 Product	0%	15%	15%	12%	7%		
2 Products	0%	0%	11%	5%	4%		
3 Products	0%	4%	3%	5%	10%		
4 Products	0%	0%	3%	0%	0%		
5 Products	0%	0%	0%	0%	2%		
	Mean	Variance	Observations	df	t Stat	P(T<=t) two-tail	t Critical two-tail
<b>Less than 2 Hours</b>	0.605	1.194	152	284	2.079	0.038	1.968

<b>More than 2 Hours</b>	0.376	0.721	170
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The second hypothesis stated that participants who had heard the song before will recall more brands than those who have never heard the song. This hypothesis was supported as the percentage of respondents who were unable to recall any brands was lower for those who had heard the song before. When looking at the respondents who had heard the song before, 70.6% of these respondents were unable to recall any brands. When compared to those who had never heard the song before, the percent of respondents who were unable to recall any brands increased to 80.8%. On the other end, of those who were able to recall either four or five products, these respondents had indicated that they had heard the song before. This supports the hypothesis that those who have previously heard the song, and therefore were previously exposed to the song, would be able to recall more brands than those who have never heard the song. When conducting a paired samples test with unequal variances, the p value was 0.002, meaning that these results are statistically significant and therefore supported.

**Table 3: Previous Exposure vs. Number of Brands Recalled**

<b>Brands Recalled</b>			<b>Yes</b>			<b>No</b>
0 Products			70.6%			80.8%
1 Product			11.7%			12.0%
2 Products			8.1%			4.0%
3 Products			7.1%			3.2%
4 Products			1.0%			0.0%
5 Products			1.0%			0.0%

	<b>Mean</b>	<b>Variance</b>	<b>Observations</b>	<b>df</b>	<b>t stat</b>	<b>P(T&lt;=t) two-tail</b>	<b>t Critical two-tail</b>
Yes	0.604	1.219	197	320	3.070	0.002	19.674
No	0.296	0.484	125				

The third hypothesis stated that participants exposed to double the speed version will recall less brands than those exposed to the regular speed. This hypothesis was supported as the results below indicate. When looking at the percent of respondents that did not recall any products, 69% of respondents were exposed to the regular version of the Country or Rap song. This percentage, when the respondents were exposed to the double speed, increased to 83% and 78% for Country and Rap. Similarly, of those who were able to recall five products, these respondents were exposed to the regular speed, as 0% of respondents were able to recall five products when exposed to the double speed version. This supports the hypothesis that those exposed to the double speed version would recall less brands than those exposed to the regular speed. When analyzing the paired samples test with unequal variances, the data produced a statistically significant result with a p value of 0.003.

**Table 4: Speed of Exposure vs. Number of Brands Recalled**

Brands Recalled	Regular		Double				
	Country	Rap	Country	Rap			
0 Products	69%	69%	83%	78%			
1 Product	10%	14%	14%	9%			
2 Products	9%	8%	1%	8%			
3 Products	13%	5%	0%	5%			
4 Products	0%	1%	2%	0%			
5 Products	0%	2%	0%	0%			
	Mean	Variance	Observations	df	t Stat	P(T<=t) two-tail	t Critical two-tail
<i>Double Speed</i>	0.329	0.602	164	163	-3.007	0.003	1.974
<i>Regular Speed</i>	0.634	1.239	158				

The fourth hypothesis stated that participants who recall more than two products will be more enticed to research the brand. This hypothesis was not supported as the data below does not show any clear trends. Likewise, when running a paired samples test with unequal variances, the p value was 0.236, which is more than 0.05, which means the information is not statistically significant. Therefore, these results could easily be explained by chance alone, and so the hypothesis is not supported.

