Alcohol Advertisements on Social Media: A study of how alcohol advertisements on social media platforms appeal to young people

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Alcohol Advertisements on Social Media: A study of how alcohol advertisements on social media platforms appeal to young people

An Honors Thesis submitted in partial fulfillment of the requirements of Honors Studies in Journalism

By
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Abstract

Underage drinking is not uncommon and is associated with a number of school, social, legal, emotional, behavioral, health problems, and even death. This research seeks to explore alcohol-related social media advertisements across a variety of alcohol types, alcohol brands, and social media platforms. This was accomplished by a content analysis of the most popular alcohol brands’ advertisements on the Internet that examined the strategies used to appeal to consumers and the overall content patterns and characteristics of online alcohol advertisements. The strategy used differed by brand and alcohol type, but the most common themes included “taste,” “seasonal,” “holiday,” “recipe,” and “joke/humor.” The themes that were known for targeting young people in the past were not found as much as expected in captions and pictures; however, brands may still be targeting young adults and teens; if so, they have taken a different approach and found less obvious strategies for doing so, possibly by using new themes such as memes and flavors. In response to the Covid-19 pandemic, alcohol consumption in the United States has increased, social media use has increased, and underage drinking has likely increased; therefore, it is important that more research is conducted to better understand how these new popular themes are affecting young people.

Keywords: Alcohol, social media, advertisements, underage drinking, strategies
Introduction

Drinking among college-aged students is not uncommon. As of 2018, the National Survey on Drug Use and Health found that 54.9% of full-time college students ages 18-22 had drunk alcohol within the month and more than 30% engaged in binge drinking (“Fall semester,” 2019). Underage drinking is associated with a number of school, social, legal, emotional, behavioral, and health problems; including but not limited to the increased risks of alcohol-related motor vehicle crashes and unintentional injuries, such as burns, falls, or drowning; physical and sexual violence, changes in brain development that may have life-long effects, and suicide (“Underage drinking,” 2020).

The Internet provides the alcohol industry with a broad and nearly instant reach to consumers, and the majority of these online alcohol advertisements are accessible by minors. American adults spend an average of about four hours a day on the Internet or an app and teens spend even more time than adults (“The Nielsen Q1: 2018,” 2018) Interestingly, Generation Z and Millennials prefer to see advertisements on social media over any other platform (Abramovich, 2018).

Previous studies suggest that traditional advertisements, including television, radio, and print ads, affect young people’s drinking behavior (Anderson et al., 2009). Recent digital and social media advertisements behave the same way, but perhaps with an even greater impact and effect on these young adults due to the greater frequency of exposure and appealing themes.

Traditional alcohol advertisements have been found to frequently contain themes that appeal to youth such as social success, an improved mood, and an increased sense of self-confidence as a result of consuming alcohol (Weaver, 2016). The elaboration likelihood model (ELM) (Petty & Cacioppo, 1986) and the social cognitive theory (Roberson et al.,
2018), which will be later discussed in more depth, provide insight into why young people's attitudes could be more susceptible to alcohol marketing messages and why their behavior could be easily influenced by such advertisements. In situations where the audience may be only moderately interested in a topic, factors that act as peripheral cues can also cause the audience members to engage in the central route of processing, making for a more impactful, longer-lasting message (Agostinelli & Grube, 2002). For example, young people who are only moderately interested in messages about drinking may be more likely to deeply process a message delivered by a favorite celebrity. The celebrity serves as a peripheral cue that could be very influential to the viewer, enforcing the message of drinking.

Since alcohol advertisements promote the unsafe, underage consumption of alcohol for teenagers and can lead to extreme health problems at a young age, these advertisements are unethical and a dangerous problem for our society. In the United States’ market economy, alcohol advertisers have a legal right to advertise their product despite the negative consequences because their product is legal for those of age.

To aid in this understanding of the dangers of alcohol advertisements, the purpose of this research is to analyze how the alcohol industry has negatively contributed to the problem of underage drinking in the United States. This paper will begin by providing context to the prevalence of underage drinking among young adults and children in America and the effects it has on them. It will also discuss the exposure of alcohol advertisements and the behavioral influence that they have on people. This paper will demonstrate how the characteristics of alcohol advertisements may increase a minor’s likeliness to use alcohol. This will be accomplished by a content analysis of the most popular alcohol brands’ advertisements on the Internet. This study will examine the strategies used to appeal to
consumers and the overall content patterns and characteristics of online alcohol advertisements, as well as an evaluation of the alcohol industry’s ethical responsibility of adding responsibility and risk warnings to their advertisements. The research will answer the following questions:

RQ1: What strategy of appeals (i.e. friendship, partying, etc.) will be identified most commonly among alcohol advertisements on each platform?

RQ2: Does the most popular strategy of appeals differ across different platforms?

RQ3: To what extent does the word count differ across platforms?

RQ4: To what extent does the strategy of appeals impact the amount of engagement on a post?

RQ5: Do the strategies of appeals used differ across different alcohol brands or alcohol types?

RQ6: How often do the advertisements include a safety or responsibility message?

RQ7: Do the picture/video and the caption of the advertisements convey different messages?

The following review will critically analyze the alcohol advertising literature in-depth; describe the exposure teens have to alcohol advertisements and the varying themes found in both online and traditional alcohol advertisements; examine the motivations that drive the proliferation of online alcohol advertisements and explore the theories used to explain this investigation such as the social cognitive theory and the elaboration likelihood model.
Literature Review

Influence of Alcohol Advertisements on People

The elaboration likelihood model or ELM was developed by Petty and Cacioppo (1986) and provides a framework for persuasion and attitude change that includes two routes: the central route and the peripheral route. The central route involves high elaboration and issue-relevant thinking, while the peripheral route involves less elaboration and a person’s attitudes are formed based on relatively simple cues. These simple cues may be the credibility, attractiveness of the sources of the message, or the production quality of the message. An ELM will be high or low depending on a person’s motivation and cognitive ability. Attitude change through the central route will be longer-lasting, more resistant, and more predictive of behavior than the peripheral route. In situations where the audience may be only moderately interested in a topic, factors that act as peripheral cues can also cause the audience members to engage in the central route processing (Agostinelli & Grube, 2002). Young people who are only moderately interested in messages about drinking may be more likely to deeply process a message with a theme that is a peripheral cue they find enhancing, such as a message backed by the idea that they will gain friends from consumption.

It is widely acknowledged that the effects of advertisement are not limited to the information in the advertisement but are also a function of the appeals used in advertisements, like featuring a joke or humor (Ott et al., 2016). The ELM theory is a framework used to understand and evaluate the underlying mechanisms to describe the relationships between these strategies of appeal and consumer response to such advertisements.
Roberson et al. (2018) addressed the relation of social media and the social cognitive theory, a theory that proposes the idea that behavior is learned through observation. Mass media provides its consumers with large-scale modeling of behaviors, including drinking, and many of these examples are provided by the alcohol industry through its various advertisements. The theory proposes the concept that drinking could potentially be a learned behavior through these images. The ELM and social cognitive theory provide reasons why young peoples’ behavior may be influenced by alcohol advertisements. Studies on traditional platforms have found various correlations between effective alcohol advertisements and young people drinking or purchasing alcohol. One study (Chen et al., 2005) of 20 alcohol television ads shown to 10-17 year-olds evaluated the advertisements’ qualities and effectiveness/likeability among this age group. The study found that the attractiveness of the commercial was related closely with the participants liking the storyline and humor; and additionally, the three overall most favored ads had animal characters. The study found a very strong correlation between liking the ad and having an intent to purchase that brand, even with kids this young (p. 562). Another study (Snyder et al., 2006) evaluating alcohol advertisements from 1999-2001 found that advertisement exposure positively related to an increase in drinking, and each additional advertisement was associated with a 1% increase in drinks per month (p. 22). Youth who lived in markets with more alcohol advertising (greater advertising expenditures) drank more and their drinking levels increased more over time, in comparison to youth who lived in markets with less exposure.

Alcohol social media advertisements are accessible by young people, including minors, and studies show that these advertisements may also influence their behavior. McClure et al. (2016) found that the majority of 15-20 year-olds reported exposure to
alcohol marketing on the Internet. The study also found a positive correlation between internet usage and receptivity to internet alcohol marketing. Jernigan et al. (2017) found that compared to adults over the age of 21, adolescents 13-20 years old are nearly twice as likely to recall exposure to alcohol ads on the Internet. This age group is also twice as likely to respond to the advertisements by liking, sharing, or reposting. Additionally, Roberson et al. (2018) noted that there was a correlation found among adolescents with higher levels of social network use and binge drinking. And finally, another study (Siegel et al., 2013) found that the top alcohol brand preferences of youth who engaged in “heavy episodic drinking” were brands associated with high advertising expenditure (p. 1196).

Platforms and Messages of Alcohol Advertisements

Marketers of alcohol use many digital and traditional tactics. However, just as consumers have moved online, marketers have also. People spend a lot of time on social media, as the average adult spends around four hours a day online and teens spend an average of nine hours a day online (“The Nielsen Q1:2018,” 2018; “The common sense,” 2019). The alcohol industry is no different; in 2017, the industry’s expenditure on digital ads was more than $126.8 million (“The Nielsen alcohol: Q2: 2017,” 2017). Marketers of alcohol use many digital tactics to target Internet users including extensive marketing on websites and also social media channels, such as Facebook, Instagram, and Twitter, which have become increasingly popular (Noel & Babor, 2017; Barry et al., 2018b). Despite the 2020 pandemic, digital advertising is still forecasted for aggressive growth this year and in the coming years. Mintel estimates digital advertising spend for the year at $125.9 billion. While major brands reduce ad spending for 2020 due to the pandemic, the reduced ad spend will come at the expense of traditional media as COVID-19 has only accelerated digital usage (“Digital advertising,” 2020).
As digital advertising is a more recent development, themes within traditional media were also taken into account for cross-examination. A trend in content displaying ‘partying’ or ‘friendship’ has previously been found in traditional television and magazine alcohol advertisements and more recently also has been found in alcohol advertisements on digital platforms. Morgenstern et al. (2015) performed a class analysis study on 581 unique television alcohol advertisements and identified five content classes emerging from the advertisements including partying, quality of the product, sports, manliness, and relaxation. The study found that “party-related content,” including themes of love, sex, and partying, was the most dominant theme making up 42% of the advertisements (p. 1771). Similarly, a content analysis (Noel & Babor, 2017) of alcohol advertisements on Facebook found a high prevalence of “party” and “friendship” themes (p. 734). Barry et al. (2018b) noted that these linkages between alcohol and socialization and parties are “insidious” for adolescents because this age group is especially preoccupied with their social standing and peer acceptance, making them highly receptive to the implied suggestion that drinking will help them make friends and fit in (p. 260). Other social media studies have found variances in themes depending on the brand, and in such studies ‘partying’ was the one theme found consistently across all brands. Barry et al. (2018b) conducted a Twitter content analysis study that used a Latent Dirichlet Allocation (LDA) test to form common themes 19,005 tweets of 13 alcohol brands. Eleven of the twelve significant themes that emerged were dedicated to a specific brand. For example, Jack Daniel’s tweets produced a rock-and-roll lifestyle theme and used words like “music,” “rock,” and “night,” while Grey Goose produced a theme of luxury with words like “extraordinary,” and “toast” (p. 259). The only theme that emerged that was not brand specific, was a theme using words such as “party,” “celebrate,” and
“friend” (p. 260). Likewise, Nicholls (2012) conducted a study with 12 of the UK’s leading alcohol brands’ Facebook and Twitter posts during November 2011 and analyzed how the posts fit into predetermined categories. Less than 1/10th of wall posts (23/282) and less than 25% of all tweets (42/189) “explicitly suggested consuming alcohol” (p. 489). This implies that conversations can be about other things as long as they are in a branded environment, which seems to be an approach many of these brands used. Once again, “celebration” was also a key term across the vast majority of brands, whether it was referring to a special occasion or simply because it is okay to ‘celebrate’ a Monday with Bacardi (p. 490).

A different content analysis study evaluated pictures on Instagram for the visible content shown within the photos. Barry et al. (2018a) evaluated 15 alcohol brands on Instagram over one month for 38 different content categories, including production value, character appeals, youth-oriented themes, product appeals, reward, appeals, and several more. The study found that the production value of the posts was generally high; color, texture, shine, and contrast were found in over 80% of the ads. Seventy percent of the advertisements used product appeals, 29% of posts depicted achievement including wealth and social gain, and 17% of posts depicted camaraderie including partying and friendship (p. 2416). Positive emotional experiences, including laughing, smiling, relaxing, etc., were depicted in half of the sample, and 182/184 posts (98%) had a person or people in the post. Around 17% of the posts included inappropriate use; for example, activities that should not be combined with alcohol like mountain biking or skiing or overconsumption with a person holding a full bottle of liquor. These risky behaviors portrayed in the media could lead to how young people perceive regular drinking (Barry et al., 2018a, p. 2417-2418).
Many of the categories used in these studies (Noel & Babor, 2017; Nicholls, 2012; Barry et al., 2018a; Weaver, 2016) will be utilized in this thesis to find what strategy to appeal to the audience is commonly used across various media platforms along with what visually make up the majority of the posts.

**Concerns & Restrictions on Alcohol Advertisements**

Underage drinking has been a “significant contributor” to youth alcohol-related motor vehicle crashes and other forms of injury, violence, suicide, and problems associated with school and family (“State Laws,” 2012, p. 1). There are various laws and restrictions across states that prohibit alcohol advertising that targets minors and place limitations regarding the content. For example, Ohio has a law that restricts alcohol advertisements from making any reference to Santa Claus. However, a study in 2010 found that 41 states in America either had no law regarding targeting minors, or the state’s laws had limitations that made them fairly ineffective (“State laws”, 2012). Since the industry is self-regulated, many brands even disregard restrictions and violate code regulations surrounding their advertisements. One research study (Babor et al., 2013) found that 35-74% of all TV beer advertisements broadcast in national markets from 1999-2008 contained code violations. Another study (Noel & Babor, 2017) assessed the compliance with advertising code on Facebook and found a violation rate of 85% of Facebook posts by alcohol brands.

There is also a limited presence of moderation, responsible drinking, and safety messages within online alcohol marketing campaigns. In the Twitter content analysis (Barry et al., 2018b) mentioned above, moderation messages were only found in three instances out of over 19,000 tweets by 13 brands: Captain Morgan with “#alwaysinmoderation,” Hennesy with “#drinkresponsibly,” and Absolut with “limit” (p. 259-260). In the United Kingdom
Facebook and Twitter content analysis mentioned above (Nicholls, 2012), none of the Facebook posts recommended moderate or responsible drinking; and out of over 400 total tweets, only six potentially “strategically ambiguous” tweets by Bacardi and one tweet by Smirnoff referenced responsible practices (p. 489). The tweets were mixed in with many other messages that did not regard safety.

Likely, code violations regarding alcohol advertisements on online platforms are not uncommon and any age gates intended to restrict minors on social media are often ineffective. Efforts to limit youth exposure to alcohol advertisements are ineffective or simply being ignored and it is clear that state laws and the alcohol industry’s self-regulation practices are ineffective and a significant health concern (Barry et al., 2018b).

**Research Questions**

My literature review and other journal articles have touched on the exposure and receptivity of young people to social media and alcohol advertising, the trends and common themes seen in alcohol advertisements, the government’s role in regulation, and even the concern surrounding the impact of these advertisements on underage consumers. The majority of past research is dated, most content analyses do not evaluate online/digital media platforms and nearly all of any modern research has only been conducted in countries outside of the United States. This study will build upon past research, but by evaluating recent and digital advertisements, and by conducting the study among Americans, this research will be a pioneer study and will introduce new data that can be a guide for future studies.