**Table 5: Number of Brands Recalled vs. Research Intent**

<b>Brands Recalled</b>	0	1	2	3	4	5
Extremely Unlikely	39%	45%	52%	22%	0%	0%
Somewhat Unlikely	23%	21%	14%	22%	67%	50%
Neither Likely nor Unlikely	25%	24%	19%	33%	0%	0%
Somewhat Likely	10%	11%	10%	17%	33%	50%
Extremely Likely	2%	0%	5%	6%	0%	0%

	<b>Mean</b>	<b>Variance</b>	<b>Observations</b>	<b>df</b>	<b>t Stat</b>	<b>P(T&lt;=t) two-tail</b>	<b>t Critical two-tail</b>
<b><i>Less than 2</i></b>	2.104	1.1912	278	54	-1.196	0.236	2.004
<b><i>More than 2</i></b>	2.341	1.532	44				

The fifth hypothesis stated that participants who recall more than two products will have a greater intention to purchase a product. This hypothesis was supported as those who recalled four or five brands were more likely to purchase a product. When looking at those who recalled five products, 50% of respondents were somewhat likely to purchase the product. With those who recalled 4 products, 33% of respondents were somewhat likely to purchase a product. The other 67% were neither likely nor unlikely. On the opposite end, of those who did not recall any products, 41% of respondents were extremely unlikely to purchase the product. Similarly, of those who recalled one product, 49% of them were extremely unlikely to purchase the product,



and of those who recalled two products, 48% of respondents were extremely unlikely. When running a paired samples test with unequal variances the p value was 0.021, which means that the results were statistically significant, and therefore supported the hypothesis.

**Table 6: Number of Brands Recalled vs. Purchase Intent**

<b>Brands</b>	0	1	2	3	4	5
Extremely Unlikely	41%	49%	48%	11%	0%	0%
Somewhat Unlikely	27%	32%	19%	39%	0%	50%
Neither Likely nor Unlikely	23%	14%	19%	33%	67%	0%
Somewhat Likely	8%	5%	10%	17%	33%	50%
Extremely Likely	1%	0%	5%	0%	0%	0%

	<b>Mean</b>	<b>Variance</b>	<b>Observations</b>	<b>df</b>	<b>t Stat</b>	<b>P(T&lt;=t) two-tail</b>	<b>t Critical two-tail</b>
<i>Less than 2 Products</i>	1.953	1.106	278	56	-2.393	0.021	2.003
<i>More than 2 Products</i>	2.386	1.265	44				

## **Discussion**

### ***Limitations***

There are three characteristics that may limit the results of this experiment. First, the size of the sample is a limitation. Due to time restrictions and convenience, only Bryant University students participated. These students were of similar financial status, as well as have many similar experiences since they attend the same university. Because of this, this study is not an accurate representation of the entire population. Likewise, due to time restrictions, participants only heard each song once, and not in a natural setting. As discussed, popular songs on the radio play several times every day. This element of repetition could play a role in participants ability to pick up on the brands mentioned. Likewise, participants were exposed to the songs in an abnormal environment. If these participants were observed in their everyday life and results were drawn more organically, the results could be different due to the participants attention levels.

Secondly, participants were exposed to two songs. This was a flaw in the survey flow, as participants were only supposed to be exposed to one song. Though the genre and speed of the song that participants were exposed to first was randomized, this could have skewed the answers to the questions that followed as participants could have been more actively listening for brand placements during the second song. Therefore, the brands recalled could have been higher for the second song in comparison to the first song.

Thirdly, the music preference of the sample could impact the responses. If a participant had a negative preference towards either the artist or genre of the song, this could have affected their attitude to the song and also how actively they were listening to the song. If there was a negative preference, participants could have not paid attention to the lyrics. Likewise, a positive

preference towards the song or artists could provoke the participant to pay greater attention to the song, recognizing and recalling the lyrics better.