Research Questions:
RQ1: What strategy of appeals (i.e. friendship, partying, etc.) will be identified most commonly among alcohol advertisements on each platform?
RQ2: Does the most popular strategy of appeals differ across different platforms?
RQ3: To what extent does the word count differ across platforms?
RQ4: To what extent does the strategy of appeals impact the amount of engagement on a post?
RQ5: Do the strategies of appeals used differ across different alcohol brands or alcohol types?
RQ6: How often do the advertisements include a safety or responsibility message?
RQ7: Do the image and the caption of the advertisements convey different messages?

Methodology

Samples

This study considers the most recent Instagram, Twitter, and Facebook posts as of November 2020 by the three top alcohol brands in the categories of Beer, Vodka, Hard Seltzer, and Whiskey. These categories provide a variety of types of alcohol and preference among these types is consistent among the target age group of 18-25 year-olds. (Fortunato et al., 2013).

Beer Brands: Bud Light, Coors Light, Miller Lite

Beer is one of the oldest and most popular drinks in the world; the third most popular drink overall after water and tea (Nelson, 2005). Beer is brewed from cereal grains such
as barley, wheat, corn, and rice. Around 42% of Americans that drink alcohol named beer as their favorite drink (Andrews, 2019).

Bud Light is a premium light lager that is the best-selling most popular beer in the United States by a two-to-one margin. The 2018 market share of Bud Light was 14.3%, which was down more than 20% from 2013 (Andrews, 2019). Coors Light is the second most popular beer brand in America. Coors Light is a low-calorie lager that held 7.2% of the market share in 2018. Miller Lite was released in 1975 and is now the third most popular beer brand in America. Its market share in 2018 was 6.1% (Andrews, 2019).

**Vodka Brands: Smirnoff, Tito’s, New Amsterdam**

Vodka is a clear, distilled spirit made from water and ethanol from grains or potatoes. Vodka originated in Russia and Poland, but it is very popular in the United States. It is the most popular liquor to use in cocktails, mixed drinks, and shots (Graham, 2019). In 2019, around 77.57 million nine-liter cases of vodka were consumed in the United States. In 2019, the advertising spend for vodka in the United States amounted to over 102 million dollars (“Landing brands,” 2019).

As of 2019, Smirnoff was the leading vodka brand in the United States with nearly nine million nine-liter cases sold. In 2019, Smirnoff and Tito’s both had 11% of the market share, with New Amsterdam at 7%. (“Leading brands,” 2019).

**Hard Seltzer Brands: White Claw, Truly, Bon & Viv**

Hard seltzer is alcoholic bubbly water with natural fruit flavoring and around 5% ABV. Hard seltzers are ready-to-drink cocktails that are low-calorie and low-carb and have been on the rise in recent years (“The complete,” 2014).

As of 2019, White Claw made $526 million of sales within the year, which was up 203.2% since the previous year. Truly Hard Seltzer had $274 million in sales that year.
which was up 183.5% since the previous year. Bon & Viv had the next highest sales with $70 million that year (Riell, 2019). Bon & Viv is owned by Anheuser-Busch Inc. which is also the parent company of Bud Light.

**Whiskey: Crown Royal, Jim Beam, Jack Daniels (Swartz, 2019).**

Whiskey is made with many grains, flavors, and distillation processes making it one of the most diverse distilled spirits. It is made from malted grains and almost always aged in barrels for years or decades. Jack and Coke is one of the easiest and most popular cocktails made with whiskey, using Jack Daniels and Coca-Cola with ice (Graham, 2021).

**Selection of Platform**

Facebook, Twitter, and Instagram were the platforms chosen for this study because they are extremely popular among teens and young adults and several alcohol brands have a presence on these three channels.

**Selection of Dates**

The twelve most recent posts as of November 2020 were selected for evaluation.

**Coding Procedures**

Prior to developing a coding scheme, my thesis advisor and I visited the brands’ Instagram, Twitter, and Facebook accounts and discussed a list of coding schemes. The advertisements were coded by me and one other coder. I trained the coder carefully to ensure the coder thoroughly understood all of the operational definitions, category schemes, mechanics, and peculiarities of the study and to eliminate any methodological problems or discrepancies. Within the sessions, we revised definitions, clarified the
boundaries, and I compiled all of this into a detailed instruction sheet with examples. This study will use quantitative research, compiling a cross-examination of Instagram, Twitter, and Facebook posts from various brands over an extended amount of time. This study will be a mixed-method content analysis in an attempt to find, describe, and quantify patterns and trends among the strategies of appeal and content within alcohol advertisements on various social media platforms. Data should provide insight into the series of advertisements’ characteristics and qualities in a systematic and measured way. A content analysis cannot draw direct correlations between advertisements and effects on an audience; however, any historical change will be studied, and notable findings will be discussed. (Wimmer & Dominick, 2014).

**Coding Schemes**

*Names and industry type of companies*

In order to code the social media accounts, coders needed a nominal determinant for each brand. The names of each company were coded as Bud Light (1), Coors Light (2), Miller Lite (3), Tito’s (4), Smirnoff (5), New Amsterdam (6), White Claw (7), Truly (8), Bon & Viv (9), Crown Royal (10), Jim Beam (11), and Jack Daniels (12). The coder also coded the industry type of each company, based on the major products each produces: beer (1), vodka (2), hard seltzer (3), and whiskey (4). The coder also coded the media platform: Instagram (1), Twitter (2), and Facebook (3).

*ID: Order within the page*

To properly code each individual social media post/advertisement, coders determined the order within the Instagram, Twitter, or Facebook page. The order within the page is
described as the ID. The first word of each post was also marked as the identifier so that no advertisements were accidentally coded twice.

**Engagement**

The number of followers, likes, shares/retweets, and comments was recorded for each post. Previous studies used “likes,” “shares/retweets,” and “comments” as an “engagement” measure (Barry et al., 2018a; Jernigan et al., 2017).

**Advertisement or Post**

In this particular study, only advertisements (1) were focused on. Responses related to corporate responsibility or regular social media posts that were non-advertisements (2) were excluded. Non-advertisement posts were coded for a specific type: social issue (1), Covid-19 related (2), Company information (3), Environmental Issue (4), Underage Drinking (5), CSR initiated (6), Unrelated to Drinking (7), Random (8), Other (0). The advertisements were also coded for type: Regular ads (0), Seasonal promotion (1), holiday (2), and contest/giveaway (3).

**Caption**

The advertisement was coded for if there was a caption (1) or if there was no caption (99). If there was a caption, the number of words was recorded, including hashtags, username tags, and numbers.

**Messages**

The strategies of appeals were coded for advertisements. First, the caption was coded for all of the following themes, then the first picture or video was coded for all of the following themes. Many of the following categories were modeled after Weaver (2016). Table 1 shows the themes that were coded as dichotomous variables: no (0) and yes (1).
Table 1. Themes that were coded as dichotomous variables

<table>
<thead>
<tr>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste, which also included flavor or description of the drink’s taste</td>
<td>Tastes, tastes good/is easy to drink/refreshing: “Goes with everything and tastes good”</td>
</tr>
<tr>
<td>Features seasonal characteristic, relating to a particular season of the year such as fall, summer, spring, winter</td>
<td>“A good drink for summer”</td>
</tr>
<tr>
<td>Featuring themes relating to a specific holiday such as Christmas or Halloween</td>
<td>“Smirnoff is the perfect way to celebrate the 4th of July”</td>
</tr>
<tr>
<td>Features the scenes of celebrating, honoring or commemorating a particular event by expressing excitement</td>
<td>“Celebrate with a White Claw”</td>
</tr>
<tr>
<td>Features relaxing from drinking, reducing tension, being calm, unwinding, or being lazy</td>
<td>“Great for relaxing”</td>
</tr>
<tr>
<td>Features hedonic feeling from drinking, or a good mood as a result from drinking</td>
<td>“Drinking Smirnoff will make your life fun!”</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>getting drunk</td>
<td>Consumption of too much alcohol, encouraging overindulgence in alcohol.</td>
</tr>
<tr>
<td>socializing</td>
<td>Conversing and mingling with other people.</td>
</tr>
<tr>
<td>food</td>
<td>Food such as appetizers, snacks, and meals.</td>
</tr>
<tr>
<td>recipe</td>
<td>Instructions for preparing a specific mixed drink or cocktail and a list of ingredients</td>
</tr>
<tr>
<td>sophistication</td>
<td>Elegant, professional, refined, and sophisticated themes</td>
</tr>
<tr>
<td>adventure</td>
<td>Risk-taking, venturesome experiences, or an extravagant journey</td>
</tr>
<tr>
<td>healthy</td>
<td>A drink that is better for you nutritionally</td>
</tr>
<tr>
<td>joke or humor</td>
<td>An intention for the audience to think something is funny, includes puns, memes, and jokes</td>
</tr>
<tr>
<td>Theme</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Covid-19</td>
<td>A message/theme relating to the 2020 pandemic, COVID-19</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Message regarding drinking responsibly, safely, or being 21+</td>
</tr>
<tr>
<td>Other</td>
<td>If an advertisement fit none of the themes listed above (1), or if an advertisement featured one of the themes listed above (0)</td>
</tr>
</tbody>
</table>

The “occasion” theme features a reason behind the drinking, a particular event or activity, such as a party or a sports game, and it was coded: party (1), family/friends get-together (2), romantic (3), outdoors (4), working out/exercise (5), sporting game (6), any occasion (7), or can’t determine (0). The “sexual content” theme relates to specifically masculine or feminine themes or relating to promiscuity and it was coded as: If an advertisement had feminine (1), masculine (2), promiscuous (3), can’t determine (4), or no sexual context (0). For example, “A typical girly night involves White Claws” was coded as 1, “Budweiser is for real men” as 2, and “For sexy times” with promiscuity pictured as 3.

The “Age” theme features a specific age group, like young people or old people, and it was coded as: 1: young (“keeps you young”), 2: old (“It’s more of a classy drink, for mature adults”), 3: can’t determine, and 0: none. The “Regional” theme relates to a specific location, like America or a specific state, and it was coded as: 1. American (“Bud light is for America”), 2. regional, and 0: none.

**Number of Pictures/Videos**
The number of pictures was noted or marked (0) for not present. The number of videos was also noted or marked (0) for not present. The first picture or video was coded for the above messages and appeals. The full coding key can be found in the Appendix.

**Intercoder reliability**

A pilot study of 72 advertisements (17% of total ads examined), two advertisements from each brand on each platform was independently and separately conducted between me and the other coder. All of our information was input into excel sheets by placing check marks or numbers into predetermined spaces. The reliability coefficient was .98 reliability (percentage agreement).

**Analysis**

After all the data was collected, the data was analyzed through the SPSS program.

**Results**

**Sample profiles**

Among the 12 studied brands, a total of 432 social media posts and advertisements were coded, including 36 from each brand with 12 from Instagram, 12 from Twitter, and 12 from Facebook. Therefore, there were 108 beer, 108 vodka, 108 hard seltzer, and 108 whiskey social media posts/advertisements coded.

**Advertisements**

The majority of social media posts from the 12 brands were advertisements \( (n = 363, 84\%) \) and the remaining 69 were non-advertising posts. 34 of the non-advertising social media posts were corporate social responsibility related \( (49.28\%) \). The 69 non-advertisement posts were excluded from the further research analysis.
Among the valid 363 advertisements, the majority were regular advertisements \( (n = 245, 67.5\%) \) with a notable amount of seasonal and holiday promotions \( (n = 87, 24\%) \). Contests and giveaways made up the remaining 8.5% \( (n = 31) \).

Captions

Among the valid 363 advertisements, the majority \( (n = 360, 99.2\%) \) had a caption. The average number of words was 23.1 \( (SD = 191.18) \).

Strategy of Appeals within Captions

Among the valid 360 advertisements with a caption, 96 advertisements \( (26.7\%) \) included a message regarding taste. 20.5% \( (n = 74) \) mentioned a specific occasion for drinking within the caption; therefore, in the majority of these advertisements \( (n = 286, 79.4\%) \) the drinking occasion was undeterminable by the caption. The most common occasion mentioned within the caption was a sporting game found within 9.4% \( (n = 34) \) of captions. The “party” occasion only made up 1.7% of captions \( (n = 6) \).

Seasonal \( (n = 122, 33.9\%) \) and holiday messages \( (n = 114, 31.7\%) \) were frequent, with each found in about a third of the advertisements’ captions. Among the 360 advertisements’ captions, 24 captions \( (6.7\%) \) included messages of “celebrating,” 23 captions \( (6.4\%) \) included “relaxing,” 17 captions \( (4.7\%) \) included “feel good,” and 18 captions \( (5\%) \) included “socializing,” 5 captions \( (1.4\%) \) included “sophistication,” 2 captions \( (0.6\%) \) included “adventure,” 6 captions \( (1.7\%) \) included “healthy.” Many advertisements, 15.9%, included a recipe in the caption \( (n = 57) \), and 22 advertisements \( (6.1\%) \) had captions including “food” in general. Notably, 15% of captions \( (n = 54) \) included a “joke” or form of humor. Only 6 advertisements \( (1.7\%) \) included a “responsibility message” within the caption. This information can be found in column one of Table 2.
Pictures and Videos

Among the valid 363 advertisements, 305 advertisements (84%) contained at least one picture or video. 193 advertisements (63.2) contained at least one picture and 112 advertisements (36.7%) contained at least one video. Of the 193 advertisements with at least one picture, 168 advertisements (87%) only had one picture and 25 advertisements (13%) contained more than one picture with a maximum of five pictures. The first picture on each post was the picture that was coded. No advertisement contained more than one video.

Strategy of Appeals within Pictures

Among the 193 pictures coded, half \((n = 98, 50.8\%)\) featured “taste.” 48 pictures (24.9%) showed a specific “occasion.” Nearly a fourth showed a “seasonal” \((n = 54, 28\%)\) aspect, and 19 pictures (9.8%) showed a “holiday.” Among the 193 pictures, 11 pictures (5.7%) showed “celebrating,” 15 pictures (7.8%) showed “relaxing,” 23 pictures (11.9%) showed “socializing,” 14 pictures (7.3%) showed “food,” 22 pictures (11.4%) showed a “recipe,” and 21 pictures (10.9%) showed “joke/humor.” “Other/can’t determine” was found in 14% of pictures \((n = 16)\). A responsibility message was found in 34% of pictures \((n = 34)\). Only 2 pictures (1%) showed “feeling good,” 3 pictures (1.6%) showed “healthy,” 6 pictures (3.1%) showed sophistication, and no pictures showed “getting drunk,” “sexual context,” “age,” “regional,” or “Covid related.” This information can be found in column two of Table 2.

Strategy of Appeals in Videos

Among the 112 videos coded, nearly half \((n = 54, 48.2\%)\) of the videos showed “taste.” Among the 113 videos, 25 videos (22.3) showed a specific “occasion.” Additionally, 37 videos (33%) showed a “seasonal aspect,” and 28 videos (25%) showed
a “holiday.” Six videos (5.4%) showed “celebrating,” 11 videos (9.8%) showed “relaxing,” 13 videos (11.6%) showed “socializing,” 7 videos (6.3%) showed “food,” 25 videos (22%) showed a “recipe,” 5 videos (4.5%) showed “sophistication,” 8 videos showed “adventure,” 1 video (0.8%) showed “healthy,” and 7 videos (6.3%) showed “joke/humor.” No videos showed “feel good,” “sexual context,” “age,” “regional,” or “covid” related. A responsibility message was found in 50% of the videos ($n = 57$). “Other/can’t determine” was found in 8% of videos ($n = 9$). This information can be found in column three of Table 2.

Table 2. Frequencies of strategies of appeal in captions, pictures, and videos

<table>
<thead>
<tr>
<th></th>
<th>Caption</th>
<th>First Picture</th>
<th>First Video</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>$n = 96$, 26.7%</td>
<td>$n = 98$, 50.8%</td>
<td>$n = 54$, 48.2%</td>
</tr>
<tr>
<td>Occasion</td>
<td>$n = 74$, 20.5%</td>
<td>$n = 48$, 24.9%</td>
<td>$n = 25$, 22.3%</td>
</tr>
<tr>
<td>Seasonal</td>
<td>$n = 122$, 33.9%</td>
<td>$n = 54$, 28%</td>
<td>$n = 37$, 33%</td>
</tr>
<tr>
<td>Holiday</td>
<td>$n = 114$, 31.7%</td>
<td>$n = 19$, 9.8%</td>
<td>$n = 28$, 25%</td>
</tr>
<tr>
<td>Celebrating</td>
<td>$n = 24$, 6.7%</td>
<td>$n = 11$, 5.7%</td>
<td>$n = 6$, 5.4%</td>
</tr>
<tr>
<td>Relaxing</td>
<td>$n = 23$, 6.4%</td>
<td>$n = 15$, 7.8%</td>
<td>$n = 11$, 9.8%</td>
</tr>
<tr>
<td>Feel good</td>
<td>$n = 17$, 4.7%</td>
<td>$n = 2$, 1%</td>
<td>$n = 0$, 0%</td>
</tr>
<tr>
<td>Get drunk</td>
<td>$n = 4$, 1.1%</td>
<td>$n = 0$, 0%</td>
<td>$n = 3$, 2.7%</td>
</tr>
<tr>
<td>Socializing</td>
<td>$n = 18$, 5%</td>
<td>$n = 23$, 11.9%</td>
<td>$n = 13$, 11.6%</td>
</tr>
<tr>
<td>Food</td>
<td>$n = 22$, 6.1%</td>
<td>$n = 14$, 7.3%</td>
<td>$n = 7$, 6.3%</td>
</tr>
<tr>
<td>Recipe</td>
<td>$n = 57$, 15.9%</td>
<td>$n = 22$, 11.4%</td>
<td>$n = 25$, 22%</td>
</tr>
<tr>
<td>Sophistication</td>
<td>$n = 5$, 1.4%</td>
<td>$n = 6$, 3.1%</td>
<td>$n = 5$, 4.5%</td>
</tr>
<tr>
<td>Adventurous</td>
<td>$n = 2$, 0.6%</td>
<td>$n = 9$, 4.7%</td>
<td>$n = 8$, 7.1%</td>
</tr>
<tr>
<td>Healthy</td>
<td>$n = 6$, 1.7%</td>
<td>$n = 3$, 1.6%</td>
<td>$n = 1$, 0.8%</td>
</tr>
</tbody>
</table>
**Average number of followers, likes, comments, and shares**

A series of one-way ANOVA tests were used to compare the means of the number of followers, likes, comments, and shares, between each brand. The mean number of followers was 1,507,422.639 ($SD = 3,824,874.959$). The mean number of comments was 79.208 ($SD = 242.129$). The mean number of likes was 1,027.866 ($SD = 1790.290$). The mean number of shares was 90.222 ($SD = 195.604$). The mean number of followers, comments, likes, and shares for each brand can be found in Table 3.

Table 3. Mean number of followers, comments, likes, & shares for each brand

<table>
<thead>
<tr>
<th></th>
<th>Bud Light</th>
<th>Coors Light</th>
<th>Miller Light</th>
<th>Tito’s</th>
<th>Smirnoff</th>
<th>New Amsterdam</th>
<th>Truly</th>
<th>Bon &amp; Viv</th>
<th>Crown Royal</th>
<th>Jim Beam</th>
<th>Jack Daniels</th>
</tr>
</thead>
<tbody>
<tr>
<td>N of Followers</td>
<td>2890</td>
<td>1047</td>
<td>821</td>
<td>137</td>
<td>4491</td>
<td>196231</td>
<td>128</td>
<td>669</td>
<td>744</td>
<td>1151</td>
<td>6377</td>
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<tr>
<td>N of Comments</td>
<td>339</td>
<td>93</td>
<td>39</td>
<td>34</td>
<td>19</td>
<td>3</td>
<td>213</td>
<td>46</td>
<td>5</td>
<td>28</td>
<td>89</td>
</tr>
</tbody>
</table>
Strategy of appeals across different platforms

The second research question seeks to know which strategies of appeals are being used on different social media platforms. A chi-square test was conducted to determine whether strategies are statistically associated with the types of social media platforms.

The results showed that there were statistically significant differences with the “socializing” appeal within captions on Facebook compared to Twitter and Instagram ($\chi^2(2) = 6.05, p < .05$), with the effect size, Cramer’s V, was .130, meaning weak association[1]. In other words, the “socializing” appeal appeared more in Facebook advertisements’ captions than statistically expected. Additionally, the results showed that there were statistically significant differences for the “joke/humor” appeal on Twitter captions than on Facebook and Instagram captions ($\chi^2(2) = 11.192, p < .005$), Cramer’s V = .176. The “joke/humor” appeal appeared more in Twitter captions than statistically expected. All other strategies of appeals appeared as expected in captions. There were no significant differences for strategies of appeals in pictures and videos across the three platforms.

Number of Words

To find the differences in the word count across three platforms, a one-way ANOVA test was conducted. The average number of words in captions on Instagram was 26.73 ($SD = 23.94$), that of Twitter was 19.14 ($SD = 12.19$), and that of Facebook was 22.63 ($SD = 22.63$).
18.02). The result showed that there was a significant difference, $F = 4.664$, $(2, 357)$, $p = 0.01$. The post-hoc analysis showed that the difference between the average word counts of Instagram ($M = 26.73$, $SD = 23.94$) and Twitter ($M = 19.14$, $SD = 12.19$) was statistically different. Instagram has a higher mean overall, and Twitter has a lower mean. In other words, brands tend to use more words on Instagram than on Twitter and it is significantly different.

Another one-way ANOVA test was conducted to find the difference in the word count across the twelve brands. The average number of words in captions for Bud Light was 16.65 ($SD = 18.26$), that of Coors Light was 23.47 ($SD = 12.80$), that of Miller Lite was 8.72 ($SD = 5.09$), that of Tito’s was 47.88 ($SD = 29.16$), that of Smirnoff was 23.15 ($SD = 18.98$), that of New Amsterdam was 19.97 ($SD = 14.29$), that of White Claw was 10.71 ($SD = 6.23$), that of Truly was 23.59 ($SD = 18.94$), that of Bon & Viv was 37.29 ($SD = 18.71$), that of Crown Royal was 23.73 ($SD = 5.03$), that of Jim Beam was 23.73 ($SD = 15.20$), and that of Jack Daniels was 22.62 ($SD = 12.49$). The result showed that there was a significant difference, $F = 13.497$, $(11, 348)$, $p = 0.000$. The post-hoc analysis showed that the difference between the average word counts of Bud Light and Tito’s, Bud Light and Bon & Viv, Coors Light and Miller Lite, Miller Lite and Tito’s, Miller Lite and Truly, Miller Lite and Bon & Viv, Miller Lite and Jim Beam, Tito’s and Smirnoff, Tito’s and New Amsterdam, Tito’s and White Claw, Tito’s and Truly, Tito’s and Crown Royal, Tito’s and Jim Beam, Tito’s and Jack Daniel’s, New Amsterdam and Bon & Viv, White Claw and Bon & Viv, and Bon & Viv and Crown Royal were statistically different. Tito’s has the highest mean score of 47.88 ($SD = 29.16$) and Bud Light has the lowest mean score of 16.65 ($SD = 18.26$) making these two brands more
statistically different than many of the others. In other words, the majority of brands tended to use very different amounts of words from each other in their captions.

Another one-way ANOVA test was conducted to find the difference in the word count across the alcohol types. The average number of words in captions for beer was 16.53 (SD = 14.631), and that of vodka was 30.35 (SD = 24.879), and that of hard seltzer was 23.45 (SD = 18.920), and that of whiskey was 21.62 (SD = 12.184). The result showed that there was a significant difference, $F = 8.904$, (3, 356), $p = 0.000$. The post-hoc analysis showed that the difference between the average word counts of beer ($M = 16.53$, $SD = 14.63$) and vodka ($M = 30.35$, $SD = 24.88$) was statistically different.

Additionally, the post-hoc showed that the difference between the average word counts of vodka ($M = 30.35$, $SD = 24.88$) and whiskey ($M = 21.62$, $SD = 12.18$) was also statistically different. Vodka captions tended to be very long compared to beer and whiskey, making the difference significant.

The Strategic Appeal of Captions across Alcohol Type

Across the different types of alcohol in the 360 advertisements with a caption, a series of chi-square tests were conducted, and the results were statistically significant for all captions’ strategic appeal categories except for “healthy,” “food,” and “adventurous.”

Across the different types of alcohol, a chi-square test was conducted, and the results were statistically significant for “taste” ($x^2(3) = 35.84, p < .000$), Cramer’s $V = .316$. Hardly any beer captions had a “taste” appeal ($n = 4, 4.2\%$); however, 39.4% of vodka captions ($n = 37$), 35.1% of hard seltzer captions ($n = 34$), and 28.4% of whiskey captions ($n = 21$) had the “taste” appeal. The results were statistically significant for “occasion” by alcohol type ($x^2(18) = 60.66, p < .000$), Cramer’s $V = .237$. “Party” was
displayed in 24 of these captions, with 10 of these advertisements being vodka. “Sporting game” was in 34 captions, with 18 coming from whiskey and 11 coming from vodka. The results were statistically significant for “seasonal” by alcohol type ($\chi^2(3) = 37.83$, $p < .000$), Cramer’s $V = .324$. Only 16.8% ($n = 16$) of beer ads had a “seasonal” aspect, while 57.4% ($n = 54$) of vodka ads had a “seasonal” aspect. The numbers for hard seltzer and whiskey were 26.8% ($n = 26$) and 35.1% ($n = 26$) respectively. The results were also statistically significant for “holiday” ($\chi^2(6) = 23.49$, $p < .001$), Cramer’s $V = .181$. The “holiday” appeal was found in 16.8% ($n = 16$) of beer advertisements, which was less than the findings of the “holiday” appeal in vodka ($n = 45, 47.9\%$), hard seltzer ($n = 30, 30.9\%$), and whiskey ($n = 23, 31.1\%$) advertisements. The “celebrating” appeal was also statistically significant across alcohol type ($\chi^2(3) = 14.73$, $p < .002$), Cramer’s $V = .202$. Most of the alcohol brands did not have “celebrating” within the caption with beer and hard seltzer having about 3% each ($n = 3$); however, 16.2% of whiskey ads had celebration within the caption ($n = 12$). Across the brands, a chi-square test was conducted, and the results were statistically significant for “recipe” ($\chi^2(3) = 51.56$, $p < .000$), Cramer’s $V = .379$. No beer captions featured the “recipe” strategy, whiskey and hard seltzer did not utilize this strategy much ($n = 11, 11.3\%; n = 11, 15.1\%$); however, 37.2% of vodka advertisements used this strategy ($n = 35$). The results were statistically significant for “joke/humor” ($\chi^2(3) = 22.56$, $p < .000$), Cramer’s $V = .250$. Beer captions utilized the “joke/humor” appeal frequently ($n = 27, 28.4\%$) compared to vodka ($n = 9, 9.6\%$), seltzer ($n = 15, 15.5\%$), and whiskey ($n = 3, 4.1\%$). The results were statistically significant for “sexual content” ($\chi^2(3) = 8.65$, $p < .05$), Cramer’s $V = .155$, as this appeal was not used in any alcohol types except for vodka ($n = 3, 3.2\%$).
Some appeals were statistically significant because the majority of advertisements across the four types did not use those appeals overall. “Relaxing” was statistically significant across alcohol type as $\chi^2(3) = 18.216, p < .000$, Cramer’s V = .225; however, the data for this category overall was very small as only 23 out of the 360 advertisements with captions found this appeal (6.4%). “Feel good” was similar, as it was also statistically significant $\chi^2(3) = 13.247, p < .004$, Cramer’s V = .192; however, this category also was hardly used within captions as only 17 out of the 360 valid advertisements had a caption with this strategy (4.7%). The “socializing” appeal was statistically significant across alcohol type ($\chi^2(3) = 10.268, p < .05$), Cramer’s V = .169, but the majority of advertisements did not use this appeal in captions as only 18 out of 360 advertisements included “socializing” (5%). Sophistication was significantly different because the majority of brands did not use this appeal ($\chi^2(3) = 11.493, p < .01$), Cramer’s V = .179.

“Adventurous” was not statistically significant, as all four alcohol types did not use this appeal within their captions in a similar way ($n = 2, 0.6\%$). “Get drunk” was also not statistically significant, and also was hardly used as only 4 out of 360 total advertisements had this appeal within the caption (1.1%). The same is true for “age,” “regional,” and “covid.”

Other appeals were not statistically significant because the themes were used similarly across captions; as “food” and “healthy” were not statistically significant among alcohol types. “Other/Can’t Determine” and “responsibility” were also not statistically significant. All of this information can be found in column one of Table 4 and in the caption columns of Table 5.

The Strategic Appeal of Pictures across Alcohol Type
Across the different types of alcohol in the 193 advertisements with a picture, a series of chi-square tests were conducted, and many results were statistically significant for all the pictures’ strategic appeal categories. Across the different types of alcohol, a chi-square test was conducted, and the results were statistically significant for “taste” ($\chi^2(3) = 64.51$, $p < .000$), Cramer’s $V = .578$. Beer did not show “taste” in their pictures ($n = 8$, 13.1%), whereas most hard seltzers ($n = 41$, 85.4%) and whiskey ($n = 29$, 70.7%) showed “taste.” 46.5% ($n = 20$) of vodka advertisements showed “taste.” The results were also statistically significant for “occasion” ($\chi^2(21) = 81.16$, $p < .000$), Cramer’s $V = .374$. Across the 193 pictures, 6 showed an “outdoor occasion,” and Bud Light made up 5 out of the 6 pictures (83.3%). 18 advertisements showed an “occasion” of “sporting game,” 14 of which were by whiskey brands (77.8%). The use of the “seasonal” appeal in pictures was also found to be statistically significant across alcohol type ($\chi^2(3) = 10.00$, $p < .000$), Cramer’s $V = .228$. Only 10.4% ($n = 5$) hard seltzer ads showed “seasonal” in pictures, which is not very much compared to beer ($n = 20$, 23.8%), vodka ($n = 14$, 32.6%), and whiskey ($n = 15$, 36.6%) pictures. The use of “relaxing” appeal in pictures was found to be statistically significant across alcohol type also ($\chi^2(3) = 9.85$, $p < .02$), Cramer’s $V = .226$. Notably, whiskey did not show “relaxing” at all, while nearly 15% of beer pictures contained the “relaxing” appeal ($n = 9$). The “food” appeal was found to be statistically significant ($\chi^2(3) = 9.61$, $p < .05$), Cramer’s $V = .223$. Only 1% of beer pictures ($n = 1$) showed “food,” compared to nearly 17% of hard seltzer pictures ($n = 8$). “Recipe” in pictures was also found to be statistically significant across alcohol type ($\chi^2(3) = 24.82$, $p < .000$), Cramer’s $V = .359$. None of the beer pictures showed “recipe” while more than 30% of whiskey pictures showed “recipe” ($n = 13$). “Sophistication”
was found to be statistically significant ($\chi^2(3) = 8.94, p < .05$), Cramer’s $V = .215$ as no vodka pictures, no seltzer pictures, only 3.3% beer pictures ($n = 2$), and 9.8% of whiskey pictures ($n = 4$) showed “sophistication.” “Adventurous” was found to be statistically significant ($\chi^2(3) = 14.44, p < .01$), Cramer’s $V = .274$. No vodka pictures, only 1.6% of beer pictures, only 2.4% of whiskey pictures showed “adventurous.” 14.6% of hard seltzer pictures showed “adventurous,” making up more than three-fourths of the pictures with “adventurous” appeal. “Joke/humor” was found to be statistically significant ($\chi^2(3) = 38.33, p < .000$), Cramer’s $V = .446$ as 31.1% of beer pictures had this appeal ($n = 19$), and no vodka, no whiskey, and hardly any seltzer ($n = 2, 4.2\%$) showed “joke/humor.” The “other/can’t determine” category showed statistical significance ($\chi^2(3) = 22.16, p < .000$), Cramer’s $V = .339$. 11 vodka pictures (25.6%) were “other/can’t determine,” which was a lot compared to the 1 beer picture, 2 seltzer pictures, and 2 whiskey pictures that were “other/can’t determine.” The “other/can’t determine” category included themes that did not necessarily fit the list of appeals, some of such themes included launching a new product or a comparison to other brands. Finally, “responsibility” was found to be statistically significant across alcohol type ($\chi^2(3) = 13.67, p < .01$), Cramer’s $V = .266$. 25% of beer pictures ($n = 15$), 17% of seltzer pictures ($n = 8$), and 27% of whiskey pictures ($n = 11$) showed responsibility, but none of the vodka pictures had the “responsibility” theme.