### ***Future avenues of Research***

Due to the limitation of time and resources, further research could be conducted with a different sample size. The participants in this study were all college students, who do not have the disposable income necessary for purchasing these luxury goods. Because of this, a different demographic, older generation or greater income level, could be surveyed to determine if age and income affects the purchase intent. Also, this survey was conducted in Smithfield, Rhode Island. Another avenue of future research could be comparing different geographic locations and ages to look into genre preference depending on location and if there is an effect with recall. Similarly, more research could be conducted to see if the artist singing the song positively or negatively impacts the consumer's attitude toward the brand. Lastly, another avenue of future research would be to look into secondary data such as financial data or search engine optimization. Looking at this data could identify if there was a spike in purchases or brand searches after the song was released.

## **Marketing Implications**

The purpose of this study was to determine whether consumers recalling brands mentioned in song lyrics affects buying behavior to create suggestions for advertisers and marketing managers looking to use lyrical product placement. Through a review of the literature and the perceptual process, greater exposure allows for greater attention, greater attention allows for greater recall, and greater recall allows for greater purchase intent. After analyzing the results to determine if respondents are actually “hearing” the brands, the results showed that participants were able to recall the brands, however under certain circumstances. Because of this, advertisers and marketing managers who are looking to use lyrical product placement to advertise a product should place the product in a slow-paced Rap song.

A slow-paced Rap song would be the most beneficial due to the results that indicated speed does matter for respondents to be able to recall the brands. From this experiment, those respondents who were exposed to the double speed version of the song recalled less brands than those who were exposed to the regular version. When looking back at the content analysis results, the average number of words was 168 for Rap and 89 for Country. Therefore, on average, Rap songs are faster paced. From the Billboard Top 50 Year End Songs of 2018 for Rap, the minimum words per minute was 103 words, and the maximum for the Country songs was 182. This shows that both genres can have faster, or slower paced songs. A slower paced song promotes greater recall as the results of the experiment found that those exposed to the regular speed version were able to recall more products. Therefore, marketing managers and advertisers should feature their products in a slower paced song to foster greater recall and purchase intent.

Also, from the results, a slow-paced Rap song would be the best because Rap was the participants' favorite genre. The results found that 23% of respondent answered Rap as their favorite genre of music, and only 15% answered Country. On the other hand, behind having no negative music preference, 24% of respondents have a negative preference towards Country music, with only 8% responding to having a negative preference towards Rap music. From the results of this study, which included college students between the ages of 18-24, more respondents favored Rap music. Therefore, if the advertisers are trying to target college students, a brand mentioned in a Rap song would have a higher exposure rate as more respondents favored Rap music and listened to Rap music in comparison to all other genres. With more people listening to this genre of music, it will reach more people and the brand will be heard by more people. The results indicated that when respondents had been exposed to the song before, they were able to recall more products. From these results it is clear that exposure is crucial for recall, and with more people listening to the genre, as Rap is the most favored genre, the exposure will be greater, and therefore recall and purchase intent will increase.

With looking at the perceptual process, the combination of an increased exposure, due to placing a product in a Rap song, and increased attention, due to the slower paced song, promotes greater recall and therefore greater purchase intent. From analyzing the results generated from this study, a slower paced Rap song would be the best platform for marketing managers and advertisers to use if they are looking to use lyrical product placement as a way to target college students between the ages of 18-24.

Though the results from this survey showed Rap as the favorite genre, this could vary due to the target audience. The participants in this study were college students between the ages of 18-24. These respondents indicated their favorite genre of music was Rap, so therefore when

targeting this demographic, Rap music would be the best platform for lyrical product placement. However, if marketing managers have a different target audience, more research should be conducted to evaluate what their musical preferences are, as they could be different than those found from this study. This study found that exposure is essential to recall. Therefore, advertisers and marketing manager should find which genre is preferred by their target audience and use lyrical product placement in a slow-paced song of that genre, in order to increase exposure.