The “holiday,” “celebrating,” “feel good,” “socializing,” “age,” and “Covid” appeals in pictures were not found to be statistically significant across brands. All types did not show “healthy” appeal in pictures in the same way; therefore, making this appeal not statistically significant across alcohol type. The “get drunk,” “sexual context,” and
“regional” appeals were not found in any pictures. All of this information can be found in the second column of Table 4 and in the picture columns of Table 5.

**The Strategic Appeal of Videos across Alcohol Type**

Across the different types of alcohol in the 112 advertisements with a video, a series of chi-square tests were conducted, and many results were statistically significant for videos’ strategic appeal categories. Across the different types of alcohol, a chi-square test was conducted, and the results were statistically significant for “taste” ($\chi^2(3) = 42.15, p < .000$), Cramer’s $V = .616$. No beer videos showed “taste;” however, 90% of hard seltzer videos showed taste ($n = 27$). The numbers for whiskey ($n = 14, 58.3\%$) and vodka ($n = 13, 33.3\%$) fell in between. “Occasion” was also found to be statistically significant for videos among alcohol type ($\chi^2(15) = 26.19, p < .05$), Cramer’s $V = .279$. More specifically, 15% of vodka videos ($n = 6$) showed a “sporting game,” compared to the 6% of beer videos ($n = 1$), 3% of seltzer videos ($n = 1$), and 8% of whiskey videos ($n = 2$). Among the ten videos including “sporting game,” vodka made up 60% ($n = 6$). The “seasonal” appeal was also found to be statistically significant ($\chi^2(3) = 15.21, p < .01$), Cramer’s $V = .369$. 52.5% of vodka videos utilized a “seasonal” appeal ($n = 21$). On the other hand, only 9 whiskey videos (24.3%), 4 beer videos (22.2%), and 2 hard seltzer videos (10%) contained this appeal. “Relaxing” in videos was found to be statistically significant across alcohol type ($\chi^2(3) = 40.12, p < .000$), Cramer’s $V = .598$. 50% of beer videos had “relaxing,” while none of the vodka or whiskey videos and hardly any of the seltzer videos ($n = 2, 6.7\%$) showed “relaxing. The “get drunk” appeal in videos was found to be statistically significant across alcohol type ($\chi^2(3) = 16.10, p < .001$), Cramer’s $V = .379$. No alcohol types showed this appeal except for beer ($n = 3, 3.7\%$).
“Socializing” was also found to be statistically significant ($x^2(3) = 27.45$, $p < .000$), Cramer’s $V = .495$, as whiskey videos utilized this appeal significantly more than other types ($n = 10$, 41.7%). Beer did not use this appeal at all in videos, and vodka ($n = 1$, 2.5%) and hard seltzer ($n = 2$, 6.7%) hardly used this appeal in videos. “Recipe” was found to be statistically significant in videos across alcohol type ($x^2(3) = 18.57$, $p < .000$), Cramer’s $V = .407$. Zero beer videos and hardly any seltzer videos ($n = 3$, 10%) showed “recipe” compared to the 50% of whiskey videos ($n = 12$) and 25% of vodka videos ($n = 10$) videos that showed “recipe.” The appeal “sophistication” was found to be statistically significant ($x^2(3) = 11.18$, $p < .05$), Cramer’s $V = .316$. No beer, no vodka, and hardly any seltzer ($n = 1$, 3.3%) videos showed “sophistication;” however, 16% of whiskey videos showed “sophistication” ($n = 4$). “Adventurous” was found to be statistically significant ($x^2(3) = 16.39$, $p < .001$), Cramer’s $V = .383$. Beer, vodka, and whiskey each had one video showing “adventurous,” making up less than 2% of each types’ videos; while hard seltzer had 14 making up 18.7% of all seltzer videos. “Responsibility” messages were found to be statistically significant across alcohol type ($x^2(3) = 15.125$, $p < .01$), Cramer’s $V = .367$. Most beer ($n = 14$, 77.8%) and whiskey videos ($n = 17$, 70.8%) showed a responsibility message. On the other hand, only 32.5% of vodka videos ($n = 13$) and 43.3% of hard seltzer videos ($n = 13$) had responsibility messages.

The “holiday,” “celebrating,” “food,” “healthy,” “joke/humor,” “Covid,” and “other/can’t determine” categories of appeals in videos were not found to be statistically significant across brands. The “feel good,” “sexual content,” “age,” and “regional” appeals were found in videos. All of this information can be found in the third column of Table 4 and in the video columns of Table 5.
<table>
<thead>
<tr>
<th></th>
<th>Caption</th>
<th>Picture</th>
<th>Video</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taste</strong></td>
<td>$(\chi^2(3) = 35.84, \ p &lt; 0.000)$, Cramer’s V = 0.316, significant</td>
<td>$(\chi^2(3) = 64.51, \ p &lt; 0.000)$, Cramer’s V = 0.578, significant</td>
<td>$(\chi^2(3) = 42.15, \ p &lt; 0.000)$, Cramer’s V = 0.616, significant</td>
</tr>
<tr>
<td><strong>Occasion</strong></td>
<td>$(\chi^2(18) = 60.66, \ p &lt; 0.000)$, Cramer’s V = 0.237, significant</td>
<td>$(\chi^2(21) = 81.16, \ p &lt; 0.000)$, Cramer’s V = 0.374, significant</td>
<td>$(\chi^2(15) = 26.19, \ p &lt; 0.05)$, Cramer’s V = 0.279, significant</td>
</tr>
<tr>
<td><strong>Seasonal</strong></td>
<td>$(\chi^2(3) = 37.83, \ p &lt; 0.000)$, Cramer’s V = 0.324, significant</td>
<td>$(\chi^2(3) = 10.00, \ p &lt; 0.000)$, Cramer’s V = 0.228, significant</td>
<td>$(\chi^2(3) = 15.21, \ p &lt; 0.01)$, Cramer’s V = 0.369, significant</td>
</tr>
<tr>
<td><strong>Holiday</strong></td>
<td>$(\chi^2(6) = 23.49, \ p &lt; 0.001)$, Cramer’s V = 0.181, significant</td>
<td>$(\chi^2(3) = 1.02 \ p &gt; 0.5)$, Cramer’s V = 0.073, not significant</td>
<td>$(\chi^2(3) = 7.47, \ p &gt; 0.1)$, Cramer’s V = 0.258, not significant</td>
</tr>
<tr>
<td><strong>Celebrating</strong></td>
<td>$(\chi^2(3) = 14.73, \ p &lt; 0.002)$, Cramer’s V = 0.202, significant</td>
<td>$(\chi^2(3) = 1.58 \ p &gt; 0.5)$, Cramer’s V = 0.091, not significant</td>
<td>$(\chi^2(3) = 3.14, \ p &gt; 0.1)$, Cramer’s V = 0.167, not significant</td>
</tr>
<tr>
<td><strong>Relaxing</strong></td>
<td>$x^2(3) = 18.216, \ p &lt; 0.000$, Cramer’s V = 0.225, significant</td>
<td>$(\chi^2(3) = 9.85 \ p &lt; 0.02)$, Cramer’s V = 0.226, significant</td>
<td>$(\chi^2(3) = 40.12, \ p &lt; 0.000)$, Cramer’s V = 0.598, significant</td>
</tr>
<tr>
<td><strong>Feel good</strong></td>
<td>$x^2(3) = 13.247, \ p &lt; 0.004$, Cramer’s V = 0.192, significant</td>
<td>$(\chi^2(3) = 6.11 \ p &gt; 0.1)$, Cramer’s V = 0.178, not significant</td>
<td>0</td>
</tr>
<tr>
<td><strong>Get drunk</strong></td>
<td>$x^2(3) = 3.540, \ p &lt; 0.316$, Cramer’s V = 0.099, not significant</td>
<td>0</td>
<td>$(\chi^2(3) = 16.10, \ p &lt; 0.001)$, Cramer’s V = 0.379, significant</td>
</tr>
<tr>
<td>Category</td>
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<td>$\chi^2(6) = 7.79, p &gt; .1$, Cramer’s $V = .142$, not significant</td>
<td>$\chi^2(3) = 27.45, p &lt; .000$, Cramer’s $V = .495$, significant</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Socializing</td>
<td>$\chi^2(3) = 3.78, p &gt; .2$, Cramer’s $V = .102$, not significant</td>
<td>$\chi^2(3) = 9.61, p &lt; .05$, Cramer’s $V = .223$, significant</td>
<td>$\chi^2(3) = 4.48, p &gt; .1$, Cramer’s $V = .200$, not significant</td>
</tr>
<tr>
<td>Food</td>
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<td>$\chi^2(3) = 24.82, p &lt; .000$, Cramer’s $V = .359$, significant</td>
<td>$\chi^2(3) = 18.57, p &lt; .000$, Cramer’s $V = .407$, significant</td>
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<tr>
<td>Recipe</td>
<td>$\chi^2(3) = 11.493, p &lt; .01$, Cramer’s $V = .179$, significant</td>
<td>$\chi^2(3) = 8.94, p &lt; .05$, Cramer’s $V = .215$, significant</td>
<td>$\chi^2(3) = 11.18, p &lt; .05$, Cramer’s $V = .316$, significant</td>
</tr>
<tr>
<td>Sophistication</td>
<td>$\chi^2(3) = 11.493, p &lt; .01$, Cramer’s $V = .179$, significant</td>
<td>$\chi^2(3) = 8.94, p &lt; .05$, Cramer’s $V = .215$, significant</td>
<td>$\chi^2(3) = 11.18, p &lt; .05$, Cramer’s $V = .316$, significant</td>
</tr>
<tr>
<td>Adventurous</td>
<td>$\chi^2(3) = 2.30, p &gt; .5$, Cramer’s $V = .080$, not significant</td>
<td>$\chi^2(3) = 14.44, p &lt; .01$, Cramer’s $V = .274$, significant</td>
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<td>$\chi^2(3) = 2.73, p &gt; .1$, Cramer’s $V = .119$, not significant</td>
<td>$\chi^2(3) = 1.82, p &gt; .5$, Cramer’s $V = .127$, not significant</td>
</tr>
<tr>
<td>Joke/Humor</td>
<td>$\chi^2(3) = 22.56, p &lt; .000$, Cramer’s $V = .250$, significant</td>
<td>$\chi^2(3) = 38.33, p &lt; .000$, Cramer’s $V = .446$, significant</td>
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<td>Sexual Context</td>
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<td>0</td>
<td>0</td>
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<td>Age</td>
<td>$\chi^2(6) = 5.61, p &gt; .1$, Cramer’s $V = .088$, not significant</td>
<td>$\chi^2(3) = 2.18, p &gt; .5$, Cramer’s $V = .106$, not significant</td>
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</table>
Online Alcohol Advertisements

Regional
\[
(x^2(6) = 6.64, p > .1), \quad \text{Cramer's V = .096, not significant}
\]

\[
(x^2(3) = 6.64, p > .1), \quad \text{Cramer's V = .096, not significant}
\]

Covid Related
\[
(x^2(3) = 4.60, p > .1), \quad \text{Cramer's V = .113, not significant}
\]

\[
(x^2(3) = 4.60, p > .1), \quad \text{Cramer's V = .113, not significant}
\]

Other context/can’t determine
\[
(x^2(3) = 3.12, p > .1), \quad \text{Cramer's V = .093, not significant}
\]

\[
(x^2(3) = 3.12, p > .1), \quad \text{Cramer's V = .093, not significant}
\]

Responsibility message
\[
(x^2(3) = 4.52, p > .1), \quad \text{Cramer's V = .112, not significant}
\]

\[
(x^2(3) = 4.52, p > .1), \quad \text{Cramer's V = .112, not significant}
\]

Note: if the Cramer’s V is less than 0.2, the result is weak association, if it’s between 0.2 and 0.6, the result is moderate association, and if it’s more than 0.6, the result is strong association (Cohen, 1988).

Table 5. Frequency of appeals found in captions, pictures, and videos across alcohol types

<table>
<thead>
<tr>
<th></th>
<th>Beer</th>
<th>Vodka</th>
<th>Hard Seltzer</th>
<th>Whiskey</th>
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<td></td>
<td>Capt</td>
<td>Pictu</td>
<td>Vide</td>
<td>Capt</td>
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<td>Taste</td>
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<td>(4.2%)</td>
<td>(13.1%)</td>
<td>(0%)</td>
<td>(39.4%)</td>
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<tr>
<td>occassion</td>
<td>n = 16 (16.8%)</td>
<td>n = 17 (28.7%)</td>
<td>n = 3 (16.7%)</td>
<td>n = 22 (23.4%)</td>
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<tr>
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<td>----------------</td>
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<tr>
<td>seasonal</td>
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<td>n = 20 (23.8%)</td>
<td>n = 4 (22.2%)</td>
<td>n = 54 (57.4%)</td>
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<td>holiday</td>
<td>n = 16 (16.8%)</td>
<td>n = 5 (8.2%)</td>
<td>n = 3 (16.7%)</td>
<td>n = 45 (47.9%)</td>
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<tr>
<td>celebrating</td>
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<td>n = 4 (6.6%)</td>
<td>n = 2 (11.1%)</td>
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<tr>
<td>Relaxing</td>
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<td>n = 9 (15%)</td>
<td>n = 9 (50%)</td>
<td>n = 10 (10.6%)</td>
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<tr>
<td>Feel good</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 3 (3.2%)</td>
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<tr>
<td>Get drunk</td>
<td>n = 2 (2.1%)</td>
<td>n = 0 (0%)</td>
<td>n = 3 (16.7%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Socializing</td>
<td>n = 8 (8.4%)</td>
<td>n = 10 (16.4%)</td>
<td>n = 0 (0%)</td>
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<tr>
<td>Food</td>
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<td>n = 1 (0%)</td>
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<td>n = 7 (2.1%)</td>
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### Online Alcohol Advertisements

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<th>(4.7 %)</th>
<th>(10 %)</th>
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<th>(17 %)</th>
<th>(10 %)</th>
<th>(6.8 %)</th>
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<td>n = 11</td>
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<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(37.2%)</td>
<td>(9.3%)</td>
<td>(25%)</td>
<td>(11.3%)</td>
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<td>(0%)</td>
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<td>(16.7%)</td>
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<tr>
<td><strong>Adventurous</strong></td>
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<td>(0%)</td>
<td>(0%)</td>
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<td>n = 3</td>
<td>n = 9</td>
<td>n = 2</td>
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<td>(28.4%)</td>
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<td>(5%)</td>
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<td>(4.2%)</td>
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<tr>
<td></td>
<td>(1.1%)</td>
<td>(1.6%)</td>
<td>(0%)</td>
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<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
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<tr>
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<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
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</table>
The Strategic Appeal of Captions across Alcohol Brand

Across the brands, a chi-square test was conducted, and the results were statistically significant for “taste” ($\chi^2(11) = 115.43, p < .001$), Cramer’s $V = .566$. Bud Light used “taste” in 11.8% of captions ($n = 4$), while the other brands did not use this appeal within captions. Tito’s utilized this appeal significantly more than all other brands in 75% of captions ($n = 24$). Smirnoff used this appeal in 35% of captions ($n = 9$) and New Amsterdam used this appeal in 11% of captions ($n = 4$). Bon & Viv used this appeal in 26% of captions ($n = 8$), White Claw used this appeal in 27% of captions ($n = 9$), and Truly used this appeal in 53% of captions.

The results were also statistically significant for “occasion” ($\chi^2(66) = 246.48, p < .000$), Cramer’s $V = .338$. Three Coors Light captions (9.4%) featured a “party” occasion. Jim Beam ($n = 2, 6.7\%$) and Crown Royal ($n = 1, 4.3\%$) were the only other brands to feature the “party” occasion in a caption. The “friends/family get-together” was found in 25% of Tito’s captions ($n = 8$), but only 8% of Smirnoff captions ($n = 2$) and no New
Amsterdam captions. This theme was found in about 6% of Coors Light and Miller Lite captions, but not found in Bud Light captions. Bon & Viv had “friends/family get-together” in 6.5% of captions ($n = 2$), while the other hard seltzer brands did not use this occasion. Jim Beam used this occasion in 13% of captions ($n = 4$), Jack Daniels used this occasion in 14% ($n = 3$), and Crown Royal did not use this occasion. Coors Light and Miller Lite both used the “sporting game” occasion in around 6% of captions ($n = 2$), while Bud Light did not use it. New Amsterdam used this occasion in 25% of captions ($n = 9$), while Smirnoff used it in 8% ($n = 2$) and Tito’s did not use this occasion. Crown Royal used this occasion in 70% of captions ($n = 16$), while the other whiskey brands did not use this occasion.

The “seasonal” appeal was found to be statistically significant among different brands’ captions ($x^2(11) = 91.71, p < .000$), Cramer’s $V = .505$. Coors Light used this appeal a lot compared to other beer brands, in 44% of captions ($n = 14$). Bud Light and Miller Lite only used this theme once each. Tito’s used this appeal in 81% of captions ($n = 26$), Smirnoff used this appeal in 62% of captions ($n = 16$), and New Amsterdam used this appeal in 33% of captions ($n = 12$). Bon & Viv used this appeal in 48% of captions ($n = 15$), White Claw used this appeal in 21% of captions ($n = 7$), and Truly used this appeal in 13% of captions ($n = 4$). Jim Beam used this appeal in 50% of captions ($n = 15$), Jack Daniels used this appeal in 43% of captions ($n = 9$), and Crown Royal used this appeal in 9% of captions ($n = 2$).

The “holiday” appeal was also found to be statistically significant ($x^2(11) = 86.31, p < .000$), Cramer’s $V = .346$. Tito’s had this appeal in 75% of captions ($n = 24$), Smirnoff had this appeal in 47% of captions ($n = 12$), and New Amsterdam used this appeal in
25% of captions \((n = 9)\). Bon & Viv also used this appeal more than the other seltzers in 55% of captions \((n = 17)\). Truly used in 25% \((n = 8)\) and White Claw used in 14% \((n = 5)\). Coors Light used this appeal the most out of the beer brands in 21.9% of captions \((n = 7)\), while Miller Lite used in 17% \((n = 5)\) and Bud Light used in 12% \((n = 4)\). Jack Daniels used this appeal in 71% of captions \((n = 15)\), while Jim Beam used in 20% \((n = 5)\) and Crown Royal used in 9% \((n = 2)\).

The “celebrating” appeal was also found to be statistically significant \((x^2(11) = 53.69, p < .000)\), Cramer’s \(V = .386\). Tito’s used this appeal in 25% of captions \((n = 6)\), while the other vodka brands did not use this appeal. Jim Beam used this appeal in 33% of captions \((n = 10)\). Coors Light, Miller Lite, White Claw, Truly, and Crown Royal all used this appeal less than 10% and the brands not mentioned did not use this appeal.

The “relaxing” appeal was also found to be statistically significant \((x^2(11) = 57.496, p < .000)\), Cramer’s \(V = .400 (n = 9)\). Tito’s used this appeal in 28% of captions and Bon & Viv used this appeal in 26% of captions \((n = 8)\). Any other brands that used this appeal in captions used it less than 10%.

The “feel good” appeal was found to be statistically significant among brands \((x^2(11) = 41.73, p < .000)\), Cramer’s \(V = .340\). Bon & Viv used this appeal in 26% of captions \((n = 8)\) and all other brands used this appeal less than 10%.

The “get drunk” appeal was found to be statistically significant in captions \((x^2(11) = 19.885, p < .05)\), Cramer’s \(V = .235\). Miller Lite used this appeal in 7% of captions \((n = 2)\) and Truly used this appeal in 6% of captions \((n = 2)\). All other brands did not use this appeal at all.
The “socializing” appeal was also found to be statistically significant in captions ($x^2(11) = 39.64$, $p < .000$), Cramer’s $V = .360$. Miller Lite used this appeal in 24% of captions ($n = 7$), while Coors Light only used this appeal in one caption, and Bud Light did not use this appeal. Jim Beam used this appeal in 13% of captions ($n = 4$) and Jack Daniels used this appeal in 14% of captions ($n = 3$), while Crown Royal did not use this appeal in captions. Vodka and hard seltzer brands hardly used this theme in captions.

The “recipe” appeal was found to be statistically significant. Tito’s used this appeal in 69% of captions ($n = 22$), New Amsterdam used this appeal in 28% of captions ($n = 10$), and Smirnoff used this appeal in 12% of captions ($n = 3$). Bon & Viv used this appeal in 36% of captions ($n = 11$), while the other seltzer brands did not use this appeal at all. Jack Daniels used this appeal in 43% of captions, while Jim Beam only used in two captions (6.9%), and Crown Royal did not use this appeal. Beer brands did not use this appeal at all.

The “sophistication” appeal was found to be statistically significant ($x^2(11) = 31.46$, $p < .001$), Cramer’s $V = .296$. Jack Daniels used this appeal in 14% of captions ($n = 3$), while Jim Beam used in 3% of captions ($n = 1$), and Crown Royal did not use this appeal. Smirnoff was the only other brand to use this appeal in a caption ($n = 1, 3.8\%$).

The “healthy” appeal was found to be statistically significant ($x^2(11) = 32.73$, $p < .001$), Cramer’s $V = .302$. Bon & Viv used this appeal in 8% of captions ($n = 3$) and Smirnoff used this appeal in 12% of captions ($n = 3$). All other brands did not use this appeal at all.

The “joke/humor” appeal was found to be statistically significant ($x^2(11) = 47.34$, $p < .000$), Cramer’s $V = .363$. Bud Light used this appeal in 50% of captions ($n = 17$), Coors Light used this appeal in 19% of captions ($n = 6$), and Miller Lite used this appeal in 14%
of captions \((n = 4)\). New Amsterdam used this appeal in 17\% of captions \((n = 6)\), while Smirnoff and Tito’s used this appeal in less than 5\% of captions. White Claw and Truly both used this appeal in around 18\% of captions \((n = 6)\), while Bon & Viv used it in only 9\% \((n = 3)\). Jim Beam used this appeal in 10\% of captions \((n = 3)\), while the other whiskey brands did not use this appeal in captions.

The “sexual context” appeal was found to be statistically significant \((x^2(11) = 38.75, p < .000)\), Cramer’s \(V = .329\). Smirnoff was the only brand to use this appeal; 11.5\% of Smirnoff captions had “sexual context” \((n = 3)\).

The “other/can’t determine” appeal was also found to be statistically significant \((x^2(11) = 35.10, p < .000)\), Cramer’s \(V = .312\). Miller Lite had 10 captions that fell into this category \((34.5\%)\), Bud Light had 7 captions in this category, \((20.6\%)\), and Coors Light had none. New Amsterdam had 9 captions in this category \((25\%)\), and Smirnoff and Tito’s both had less than 10\% in this category. The hard seltzer and whiskey brands all had 10\% or less.

The “food,” “adventurous,” “age,” “regional,” “covid,” and “responsibility message” appeals were not found to be statistically significant. All of this information can be found in the first column of Table 6 and the captions columns of Table 7, Table 8, Table 9, and Table 10.

**The Strategic Appeal of Pictures across Alcohol Brand**

Across the brands, a chi-square test was conducted, and the results were statistically significant for “taste” \((x^2(11) = 88.92, p < .000)\), Cramer’s \(V = .679\). 32\% of Bud Light’s pictures \((n = 7)\) showed the “taste” appeal, which is significant as Miller Lite had no pictures showing the taste appeal and Coors Light only had one \((7\%)\). Smirnoff used
more of the “taste” appeal in pictures \((n = 6, 66.7\%)\) in comparison to Tito’s \((n = 4, 44.4\%)\) and New Amsterdam \((n = 10, 40\%)\). White Claw and Bon & Viv both used the “taste” appeal in more than 90% of pictures and Truly used it in 75% of pictures. Jack Daniels used the “taste” appeal in 100% of pictures \((n = 11)\) and Crown Royal used the “taste” appeal in 92.9% of pictures \((n = 13)\). However, Jim Beam only used the “taste” appeal in 31.3% of pictures \((n = 5)\).

The “occasion” in pictures was also found to be statistically significant across alcohol brands \(\chi^2(77) = 281.04, p < .000\), Cramer’s \(V = .456\). No Bud Light or Coors Light pictures showed “friends/family get-together,” but 20% of Miller Lite pictures \((n = 5)\) showed “friends/family get-together.” 12% of New Amsterdam pictures \((n = 3)\) showed “friends/family get-together,” while the other vodka brands had none. New Amsterdam also had a “sporting game” occasion in 16% of pictures \((n = 4)\), while the other vodka brands had none. Notably, 92.9% of Crown Royal pictures also featured the “sporting game” occasion \((n = 13)\), while the other whiskey brands had none. Additionally, 18.2% of White Claw pictures featured a “working out” occasion, which makes up 100% of all pictures that had such occasion.

Pictures with “seasonal” appeal were found to be statistically significant across alcohol brands \(\chi^2(11) = 51.59, p < .000\), Cramer’s \(V = .517\). Coors Light had a “seasonal” appeal in 60% of pictures \((n = 9)\), while Bud Light and Miller Lite only utilized this appeal in 27% \((n = 6)\) and 20% \((n = 5)\) of pictures, respectively.

“Relaxing” was also found to be significant across alcohol brands \(\chi^2(11) = 29.34, p < .01\), Cramer’s \(V = .390\). The “relaxing” appeal was found within 33% of Coors Light \((n = 5)\), 16% of Miller Lite \((n = 4)\), and none of Bud Light’s pictures. Bon & Viv also
utilized the “relaxing” appeal significantly more than the other seltzer brands, as 19% of Bon & Viv pictures had the appeal and the other seltzer brands had no pictures with the appeal.

The “socializing” appeal in pictures was also statistically significant \( (\chi^2(11) = 47.43, p < .001) \), Cramer’s V = .496. Bud Light and Coors Light did not use the “socializing” appeal at all, while Miller Lite used the appeal in 41.7% of pictures \( (n = 10) \). White Claw did not use the “socializing” appeal in pictures, Bon & Viv used it in one picture (4.8%), and Truly used it in 12.5% of pictures \( (n = 2) \). Jack Daniels utilized the “socializing” appeal in 27.3% of pictures \( (n = 3) \), Jim Beam used in 12.5% of pictures \( (n = 2) \), and Crown Royal used in one picture (7.1%).

The “food” appeal was found to be statistically significant also \( (\chi^2(11) = 47.04, p < .000) \), Cramer’s V = .494. Smirnoff utilized the “food” appeal in 22.2% of pictures \( (n = 2) \), and the other vodka brands did not use “food” in pictures. Bon & Viv utilized the “food” appeal in 38.1% of pictures \( (n = 8) \), while the other seltzer brands did not use this appeal at all. Crown Royal had “food” in 21.4% of their pictures \( (n = 3) \), while the other whiskey brands did not use this appeal.

The “recipe” appeal in pictures was also found to be statistically significant across alcohol brands \( (\chi^2(11) = 42.43, p < .000) \), Cramer’s V = .469. Beer brands did not use this appeal at all. Tito’s used this appeal in one picture (11.1%), Smirnoff did not use this appeal, and New Amsterdam used this appeal in 12% of pictures \( (n = 3) \). White Claw did not use this appeal, Truly used this appeal in one picture (6.3%); however, Bon & Viv used this appeal in 19% of pictures \( (n = 4) \). Jim Beam \( (n = 3) \) and Jack Daniels \( (n = 2) \)
each used the “recipe” appeal in 18% of pictures; however, Crown Royal used this appeal in 57.1% of pictures (n = 8).

“Sophistication” in pictures was also found to be statistically significant across brands ($\chi^2(11) = 47.63, p < .000$), Cramer’s V = .497. “Sophistication” was used in 8.3% of Miller Lite’s pictures, but not used in the other beer brands’ pictures. 36.4% of Jack Daniels’ pictures had “sophistication” appeal; the other whiskey brands did not use this appeal. No other brands featured “sophistication” in their pictures.

The “adventurous” appeal was also found to be statistically significant ($\chi^2(11) = 67.92, p < .000$), Cramer’s V = .593. An “adventurous” appeal was found in 54.5% of White Claw pictures, but not found in Bon & Viv and only found in one Truly picture (6.3%). The “adventurous” appeal was also found in one Miller Lite picture and one Jim Beam picture.

“Joke/humor” was found to be statistically significant ($\chi^2(11) = 114.16, p < .000$), Cramer’s V = .769. 77.3% of Bud Light pictures had “joke/humor” (n = 17), while only one Coors Light picture (6.7%) and only one Miller Lite picture (4.8%) had “joke/humor.” No vodka or whiskey brands used “joke/humor” and hardly any seltzer brands used “joke/humor.”

The “Covid” appeal was statistically significant across alcohol brands ($\chi^2(11) = 22.56, p < .05$), Cramer’s V = .340 because of Jim Beam. Jim Beam was the only brand that had a “Covid” appeal within the analysis, with 2 pictures (12.5%). The “other/can’t determine” category was also statistically significant ($\chi^2(11) = 34.00, p < .000$), Cramer’s V = .420. New Amsterdam had 9 pictures that fell into this category (36%), which was significantly more than the other vodka brands that each had only one.
The “responsibility” message was statistically significant ($\chi^2(11) = 82.29$, $p < .000$), Cramer’s $V = .656$. Only 4.5% ($n = 1$) of Bud Light pictures had a responsibility message, 16.7% ($n = 4$) Miller Lite pictures had responsibility messages, and 66.7% ($n = 10$) of Coors Light pictures had responsibility messages. No Vodka pictures had responsibility messages. No Truly or Bon & Viv pictures had responsibility messages; however, 72.7% ($n = 8$) of White Claw’s pictures had a responsibility message. No Crown Royal pictures had a responsibility message, 31.3% of Jim Beam’s pictures ($n = 5$) had a responsibility message, and 54.5% of Jack Daniels’ pictures had a responsibility message.