## **Conclusion**

Overall, this study found that consumers are actually “hearing” the brands mentioned in lyrical product placements, and that speed does matter. Through looking at a content analysis of the Billboard year-end of 2018 songs for the genres of Rap and Country, Rap songs had the most product mentions, with the highest category being fashion brands. From conducting an experiment that exposed participants to songs at different speeds and then asking recall and recognition questions, the speed impacted respondents’ abilities to recall products. In looking towards the future and implications of these findings, marketing managers and advertisers can use these results when utilizing lyrical product placement. With a high exposure to advertisements, marketers must develop a way to break through to their audiences. Nowadays, product placements in music videos, on television shows, and in movies have become normal, so marketers are looking towards music as a new platform. The results from this study found this platform as viable, however marketers must be careful to utilize lyrical product placement under the right parameters. From the respondents in this study and their musical preferences, a slow-paced Rap song would be best suited in order to reach a large audience as well as allow for the greatest recall. However, marketing managers looking to use lyrical product placements should evaluate their target audiences and select a slower paced song from the genre that their audience prefers in order to maximize the exposure. With greater recall comes greater purchase intent, which will be beneficial for marketers and their brands.

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## Appendix

### Survey

#### Survey Consent

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#### **Survey Consent Purpose**

You are invited to participate in a study examining musical preferences and buying behavior.

**Description** - If you decide to participate, you will be taking part in a brief 5-10-minute survey. The survey will discuss the effect of product placement.

**Confidentiality** - Any information obtained in connection with this study will remain confidential and will not be disclosed to the general public in a way that can be traced to you. In any written reports or publications, no participant other than the researchers will be identified, and only anonymous data will be presented. This consent form, with your signature, will be stored separately and independently from the data collected so that your responses will not be identifiable.

**Participation Is Voluntary** - Your participation is totally voluntary, and your decision whether or not to participate will not affect you. If you decide to participate, you are also free to discontinue participation at any time without affecting such relationships. However, it is requested that you notify the investigator of this.

**Persons to Contact** - If you have any questions, please contact Bridget Gomes at (978) 846-4541 or mgomes5@bryant.edu. If you have any additional questions later, we will be happy to answer them. You can have a copy of this form to keep if you wish.

**Indicating Informed Consent** - The following survey contains explicit language. In order to participate in this survey, you must be at least 18 years old.

By clicking "I agree" you are indicating that you have read and agree to the above consent form conditions.

I agree (1)

I do not agree (2)

## Music Preference

---

What are your favorite genres of music? (check all that apply)

- Rap (1)
  - Hip/hop (2)
  - Pop (3)
  - Country (4)
  - EDM (5)
  - Reggaeton (6)
  - Other (7) \_\_\_\_\_
- 

Is there a genre, or genres, that you refuse to listen to/have strong negative preference towards?  
(check all that apply)

- Rap (1)
  - Hip/hop (2)
  - Pop (3)
  - Country (4)
  - EDM (5)
  - Reggaeton (6)
  - Other (7) \_\_\_\_\_
  - I do not have a negative preference towards any music genre (8)
-

How many hours do you spend listening to music during a week?

- 0-1 hour (1)
  - 1-2 hours (2)
  - 2-6 hours (3)
  - 6-10 hours (4)
  - 10+ hours (5)
- 

Where do you listen to music? (check all that apply)

- Spotify (1)
  - Apple music (2)
  - Pandora (3)
  - Youtube (4)
  - Other (5) \_\_\_\_\_
- 

When do you listen to music? (check all that apply)

- In a car/ while driving (1)
  - While doing homework (2)
  - When working out (3)
  - When walking to/from class (4)
  - At an event (5)
  - With friends (6)
  - Other (7) \_\_\_\_\_
-

### Country Song (Fast/Slow)

---

Please click the link and listen to the song. After you have listened, please return to this survey to complete the following questions.

---

Based on the music you just listened to, you may have heard some brand names mentioned. Can you recall how many?

- 0 (1)
  - 1 (2)
  - 2 (3)
  - 3 (4)
  - 4 (5)
  - 5 (6)
- 

Can you recall what brands were mentioned? List all that you remember. If you cannot remember any, please write "None".

---

Based on the music you just listened to, you may have heard some brand names mentioned. From the list below, which brands do you remember hearing? (Check all that you can remember)

- Honda (1)
  - Marlboro (2)
  - Ford (3)
  - Chevy (4)
  - Crisco (5)
  - Sears (6)
  - Macy's (7)
  - Cisco (8)
  - Salems (9)
  - Walmart (11)
  - None (10)
- 

Have you heard this song before?

- Yes (1)
  - No (2)
- 

What genre do you consider this song?

- Rap (1)
  - Hip/hop (2)
  - Pop (3)
  - Country (4)
  - EDM (5)
  - Reggaeton (6)
  - Other (7) \_\_\_\_\_
-

How much do you like this song?

- Dislike a great deal (1)
  - Dislike somewhat (2)
  - Neither like nor dislike (3)
  - Like somewhat (4)
  - Like a great deal (5)
-

### Rap Song (Fast/Slow)

---

Please click the link and listen to the song. After you have listened, please return to this survey to complete the following questions.

---

Based on the music you just listened to, you may have heard some brand names mentioned. Can you recall how many?

- 0 (1)
  - 1 (2)
  - 3 (3)
  - 5 (4)
  - 7 (5)
  - 9 (6)
- 

Can you recall what brands were mentioned? List all that you remember. If you cannot remember any, please write "None".

---

Based on the music you just listened to, you may have heard some brand names mentioned. From the list below, which brands do you remember hearing? (Check all that you can remember)

- Rolex (1)
  - Chevy (2)
  - Toyota (3)
  - Honda (4)
  - Saint Laurent (5)
  - Vans (6)
  - Nike (7)
  - Audemars Piguet (8)
  - None (9)
-

Have you heard this song before?

- Yes (1)
  - No (2)
- 

How much do you like this song?

- Dislike a great deal (1)
  - Dislike somewhat (2)
  - Neither like nor dislike (3)
  - Like somewhat (4)
  - Like a great deal (5)
- 

What genre do you consider this song?

- Rap (1)
  - Hip/hop (2)
  - Pop (3)
  - Country (4)
  - EDM (5)
  - Reggaeton (6)
  - Other (7) \_\_\_\_\_
-



## Buying Behavior

---

How do you typically find out about brands? (check all that apply)

- Shopping in the stores (1)
  - TV commercials (2)
  - Online ads (3)
  - Family/ friends (4)
  - Social media (5)
  - Habit (6)
  - Influencers/ Celebrity endorsements (7)
  - Other (8) \_\_\_\_\_
- 

How likely are you to research any of the products you heard mentioned today?

- Extremely unlikely (1)
  - Somewhat unlikely (2)
  - Neither likely nor unlikely (3)
  - Somewhat likely (4)
  - Extremely likely (5)
- 

How likely are you to purchase any of the products you heard mentioned today?

- Extremely unlikely (1)
  - Somewhat unlikely (2)
  - Neither likely nor unlikely (3)
  - Somewhat likely (4)
  - Extremely likely (5)
-

You are on a shopping trip or about to buy something online. Identify to what degree you agree or disagree with each statement about your buying behavior when making a purchase.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
My society culture affects my buying behavior (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use social media sites to spot the latest fashion trends (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family are the most influential people that affect my buying behavior (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about people's opinions when I buy things (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often change to another product if i had a bad experience with the previous one (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends are the most influential people that affect my buying behavior (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Celebrities are the most influential people that affect my buying behavior (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

## Demographics

---

How old are you?

- Under 18 (1)
  - 18 - 24 (2)
  - 25 - 34 (3)
  - 35 - 44 (4)
  - 45 - 54 (5)
  - 55 - 64 (6)
  - 65 - 74 (7)
  - 75 - 84 (8)
  - 85 or older (9)
- 

What gender do you identify with?