The “holiday,” “celebrating,” “feel good,” “healthy,” and “age” appeals in pictures were not found to be significant across brands. The “get drunk,” “sexual content,” and “regional” appeals were not found in any pictures. All of this information can be found in the second column of Table 6 and the pictures columns of Table 7, Table 8, Table 9, and Table 10.

**The Strategic Appeal of Videos across Alcohol Brands**

Across the brands, a chi-square test was conducted, and the results were statistically significant for “taste” ($\chi^2(11) = 56.74$, $p < .000$), Cramer’s $V = .715$. Beer brands did not use this appeal in videos. Tito’s used this appeal in 50% of videos ($n = 6$), while Smirnoff ($n = 4$, 25%) and New Amsterdam ($n = 3$, 27.3%) used this appeal similarly in only one-fourth of videos. Among hard seltzers, the “taste” appeal was used frequently and similarly, but especially in Bon & Viv videos ($n = 3$, 100%). Jack Daniels’ videos had the “taste” appeal in 100% of videos; however, Crown Royal and Jim Beam ($n = 4$) only had this appeal in 2 videos each.
Across the brands, the results were also statistically significant for “occasion” ($\chi^2(55) = 78.61, p < .05$), Cramer’s $V = .375$. New Amsterdam had a “sporting game” occasion in 45% of videos ($n = 5$), while Tito’s had none, and Smirnoff had only one. Crown Royal had a “sporting game” occasion in 25% of videos ($n = 2$), while the other whiskey brands did not have this occasion in any videos. Jack Daniels showcased a “friends/family get-together” in 40% of videos ($n = 4$), while Crown Royal did not use this occasion and Jim Beam only used it once.

Across the brands, the “seasonal” appeal was statistically significant for videos ($\chi^2(11) = 29.51, p < .05$), Cramer’s $V = .513$. Bud Light and Miller Lite did not use this appeal; however, Coors Light had the “seasonal” appeal in 28.6% of videos ($n = 4$). Among the vodka brands, Smirnoff used this appeal in 65% ($n = 11$) of videos, while New Amsterdam used this appeal in 46% ($n = 5$) of videos, and Tito’s used this appeal in 42% of videos. Jack Daniels used this appeal more than the other whiskey brands in 70% of videos, while Jim Beam used it in two, and Crown Royal did not use this appeal.

The “holiday” appeal was also statistically significant ($\chi^2(11) = 56.89, p < .000$), Cramer’s $V = .713$. The “holiday” appeal did not show up in Bud Light or Coors Light videos but was in 100% of Miller Lite videos ($n = 3$). Smirnoff used in 53% of videos ($n = 9$), Tito’s used in 33% of videos ($n = 4$), and New Amsterdam did not use this appeal. Bon & Viv used this appeal in 100% of videos ($n = 3$), while the other seltzers did not use this appeal. Jack Daniels used this appeal in 70% of videos ($n = 7$), while Jim Beam only used it in two videos and Crown Royal did not use it.

Across brands, the “celebrating” appeal was found to be statistically significant in videos ($\chi^2(11) = 22.01, p < .05$), Cramer’s $V = .443$. This appeal was not used in Bud Light or...
Miller Lite videos but was used in 14% of Coors Light videos \((n = 2)\). This appeal was found in 27% of New Amsterdam videos \((n = 3)\), but not found in the other vodka brands’ videos. White Claw and Truly did not use this appeal; however, Bon & Viv did \((n = 1, 33.3\%)\). None of the whiskey brands used the “celebrating” appeal in videos.

Across brands, the “relaxing” appeal was found to be statistically significant \((\chi^2(11) = 55.135, p < .000)\), Cramer’s V = .702. Bud Light did not use this appeal, while 43% of Coors Light videos \((n = 6)\) used this appeal and 100% of Miller Lite videos used this appeal \((n = 3)\). Other brands and alcohol types rarely used this appeal.

The “get drunk” appeal was found to be statistically significant \((\chi^2(11) = 112.00, p < .000)\), Cramer’s V = 1.0. Miller Lite used this appeal in 100% \((n = 3)\) of videos, while no other brands or types used this appeal at all in videos.

The “socializing” appeal was found to be statistically significant \((\chi^2(11) = 67.99, p < .000)\), Cramer’s V = .779. Jack Daniels used this appeal in 90% of videos \((n = 9)\), while Jim Beam used this appeal in one video and Crown Royal did not use this appeal in videos at all. Other brands hardly showed this appeal in videos.

The “food” appeal was found to be statistically significant \((\chi^2(11) = 21.70, p < .05)\), Cramer’s V = .440. Tito’s used this appeal in 25% \((n = 3)\) of videos, while Smirnoff only used it in one video and New Amsterdam did not use this appeal. Truly used this appeal in 30% of videos \((n = 3)\), while other seltzers did not use this appeal. All other brands did not use this appeal.

The “recipe” appeal was found to be statistically significant \((\chi^2(11) = 68.04, p < .000)\), Cramer’s V = .779. No beer brands used this appeal in videos. Tito’s used this appeal in half of their videos \((n = 6, 50\%)\), New Amsterdam used it in 27% \((n = 3)\), and Smirnoff
used this appeal in one video (6%). White Claw and Truly did not use the “recipe” appeal in videos, while Bon & Viv used this appeal in all videos ($n = 3, 100\%$). Jim Beam did not use this appeal, Crown Royal used in a fourth of videos ($n = 2, 25\%$), and Jack Daniels used in 100% of videos ($n = 10$).

The “sophistication” appeal was found to be statistically significant ($x^2(11) = 23.50, p < .05$), Cramer’s $V = .015$. No beer or vodka brands used this appeal and White Claw was the only seltzer brand to use this appeal in one video. Jack Daniels did not use this appeal, while Crown Royal used it in 25% ($n = 2$) and Jim Beam used it in 33% ($n = 2$) of videos.

The “adventurous” appeal was found to be statistically significant ($x^2(11) = 25.71, p < .001$), Cramer’s $V = .479$. White Claw significantly used this appeal in videos compared to all other brands; 35.3% ($n = 6$) of White Claw videos had the “adventurous” appeal. The only other brands to use this appeal were Smirnoff and Truly, each with one video that had the appeal.

The “joke/humor” appeal was found to be statistically significant ($x^2(11) = 51.97, p < .000$), Cramer’s $V = .687$. Miller Lite had this appeal in all videos ($n = 3$), while the other beer brands did not feature this appeal in their videos. Truly also used this appeal ($n = 2, 20\%$), while the other seltzers did not use it.

The “other/can’t determine” category was also found to be statistically significant ($x^2(11) = 43.23, p < .000$), Cramer’s $V = .621$. New Amsterdam had three videos (27.3%) that were “other/can’t determine,” while the other vodka brands did not have any in this category. Crown Royal had four videos (50%) that fit into this category, while the other whiskey brands had none.
“Responsibility” messages in videos were also found to be statistically significant across brands ($\chi^2(11) = 70.56, p < .000$), Cramer’s $V = .794$. Bud Light and Miller Lite had a responsibility message in all videos and Coors Light had a responsibility message in 71% ($n = 10$) of videos. All Tito’s videos had a responsibility message, while Smirnoff only had a responsibility message in one video, and New Amsterdam did not have any responsibility messages in videos. White Claw had a responsibility message in 76.5% ($n = 13$) of videos, while Truly and Bon & Viv did not have responsibility messages in videos. Jack Daniels had a responsibility message in 100% of videos, while Jim Beam and Crown Royal had responsibility messages in 50% of videos.

The “healthy” and “covid” appeals were not found to be statistically significant. The “feel good,” “sexual,” “age,” and “regional” appeals were not found in any videos. All of this information can be found in the third column of Table 6 and the video columns of Table 7, Table 8, Table 9, and Table 10.

Table 6: Statistical significance for appeal on caption, picture, and video by alcohol brand

<table>
<thead>
<tr>
<th></th>
<th>caption</th>
<th>picture</th>
<th>video</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>($\chi^2(11) = 115.43, p &lt; .001$), Cramer’s $V = .566$</td>
<td>($\chi^2(11) = 88.92, p &lt; .000$), Cramer’s $V = .679$, significant</td>
<td>($\chi^2(11) = 56.74, p &lt; .000$), Cramer’s $V = .715$, significant</td>
</tr>
<tr>
<td>Occasion</td>
<td>($\chi^2(66) = 246.48, p &lt; .000$), Cramer’s $V = .338$, significant</td>
<td>($\chi^2(77) = 281.04, p &lt; .000$), Cramer’s $V = .456$, significant</td>
<td>($\chi^2(55) = 78.61, p &lt; .05$), Cramer’s $V = .375$, significant</td>
</tr>
<tr>
<td>Seasonal</td>
<td>( \chi^2(11) = 91.71, p &lt; .000 ), Cramer’s V = .505, significant</td>
<td>( \chi^2(11) = 51.59, p &lt; .000 ), Cramer’s V = .517, significant</td>
<td>( \chi^2(11) = 29.51, p &lt; .05 ), Cramer’s V = .513, significant</td>
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<td>-------------------------------------------------</td>
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<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Holiday</td>
<td>( \chi^2(11) = 86.31, p &lt; .000 ), Cramer’s V = .346, significant</td>
<td>( \chi^2(11) = 12.43, p &gt; .1 ), Cramer’s V = .254, not significant</td>
<td>( \chi^2(11) = 56.89, p &lt; .000 ), Cramer’s V = .713, significant</td>
</tr>
<tr>
<td>Celebrating</td>
<td>( \chi^2(11) = 53.69, p &lt; .000 ), Cramer’s V = .386, significant</td>
<td>( \chi^2(11) = 18.79, p &gt; .05 ), Cramer’s V = .312, not significant</td>
<td>( \chi^2(11) = 22.01, p &lt; .05 ), Cramer’s V = .443, significant</td>
</tr>
<tr>
<td>Relaxing</td>
<td>( \chi^2(11) = 57.496, p &lt; .000 ), Cramer’s V = .400, significant</td>
<td>( \chi^2(11) = 29.34, p &lt; .01 ), Cramer’s V = .390, significant</td>
<td>( \chi^2(11) = 55.135, p &lt; .000 ), Cramer’s V = .702, significant</td>
</tr>
<tr>
<td>Feel good</td>
<td>( \chi^2(11) = 41.73, p &lt; .000 ), Cramer’s V = .340, significant</td>
<td>( \chi^2(11) = 16.55, p &gt; .1 ), Cramer’s V = .293, not significant</td>
<td>0</td>
</tr>
<tr>
<td>Get drunk</td>
<td>( \chi^2(11) = 19.885, p &lt; .05 ), Cramer’s V = .235, significant</td>
<td>0</td>
<td>( \chi^2(11) = 112.00, p &lt; .000 ), Cramer’s V = 1.0, significant</td>
</tr>
<tr>
<td>Socializing</td>
<td>( \chi^2(11) = 39.64, p &lt; .000 ), Cramer’s V = .360, significant</td>
<td>( \chi^2(11) = 47.43, p &lt; .001 ), Cramer’s V = .496, significant</td>
<td>( \chi^2(11) = 67.99, p &lt; .000 ), Cramer’s V = .779, significant</td>
</tr>
<tr>
<td>Food</td>
<td>( \chi^2(11) = 12.22, p &gt; .1 ), Cramer’s V = .184, not significant</td>
<td>( \chi^2(11) = 47.04, p &lt; .000 ), Cramer’s V = .494, significant</td>
<td>( \chi^2(11) = 21.70, p &lt; .05 ), Cramer’s V = .440, significant</td>
</tr>
<tr>
<td>Recipe</td>
<td>$(\chi^2(11) = 128.01, p &lt; .000), \text{Cramer's V = .597}$, significant</td>
<td>$(\chi^2(11) = 42.43, p &lt; .000), \text{Cramer's V = .469}$, significant</td>
<td>$(\chi^2(11) = 68.04, p &lt; .000), \text{Cramer's V = .779}$, significant</td>
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<tr>
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<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sophistication</td>
<td>$(\chi^2(11) = 31.46, p &lt; .001), \text{Cramer's V = .296}$, significant</td>
<td>$(\chi^2(11) = 47.63, p &lt; .000), \text{Cramer's V = .497}$, significant</td>
<td>$(\chi^2(11) = 23.50, p &lt; .05), \text{Cramer's V = .015}$, significant</td>
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<tr>
<td>Adventurous</td>
<td>$(\chi^2(11) = 9.35, p &gt; .5), \text{Cramer's V = .590}$, not significant</td>
<td>$(\chi^2(11) = 67.92, p &lt; .000), \text{Cramer's V = .593}$, significant</td>
<td>$(\chi^2(11) = 25.71, p &lt; .001), \text{Cramer's V = .479}$, significant</td>
</tr>
<tr>
<td>Healthy</td>
<td>$(\chi^2(11) = 32.73, p &lt; .001), \text{Cramer's V = .302}$, significant</td>
<td>$(\chi^2(11) = 15.01, p &gt; .1), \text{Cramer's V = .280}$, not significant</td>
<td>$(\chi^2(11) = 5.64, p &gt; .5), \text{Cramer's V = .224}$, not significant</td>
</tr>
<tr>
<td>Joke/Humor</td>
<td>$(\chi^2(11) = 47.34, p &lt; .000), \text{Cramer's V = .363}$, significant</td>
<td>$(\chi^2(11) = 114.16, p &lt; .000), \text{Cramer's V = .769}$, significant</td>
<td>$(\chi^2(11) = 51.97, p &lt; .000), \text{Cramer's V = .687}$, significant</td>
</tr>
<tr>
<td>Sexual Context</td>
<td>$(\chi^2(11) = 38.75, p &lt; .000), \text{Cramer's V = .329}$, significant</td>
<td>0</td>
<td>0</td>
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<td>Age</td>
<td>$(\chi^2(11) = 21.055, p &gt; .5), \text{Cramer's V = .171}$, not significant</td>
<td>$(\chi^2(11) = 7.81, p &gt; .5), \text{Cramer's V = .201}$, not significant</td>
<td>0</td>
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<tr>
<td>Regional</td>
<td>$(\chi^2(11) = 20.58, p &gt; .5), \text{Cramer's V = .169}$, not significant</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Covid Related

\( (x^2(11) = 13.56, p > .1), \) Cramer’s V = .194, not significant

\( (x^2(11) = 22.56, p < .05), \) Cramer’s V = .340, significant

\( (x^2(11) = 5.64, p > .5), \) Cramer’s V = .224, not significant

Other context/can’t determine

\( (x^2(11) = 35.10, p < .000), \) Cramer’s V = .312, significant

\( (x^2(11) = 34.00, p < .000), \) Cramer’s V = .420, significant

\( (x^2(11) = 43.23, p < .000), \) Cramer’s V = .621, significant

Responsibility message

\( (x^2(11) = 16.08, p > .1), \) Cramer’s V = .211, not significant

\( (x^2(11) = 82.29, p < .000), \) Cramer’s V = .656, significant

\( (x^2(11) = 70.56, p < .000), \) Cramer’s V = .794, significant

Note: if the Cramer’s V is less than 0.2, the result is weak association, if it’s between 0.2 and 0.6, the result is moderate association, and if it’s more than 0.6, the result is strong association (Cohen, 1988).