- Male (1)
- Female (2)
- Prefer not to answer (3)

### Bibliography

- Ahmed, S., & Ashfaq, A. (2013). Impact of Advertising on Consumers' buying behavior through Persuasiveness, Brand Image, and Celebrity endorsement. *Global Media Journal: Pakistan Edition*, 6(2), 149–157.
- Boundless. (n.d.). Boundless Marketing. Retrieved from <https://courses.lumenlearning.com/boundless-marketing/chapter/the-consumer-decision-process/>
- Chi, H.K., Yeh, H.R. and Yang, Y.T. (2009), "The Impact of Brand Awareness on Consumer Purchase Intention: The Mediating Effect of Perceived Quality and Brand Quality," *The Journal of International Management Studies*, Vol. 4, No. 1, pp. 135- 144.
- Craig, C., & Bichard, S. (2014). London, lyrics, & Louis Vuitton: A cross-cultural analysis of product placement in popular music. *Southwestern Mass Communication Journal*, 30(2), 1–31.
- Craig, C., Flynn, M. A., & Holody, K. J. (2017). Name Dropping and Product Mentions: Branding in Popular Music Lyrics. *Journal of Promotion Management*, 23(2), 258–276. <https://doi-org.bryant.idm.oclc.org/10.1080/10496491.2016.1267679>
- Danaher, P. J., & Mullarkey, G. W. (2003). Factors Affecting Online Advertising Recall: A Study of Students. *Journal of Advertising Research*, 43(3), 252–267. doi: 10.2501/jar-43-3-252-267
- de Gregorio, F., & Yongjun Sung. (2009). Giving a shout out to Seagram's gin: Extent of and attitudes towards brands in popular songs. *Journal of Brand Management*, 17(3), 218–235. <https://doi-org.bryant.idm.oclc.org/10.1057/bm.2009.4>
- Essays, UK. (November 2018). Association between Brand recall and Consumer purchase intention. Retrieved from <https://www.ukessays.com/essays/marketing/association-between-brand-recall-and-consumer-purchase-intention-marketing-essay.php?vref=1>
- Friedman, M. (1986). Commercial influences in the lyrics of popular American music of the postwar era. *Journal of Consumer Affairs*, 20(2), 193–213. doi:10.1111/j.1745-6606.1986.tb00378.x
- Fuentes, Kuis J., Encarna Carmona, Inmaculada F Agis, and Andres Catena (1994), "The Role of the Anterior Attention System in Semantic Processing of Both Foveal and Parafoveal Words," *Journal of Cognitive Neuroscience*, 6 (1), 17-25
- Goldstein, D. G., McAfee, R. P., & Suri, S. (2011). The effects of exposure time on memory of display advertisements. *Proceedings of the 12th ACM Conference on Electronic Commerce - EC 11*. doi: 10.1145/1993574.1993584
- Herd, D. (2005). Changes in the prevalence of alcohol use in rap song lyrics, 1979–97. *Addiction*, 100(9), 1258–1269. doi:10.1111/j.1360-0443.2005.01192.
- How Does Bryant University Rank Among America's Best Colleges? (n.d.). Retrieved from <https://www.usnews.com/best-colleges/bryant-university-3402>
- Hussain, Nazar, Ali, Imtiaz, Ahmed, Sohail, & Ahmed, Nazir (2017). Brand Awareness Impact on Brand Association and Loyalty for Customers and Non-customers. *International Journal of Scientific Research and Innovative Technology*, vol. 4, no. 8, pp. 13-18
- Jallad, R. (2019, October 22). Council Post: To Convert More Customers, Focus On Brand Awareness. Retrieved May 06, 2020, from <https://www.forbes.com/sites/forbesagencycouncil/2019/10/22/to-convert-more-customers-focus-on-brand-awareness/>