Table 7. Frequency of appeal on caption, picture, and video by beer brand

<table>
<thead>
<tr>
<th></th>
<th>Bud</th>
<th>Coors</th>
<th>Miller</th>
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<tr>
<td></td>
<td>Captio n</td>
<td>Picture</td>
<td>Video</td>
</tr>
<tr>
<td>Taste</td>
<td>( n = 4 ) (4.2%)</td>
<td>( n = 7 ) (31.8%)</td>
<td>( n = 0 ) (0%)</td>
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<td>occasion</td>
<td>( n = 0 ) (0%)</td>
<td>( n = 3 ) (13.6%)</td>
<td>( n = 0 ) (0%)</td>
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<td>seasonal</td>
<td>( n = 1 ) (2.9%)</td>
<td>( n = 6 ) (27.3%)</td>
<td>( n = 0 ) (0%)</td>
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<tr>
<td>Category</td>
<td>n = 4 (11.8%)</td>
<td>n = 4 (13.6%)</td>
<td>n = 0 (0%)</td>
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<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>holiday</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
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<td>celebrating</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Relaxing</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Feel good</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
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<tr>
<td>Get drunk</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
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<td>Socializing</td>
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<td>Food</td>
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<td>Recipe</td>
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<td>n = 0 (0%)</td>
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<td>Sophistication</td>
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<td>Healthy</td>
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Table 8. Frequency of appeal on caption, picture, and video by vodka brand

<table>
<thead>
<tr>
<th></th>
<th>Tito’s</th>
<th>Smirnoff</th>
<th>New Amsterdam</th>
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<td>Caption</td>
<td>Picture</td>
<td>Video</td>
</tr>
<tr>
<td>Taste</td>
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<td></td>
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<td>n = 6 (50%)</td>
</tr>
<tr>
<td>occasion</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------------</td>
<td>------------</td>
</tr>
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</tr>
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</tr>
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<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Feel good</td>
<td>n = 3 (9.4%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Get drunk</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Socializing</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Food</td>
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</tr>
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<td>n = 0 (0%)</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Adventurous</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Healthy</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Joke/Humor</td>
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<td>n = 0 (0%)</td>
<td>n = 1 (8.3%)</td>
</tr>
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<td>Sexual Context</td>
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<td>n = 0 (0%)</td>
</tr>
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<td>n = 0 (0%)</td>
</tr>
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</tr>
<tr>
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<td>n = 1 (4.5%)</td>
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</tr>
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</tr>
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</table>

Table 9. Frequency of appeal on caption, picture, and video by hard seltzer brand
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<th>White claw</th>
<th></th>
<th>Truly</th>
<th></th>
<th>Bon &amp; Viv</th>
<th></th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Captio</td>
<td>Picture</td>
<td>Video</td>
<td>Captio</td>
<td>Picture</td>
<td>Video</td>
</tr>
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<td>n = 17</td>
<td>n = 8</td>
<td>n = 8</td>
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<td>(9.4%)</td>
<td>(90.9%)</td>
<td>(94.1%)</td>
<td>(17.7%)</td>
<td>(80%)</td>
<td>(8.3%)</td>
</tr>
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<td>n = 5</td>
<td>n = 0</td>
<td>n = 2</td>
<td>n = 5</td>
</tr>
<tr>
<td></td>
<td>(8.8%)</td>
<td>(27%)</td>
<td>(29.5%)</td>
<td>(0%)</td>
<td>(12.5%)</td>
<td>(16.1%)</td>
</tr>
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<td>n = 0</td>
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</tr>
<tr>
<td></td>
<td>(20.6%)</td>
<td>(0%)</td>
<td>(11.8%)</td>
<td>(12.5%)</td>
<td>(0%)</td>
<td>(48.4%)</td>
</tr>
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<td>n = 0</td>
<td>n = 8</td>
<td>n = 1</td>
<td>n = 17</td>
</tr>
<tr>
<td></td>
<td>(14.7%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(25%)</td>
<td>(6.3%)</td>
<td>(54.8%)</td>
</tr>
<tr>
<td>celebrating</td>
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<td>n = 0</td>
<td>n = 1</td>
<td>n = 0</td>
<td>n = 0</td>
</tr>
<tr>
<td></td>
<td>(5.9%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(3.1%)</td>
<td>(0%)</td>
<td>(0%)</td>
</tr>
<tr>
<td>Relaxing</td>
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<td>n = 0</td>
<td>n = 1</td>
<td>n = 2</td>
<td>n = 1</td>
<td>n = 8</td>
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<tr>
<td></td>
<td>(5.9%)</td>
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<td>(5.9%)</td>
<td>(6.3%)</td>
<td>(6.3%)</td>
<td>(25.8%)</td>
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<td>Feel good</td>
<td>n = 2</td>
<td>n = 0</td>
<td>n = 0</td>
<td>n = 1</td>
<td>n = 0</td>
<td>n = 8</td>
</tr>
<tr>
<td></td>
<td>(5.9%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(3.1%)</td>
<td>(0%)</td>
<td>(25.8%)</td>
</tr>
<tr>
<td>Get drunk</td>
<td>n = 0</td>
<td>n = 0</td>
<td>n = 0</td>
<td>n = 2</td>
<td>n = 0</td>
<td>n = 0</td>
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<tr>
<td></td>
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<td>(0%)</td>
<td>(0%)</td>
<td>(6.3%)</td>
<td>(0%)</td>
<td>(0%)</td>
</tr>
<tr>
<td>Socializing</td>
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<td>n = 0 (0%)</td>
<td>n = 1 (5.9%)</td>
<td>n = 0 (0%)</td>
<td>n = 2 (12.5%)</td>
<td>n = 1 (3.2%)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Food</td>
<td>n = 1 (2.9%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 5 (15.6%)</td>
<td>n = 0 (0%)</td>
<td>n = 3 (30%)</td>
</tr>
<tr>
<td>Recipe</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Sophistication</td>
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<td>n = 1 (5.9%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Adventurous</td>
<td>n = 1 (0.3%)</td>
<td>n = 6 (54.5%)</td>
<td>n = 6 (35.3%)</td>
<td>n = 0 (0%)</td>
<td>n = 1 (6.3%)</td>
<td>n = 1 (10%)</td>
</tr>
<tr>
<td>Healthy</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Joke/Humor</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 6 (18.8%)</td>
<td>n = 1 (6.3%)</td>
<td>n = 2 (20%)</td>
</tr>
<tr>
<td>Sexual Context</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Age</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
<tr>
<td>Regional</td>
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<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
<td>n = 0 (0%)</td>
</tr>
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</table>
Table 10. Frequency of appeal on caption, picture, and video by whiskey brand

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<thead>
<tr>
<th></th>
<th>Crown Royal</th>
<th>Jim Beam</th>
<th>Jack Daniels</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Captio n</td>
<td>Picture</td>
<td>Video</td>
</tr>
<tr>
<td>Taste</td>
<td>n = 2</td>
<td>n = 13</td>
<td>n = 2</td>
</tr>
<tr>
<td></td>
<td>(2.1%)</td>
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<td>(25%)</td>
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<td>n = 17</td>
<td>n = 13</td>
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<tr>
<td></td>
<td>(3.9%)</td>
<td>(92.9%)</td>
<td>(25%)</td>
</tr>
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<td>seasonal</td>
<td>n = 2</td>
<td>n = 0</td>
<td>n = 0</td>
</tr>
<tr>
<td></td>
<td>(8.7%)</td>
<td>(0%)</td>
<td>(0%)</td>
</tr>
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<td>n = 0</td>
<td>n = 0</td>
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<td>(8.7%)</td>
<td>(0%)</td>
<td>(0%)</td>
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<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
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<tr>
<td>-------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>celebrating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxing</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
<td>Feel good</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
<td>Get drunk</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
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<td>$n = 1$ (7.1%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
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<td>$n = 3$ (13%)</td>
<td>$n = 3$ (21.4%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
<td>Recipe</td>
<td>$n = 0$ (0%)</td>
<td>$n = 8$ (57.1%)</td>
<td>$n = 2$ (25%)</td>
</tr>
<tr>
<td>Sophistication</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 2$ (25%)</td>
</tr>
<tr>
<td>Adventurous</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
<td>Healthy</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
</tr>
<tr>
<td>Joke/Humor</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
<td>$n = 0$ (0%)</td>
</tr>
</tbody>
</table>
### RQ4: Strategy of Appeals on Engagement

RQ4 asked whether the advertising message strategies in social media would be related to the amount of engagement in terms of sharing \((M = 85.46, SD = 242.98)\), liking \((M = 1047.63, SD = 1804.08)\), and commenting \((M = 78.79, SD = 244.68)\). The number of sharing was not normally distributed, with skewness of 6.72 \((SE = .15)\) and kurtosis of 56 \((SE = .29)\), the number of likes was not normally distributed, with skewness of 2.76 \((SE = .12)\) and kurtosis of 8.63 \((SE = .24)\), and the number of comments was not normally distributed, with skewness of 7.82 \((SE = .12)\) and kurtosis of 76.98 \((SE = .24)\).

The Wilcoxon tests for each message strategy with numbers of shares, likes, and comments were conducted. For the number of comments, the “holiday,” “feel good,” and “recipe” messages were statistically significant in captions. A Mann-Whitney U test
showed that there was a significant difference ($U = 11526, p = 0.03$) between the postings including “holiday” compared to the postings without “holiday.” The median of postings with “holiday” was 11.5 ($n = 114$) compared to 20.5 ($n = 236$) for postings without “holiday” suggesting that the posting without “holiday” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 1864, p = 0.02$) between the postings including “feel good” compared to the postings without “feel good.” The median of postings with “feel good” was 4 ($n = 17$) compared to 19 ($n = 334$) for postings without “feel good” suggesting that the posting without “feel good” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 6384.5, p = 0.005$) between the postings including “recipe” compared to the postings without “recipe.” The median of postings with “recipe” was 8 ($n = 57$) compared to 20 ($n = 293$) for postings without “recipe” suggesting that the postings without “recipe” were more popular.

For the number of likes, the “healthy,” “food,” “feel good,” and “celebrating” themes were found to be statistically significant in captions. A Mann-Whitney U test showed that there was a significant difference ($U = 442, p = 0.016$) between the postings including “healthy” compared to the postings without “healthy.” The median of postings with “healthy” was 81 ($n = 6$) compared to 304 ($n = 345$) for postings without “healthy” suggesting that the postings without “healthy” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 2674, p = 0.04$) between the postings including “food” compared to the postings without “food.” The median of postings with “food” was 146 ($n = 22$) compared to 340 ($n = 329$) for postings without “food” suggesting that the postings without “food” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 1996, p = 0.039$) between the
postings including “feel good” compared to the postings without “feel good.” The median of postings with “feel good” was 117 ($n = 17$) compared to 314 ($n = 334$) for postings without “feel good” suggesting that the posting without “feel good” were more popular.

A Mann-Whitney U test showed that there was a significant difference ($U = 2975.5, p = 0.048$) between the postings including “celebrating” compared to the postings without “celebrating.” The median of postings with “celebrating” was 564 ($n = 24$) compared to 272 ($n = 327$) for postings without “celebrating” suggesting that the postings with “celebrating” were more popular.

For the number of shares, the “taste,” “celebrating,” “relaxing,” and “feel good” themes were found to be statistically significant in captions. A Mann-Whitney U test showed that there was a significant difference ($U = 4197.5, p = 0.039$) between the postings including “taste” compared to the postings without “taste.” The median of postings with “taste” was 23 ($n = 63$) compared to 13 ($n = 162$) for postings without “taste” suggesting that the postings with “taste” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 1053.5, p = 0.014$) between the postings including “celebrating” compared to the postings without “celebrating.” The median of postings with “celebrating” was 45 ($n = 16$) compared to 15 ($n = 209$) for postings without “celebrating” suggesting that the postings with “celebrating” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 968.5, p = 0.031$) between the postings including “relaxing” compared to the postings without “relaxing.” The median of postings with “relaxing” was 3 ($n = 14$) compared to 18 ($n = 211$) for postings without “relaxing” suggesting that the postings without “relaxing” were more popular. A Mann-Whitney U test showed that there was a significant difference ($U = 759, p = 0.018$) between the postings including “feel good” compared to the postings
without “feel good.” The median of postings with “feel good” was 1 \((n = 12)\) compared to 18 \((n = 213)\) for postings without “feel good” suggesting that the posting without “feel good” were more popular.

**Discussion**

This thesis sought to research alcohol-related social media advertisements across a variety of alcohol types, alcohol brands, and social media platforms. The advertisements were then compared to historic data and cross-examined with a variety of topics.

Firstly, the sample profiles of each brand are notable. The likelihood of brands to post advertisements (84%) than corporate social responsibility-related posts (8%) shows that social media is advertisement-heavy, rather than an outlet for public relations/corporate social responsibility posts.

Nearly all advertisements (99.2%) had a caption. The average number of words was 23, which is about the length of a sentence. That seems to be a good amount to grab the attention of the viewer, but not lose their interest in a paragraph. Other captions, primarily those listing a recipe, were significantly longer with more than a hundred words.

Notable themes across all captions were seasonal (40%), holiday (32%), taste (27%), recipe (16%), and joke/humor (15%). Many themes that were discussed and criticized in the literature review for being particularly appealing to teens and young adults, such as parties (1.7%), socializing (5%), and feeling good after drinking (5%), were hardly found within captions.
Most advertisements (84%) contained pictures or videos; insinuating that even many Twitter advertisements contained a picture or video. The majority of advertisements included pictures as opposed to videos. This could be partially because pictures are a cheaper alternative, more aesthetically pleasing, or convey the message in just one glance from the viewer that is scrolling through a feed, rather than taking a longer amount of the viewer’s time to demonstrate the message through a video. Notable themes across all pictures were taste (51%), seasonal (28%), and occasion (25%). Notable themes across videos were taste (48%), seasonal (33%), holiday (25%), and occasion (22%). While some of the most common appeals across captions and pictures/videos were the same, others were not and there was a difference in each of the appeals’ percentages for captions for pictures/videos. This shows that a caption does not necessarily have to have the same message in the caption as within the picture/video. A social media post could have a picture showing a sports game on a holiday but have a caption about the taste and flavor of the alcohol. One advertisement can convey a variety of themes and messages to its viewer through its caption and picture/video. A brand maximizes the messages that it conveys by having both a caption and one or more pictures/videos. “Socializing” is one of the appeals that appeared more in pictures/videos than in captions, in about 12% of pictures and videos. “Socializing” was an appeal previously found to appeal to young people. Perhaps alcohol brands are trying to take a more subtle approach, and rather than obviously appealing to teens by blatantly stating the theme within the caption, demonstrating it in the picture. However, once again many themes that were discussed and criticized in the literature review for being particularly appealing to teens and young adults, such as parties, celebrating, getting drunk, and feeling good after drinking were hardly found within pictures and videos. This shows that alcohol
brands primarily do not use the appeals that they used to. Brands may still be targeting young adults and teens; if so, they have taken a different approach and found less obvious strategies for doing so.

“Joke/humor” was a notably common appeal across captions, and also was used relatively frequently in pictures and videos. A vast majority of these jokes included memes, which is a very popular part of Generation Z culture; and perhaps, most likely more relatable to Generation Z than any other age group. Flavors, which are included in the “taste” appeal, may also be a way to target a younger generation. Flavors are found to be more appealing to a younger generation; as youth and young people prefer sweet flavors (Hoffman et al., 2016). Many alcohol brands have flavors such as chocolate, cake, mango, tropical, etc. “Taste” was the most popular appeal in pictures and videos, and the third most popular appeal in captions. The “taste” category was primarily made up of captions, pictures, and videos that mentioned specific flavors. “Seasonal” and “holiday” appeals were also very popular across captions, pictures, and videos. In some states, alcohol advertisements with Santa are banned for creating an association between a childhood theme and alcohol. Advertisements with the Easter Bunny, Halloween candy/costumes, or other holiday appeals have no restrictions and were widely seen in alcohol social media advertisements. One Coors Light advertisement had a cute animated snowman singing and playing the piano, the advertisement was very kid friendly. These significant themes may be a new way that targets a younger audience.