- Karrh, J. A. (1998). Brand Placement: A Review. *Journal of Current Issues & Research in Advertising* (CTC Press), 20(2), 31. <https://doi-org.bryant.idm.oclc.org/10.1080/10641734.1998.10505081>
- Kellaris, J. J., & Cox, A. D. (1989). The Effects of Background Music in Advertising: A Reassessment. *Journal of Consumer Research*, 16(1), 113–118. <https://doi-org.bryant.idm.oclc.org/10.1086/209199>.
- Kim, H. (2002, September 9). Marketers explore product placement in music. *Advertising Age*. Retrieved from <http://www.adage.com/paypoints/buyArticle.cms/login?newsId=35982&auth=>
- Krugman, H. E. (2000). Memory without recall, exposure without perception. *Journal of Advertising Research*, 40(6), 49-54.
- Mandese, J. (2018, June 13). Product Placement Poised to Top \$10 Billion: Report Cites Fewer, More Valuable Deals Including Upfronts, Netflix. Retrieved from <https://www.mediapost.com/publications/article/320675/product-placement-poised-to-top-10-billion-repor.html>
- Mohammed-Baksh, S., & Callison, C. (2014). “Listening to Maybach in my Maybach”: Evolution of product mention in music across the millennium’s first decade. *Journal of Promotion Management*, 20(1), 20–35. doi:10.1080/10496491.2013.829162
- Nielsen. (2014). 2014 Nielsen music report. Retrieved from <http://www.nielsen.com/us/en/pressroom/2015/2014-nielsen-music-report.html>
- Nme, & Nme. (2010). Lady Gaga's 'Telephone' Video - How Many Products Can You Spot? NME. Retrieved from <https://www.nme.com/blogs/nme-blogs/lady-gagas-telephone-video-how-many-products-can-you-spot-41887>
- Oakes, S., & North, A. C. (2006). The impact of background musical tempo and timbre congruity upon ad content recall and affective response. *Applied Cognitive Psychology*, 20(4), 505–520. <https://doi-org.bryant.idm.oclc.org/10.1002/acp.1199>
- Plambeck, J. (2010). Product placement grows in music videos. *The New York Times*. Retrieved from <http://www.nytimes.com/2010/07/06/business/media/06adco.html>
- Pymnts. (2018, January 9). Study Finds Consumers Research Before They Buy. Retrieved from <https://www.pymnts.com/news/retail/2018/omichannel-ecommerce-consumer-habits/>
- Reed, J. D., & Dutka, E. (1989). Plugging Away in Hollywood Companies push hard to get their products on the silver screen. *TIME Magazine*, 133(1), 103.
- Schacter, Daniel L. (1996), “Illusory Memories: A Cognitive Neuroscience Analysis,” *Proceedings of the National Academy of Sciences*, 93 (24), 13527-33.
- The Newest Soundtrack To The World? (2003). *Billboard*, 115(12), 39.
- The Perceptual Process - Organizational Behavior. (n.d.). Retrieved from <https://openstax.org/books/organizational-behavior/pages/3-1-the-perceptual-process>
- The Perceptual Process. (n.d.). Retrieved from <https://www.perceptualmaps.com/understanding-perceptual-maps/the-perceptual-process/>
- Verklin, D., & Kanner, B. (2007). *Watch this listen up click here*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Vuokko, Pirjo (1997), “The Determinants of Advertising Repetition Effects,” in *Measuring Advertising Effectiveness*, William D. Wells, ed., Mahwah, NJ: Erlbaum, 239-60.
- Wallace, W. T. (1991). Jingles in Advertisements: Can They Improve Recall? *Advances in Consumer Research*, 18(1), 239–242.

- Wang, X., & Yang, Z. (2010). The effect of brand credibility on consumers' brand purchase intention in emerging economies: The moderating role of brand awareness and brand image. *Journal of Global Marketing*, 23(3), 177–188. <https://doi-org.bryant.idm.oclc.org/10.1080/08911762.2010.487419>
- Wipperfurth, A. (2005). *Brand hijacking: Marketing without marketing*. New York: Penguin.