As previous studies showed a limited presence of moderation and responsible drinking, the current study also showed a very limited number of responsible drinking messages. Responsibility messages across captions, videos, and pictures were few and far between. The numbers for this category were entirely too low for captions, pictures, and videos. In
fact, some responsibility messages that were included within the count were blurry and/or so small that they were hard to read. Responsibility messages had to be searched for and were not easy to find. The Covid-19 theme was also very scarcely used across captions, videos, and pictures. Drinking often takes place in a social setting such as a party or a bar, but the number of warnings or messages about social distancing was extremely low. The “socializing” appeal appeared more in Facebook’s advertisements’ captions than statistically expected. This may be because there are more adults on this platform than on Instagram and Twitter, and since this theme is known for targeting a younger generation, alcohol brands wanted to avoid obviously using this theme on platforms that are composed of primarily younger people. The “joke/humor” theme appeared more in Twitter captions than statistically expected, this makes sense as Twitter is known for memes and jokes. The strategies of appeals were not significantly different for pictures and videos across different social media platforms, meaning the majority of popular themes are the same across all platforms. Brands are posting similar messages on each of their social media channels.

**Word Count**

According to Sprout Social, the ideal length of a Facebook caption is 14 words, the ideal length of a Tweet is 71-100 characters or 35-50 words, and the ideal length of an Instagram caption is 138-150 characters or 69-75 words (Jackson, 2021). On the contrary, this research found that the alcohol brands’ Facebook captions were surprisingly longer than their Tweets. Overall, the average word counts were far lower on Twitter and Instagram within alcohol advertisements than the ideal length. Perhaps the main message within these advertisements is not over-emphasized within the caption, but rather shown in the picture and video.
Instagram captions had the longest mean word count, while Twitter had the shortest. Twitter is known for being primarily words rather than pictures; however, many Tweets were just short blurbs. This may be because Instagram has a longer amount of allowed characters than Twitter, which has a maximum of only 280 characters. Also, Instagram is better for posting recipes, which requires a higher character word count than Twitter offers and is a notably popular theme in captions. Vodka brands had a higher word count than all other brands; vodka brands also posted recipes more frequently than all other brands. Tito’s had a higher word count than the other vodka brands and was also the brand that posted the most recipes. Beer brands have little need to post any recipes, as they are more so ready-to-drink and are not used in many recipes, which may be why their word count was significantly lower.

**Appeals and Types/Brands of Alcohol**

Certain types of alcohol used certain themes more than other types. Similar to the recipe appeal, the “taste” theme was not found in beer videos; however, this appeal was found in 90% of seltzer videos. This makes sense, as most beers do not have many flavors to advertise; however, all seltzers have many different flavors as that is one of the seltzers’ most appealing features.

Lots of themes that were popular for specific alcohol types/brands across captions were also similar across pictures and videos. For example, “Joke/humor” appeared in around the same number of beer captions as it did in the pictures. However, as discussed before, this is not true for all themes as “socializing” appeared more in pictures/videos than in captions.

Even within the same type of alcohol, many brands varied in popular themes. For example, “seasonal” was a very popular theme across captions, pictures, and videos.
However, certain brands preferred to use this theme as Coors Light and Tito’s used this theme significantly more in captions compared to other brands. For videos, Tito’s used the “taste” theme significantly more than Smirnoff and New Amsterdam, Bon & Viv used the “taste” theme significantly more than White Claw and Truly, and Jack Daniels used the “taste” theme significantly more than Crown Royal and Jim Beam.

Many brands differed in appeals because of their brand image and identity. The “adventure” appeal was used far more by White Claw than any other brand. White Claw’s brand is based on adventure, their logo is a wave, and their website includes statements such as “discover pure refreshment” that capture the theme. Similarly, Coors Light’s slogan is “made to chill,” and had more “relaxing” themes in pictures than any other brand ($n = 5, 33\%$), and 43% of Coors Light videos also had this theme ($n = 6$). Bon & Viv’s slogan is “zero sugar, great taste,” and was one of only two brands to use the “healthy” appeal in captions.

Coors Light and Miller Lite had a very similar strategy, using mostly the same appeals strategies which were very different from Bud Light. This is likely because the parent company for Coors Light and Miller Lite is the same. Only a few strategies differed among Miller Lite and Coors Light, one of which was the “getting drunk” theme. Miller Lite used this theme in all three videos (100%) that they posted, while no other brand at all used this theme within videos. Miller Lite also used the “getting drunk” theme in two captions, while Coors Light and Bud Light did not use this appeal at all in captions. This use is very significant. Miller Lite also used the “socializing” appeal in 42% of pictures and 24% of captions, while Bud Light and Coors Light did not use this appeal at all in pictures and hardly used in captions. Additionally, in many of the “socializing” pictures that Miller Lite posted, the people in the pictures looked very young and it is hard to tell
whether or not these people are over the age of 21. It seems as though Miller Lite used some of the more traditional themes found in alcohol advertisements that were insidious for minors.

In response to the Covid-19 pandemic, alcohol consumption in the United States has increased (Barbosa et al., 2020). This is why a “Covid” category was included in the coding key. As mentioned earlier, Jim Beam was the only brand to include a “Covid” message. Notably, the pandemic has affected drinking consumption, yet it has not affected the advertising on social media. Perhaps, alcohol brands want to reassure and create a facade of normalcy in buying alcohol during the pandemic as a way to combat the loss of alcohol sales to bars and for parties.

**Appeals and Engagement**

The Mann-Whitney tests found that certain appeals within captions were associated with less engagement (likes, comments, and shares) from viewers. Posts with “holiday,” “feel good,” “recipe,” “healthy,” “food,” and “relaxing” appeals were associated with less engagement than posts that did not have those appeals. Perhaps the lack of engagement with holiday advertisements is due to ad fatigue since these advertisements were seen extremely frequently and are especially concentrated in the last few months of the year with Halloween, Thanksgiving, and Christmas, which was the time frame in which this analysis was conducted. Nearly half of consumers express annoyance after seeing similar advertisements over and over again (“Digital advertising,” 2020). Posts with “food” and “recipe” themes tended to have the longest captions which could cause consumer annoyance or disinterest. These advertisements were also frequent which could cause
advertisement fatigue. Posts with “relaxing” and “feel good” messages were not very common, but possibly just do not resonate with consumers within the stressful and busy environment of today, as many people may feel as though they do not have time to relax. Posts that had “healthy” themes were not interacted with as much, possibly because people do not associate drinking habits with healthy habits, as drinking can be counterproductive to healthiness.

Meanwhile, posts with “celebrating” and “taste” appeals were associated with more engagement from the viewer than posts without those appeals. These advertisements are grabbing the attention of the audience better than most other appeals. As discussed earlier, “celebrating” is a theme that has previously been found to be attractive to young people in alcohol advertisements and “taste” may be a new theme that is attracting young people to alcohol advertisements. Perhaps young people created the added engagement of these advertisements because they found these themes attractive.

**Elaboration Likelihood Model**

As discussed in the literature review, the elaboration likelihood model or ELM provides a framework for persuasion and attitude change that includes two routes: the central route and the peripheral route. The central route involves high elaboration and issue-relevant thinking and the peripheral route involves less elaboration as a person’s attitudes are formed based on relatively simple cues (Petty and Cacioppo, 1986). These simple cues may be the credibility, attractiveness of the sources of the message, or the production quality of the message. In situations where the audience may be only moderately interested in a topic, factors that act as peripheral cues can also cause the audience members to engage in the central route processing (Agostinelli & Grube, 2002). For example, young people who are only moderately interested in messages about
drinking may be more likely to deeply process a drinking message that is delivered from their favorite celebrity.

Each strategy of appeals was labeled as a central route appeal or a peripheral route appeal. The central route appeals were not as frequently used in the advertisements as the peripheral route appeals were. The only central route appeals that were used frequently were “taste” and “recipe.” Most other central route appeals like “getting drunk,” “celebrating,” or “parties” were hardly used. Peripheral route appeals such as “seasonal,” “holiday,” “joke/humor” were used more frequently. This may be because young people might be only moderately interested in drinking, yet certain factors acting as peripheral cues that younger people are interested in such as memes or sweet flavors could cause young people to engage in the central route processing. Young people who are only moderately interested in messages about drinking may be more likely to deeply process a message with a meme attached or pictures of intriguing flavors.

**Conclusion**

This research explored alcohol-related social media posts and advertisements across a variety of alcohol types, alcohol brands, and social media platforms. It was found that the alcohol brands’ social media accounts are advertisement heavy. Several strategies were identified across captions, pictures, and videos. The strategy used differed by brand and alcohol type, but the most common themes included “taste,” “seasonal,” “holiday,” “recipe,” and “joke/humor.” Many themes that were discussed and criticized in the literature review for being particularly appealing to teens and young adults, such as parties, socializing, and feeling good after drinking were hardly found within captions.
Some of these themes appeared more in pictures; perhaps alcohol brands are trying to take a more subtle approach rather than obviously appealing to teens by blatantly stating the theme. Each advertisement can convey a variety of themes and messages through the caption and picture/video, the message in the picture could be completely different from the message in the caption. The themes that were known for targeting young people in the past were not found as much as expected in captions and pictures; however, brands may still be targeting young adults and teens; if so, they have taken a different approach and found less obvious strategies for doing so.

“Joke/humor,” “seasonal,” “holiday,” and “taste” are some themes that alcohol brands may be using to target a younger generation, as memes, flavors, and holidays are very popular among young people. These themes were also the most popular themes found across captions, pictures, and videos. This may be a new way that alcohol brands target a younger audience. Most other central route appeals like “getting drunk,” “celebrating,” or “parties” were hardly used, while peripheral route appeals such as “seasonal,” “holiday,” “joke/humor” were used more frequently. This may be because young people might be only moderately interested in drinking, yet certain factors acting as peripheral cues that younger people are interested in such as memes or sweet flavors could cause young people to engage in the central route processing.

Even within the same type of alcohol, many brands varied in popular themes. Many brands differed in appeals because of their brand image and identity, such as White Claw with “adventure” and Coors Light with “relaxing.”

Coors Light and Miller Lite had a very similar strategy, using mostly the same appeals strategies which were very different from Bud Light. This is likely because the parent company for Coors Light and Miller Lite is the same.
Miller Lite used certain themes that other brands did not use. Miller Lite also used the “getting drunk” theme in two captions, while Coors Light and Bud Light did not use this appeal at all in captions. Additionally, in many of the “socializing” pictures that Miller Lite posted, the people in the pictures looked very young and it is hard to tell whether or not these people are over the age of 21.

Responsibility messages were hardly used. Some were so blurry and/or small that they were hard to read. The Covid-19 theme was also very scarcely used across captions, videos, and pictures. Drinking often takes place in a social setting such as a party or a bar, but the number of warnings or messages about social distancing was extremely low.

Interestingly, in response to the Covid-19 pandemic, alcohol consumption in the United States has increased (Barbosa et al., 2020). Additionally, Mintel (2020) found that Covid-19 messaging is generally welcomed within advertisements, and consumers appreciate learning about how companies have helped out during these tough times and are more willing to do business with them later (“Digital advertising”). However, alcohol brands hardly addressed the pandemic; perhaps these alcohol companies want to reassure their customers and create a sense of normalcy so that their sales are not affected.

While there is not enough evidence to determine an exact correlation between alcohol advertising practices and themes targeting young people, it is likely that alcohol companies are using new strategies to reach consumers and that the themes used in advertisements today can be influential on young peoples’ drinking habits.

Study Limitations and Future Research

Some limitations of the study include the time of year it was performed in relation to the Covid-19 pandemic and “seasonal” and “holiday” themes. Further research should
be performed in the future, perhaps in summer months, and include other types/brands such as tequila and wine. Additionally, Snapchat could be added as a platform to study. An experiment should be conducted to find if the common themes of “taste,” “seasonal,” “holiday,” and “joke/humor” significantly appeal to young adults and teenagers. It would be useful in determining the correlation between advertisements and appeal to young people. In response to the Covid-19 pandemic, alcohol consumption in the United States has increased, social media use has increased, and underage drinking has likely increased; therefore, it is important that more research is conducted to better understand how these new popular themes are affecting young people.
References:


Fall semester: A time for parents to discuss the risks of college drinking. (2019). *National Institute on Alcohol Abuse*. doi: 10.1037/e659722010-001


State laws to reduce the impact of alcohol marketing on youth: current status and model policies. (2012). *John Hopkins Bloomberg School of Public Health*.


Appendix

Coding Instruction Sheet:

1. Name of Brand
   1. Bud Light
   2. Coors Light
   3. Miller Lite
   4. Tito’s
   5. Smirnoff
   6. New Amsterdam
   7. White Claw
   8. Truly
   9. Bon & Viv
   10. Crown Royal
   11. Jim Beam
   12. Jack Daniels

B. Type of Alcohol
   1. Beer: Bud Light, Coors Light, Miller Lite
   2. Vodka: Smirnoff, Tito’s, New Amsterdam
   3. Hard Seltzer: White Claw, Truly, Bon & Viv
   4. Whiskey: Crown Royal, Jim Beam, Jack Daniels

C. Type of Media
   1. Instagram
   2. Twitter
   3. Facebook

D. ID: Order within the page

E. Identifier: The first word of the caption

F. Number of followers

G. Number of likes

H. Number of shares/retweets

I. Number of comments

J. Is it a Post or an Advertisement?
   1. Post that is non-advertisement (if it is a post, answer K then stop coding)
   2. Advertisement (If advertisement skip to L and continue coding)

K. If it is a post that is non-advertisement: what type of post? (advertisements leave blank)
   1. Social issue
   2. COVID-19 related
   3. Company information (i.e. employee info, company events)
4. Environmental issue
5. Underage drinking
6. CSR initiated (donation to feed the children)
7. Picture and/or caption is unrelated to drinking
8. random, i.e. to generate comments- for example “what are you doing this weekend?”
0. Other

*Posts that are non-advertisements, stop coding here. Advertisements continue coding.*

**ADVERTISEMENTS:**

**L. Contest/Promotions** (the advertisement as a whole, including picture/video and caption)

0. Regular ads
1. Seasonal promotion
   i. Seasonal: Superbowl, college football, summer special
2. Holiday
   i. Holiday: Christmas, thanksgiving, Labor Day
3: Contest/Giveaway

**M. Is there a caption?**

1: Yes
If the answer is no, leave blank and skip to II

The following questions (N - HH) are related to only the advertisements caption, and not the picture/video.

**N. Number of words for the caption:**
Hashtags count as one word, and so do @ tags.
-i.e. #DrinkSmirnoffResponsibly = 1 word
-i.e. @kendalljenner = 1 word
-i.e. 2020= 1 word
-Emojis do not count as words
-i.e. Are you ready to drink White Claw this weekend @kimkardashian? #fun #nolawsdrinkingclaws = 12 words

**What message does the caption best convey?**

**M. Tastes:** Y (1)/No (0)
i.e. Tastes, tastes good/is easy to drink/refreshing: “Goes with everything and tastes good”
I.e. Promoting variety: “Tons of flavors” “Many ways to drink”
O. Occasion: Y (1)/No (0)
   1. PARTY: E.g., Partying/festivals: “Party”
   2. Family/friends get together: “Very casual, something to share with friends at a casual get together”
   3. Romantic: “Romantic and classy”
   4. Outdoors: Enjoy outdoors/picnic: “Good to drink outside”
   5. Working out, exercise, activity
   6. Sporting game
   7. Any; Can Drink at any occasion: “Drink whenever, wherever, it’s all good” - normalizing drinking
   0. Can’t determine from this list

P. Season: Y (1)/No (0); “A good drink for summer”

Q. Holiday: Y (1)/No (0); “Smirnoff is the perfect way to celebrate the 4th of July”

R. Context: Celebrating: Y (1)/No (0); way to celebrate: “Celebrate with a White Claw”

S. Context: Relaxing: Y (1)/No (0); “Great for relaxing”

T. Context: Feel good/fun/happy/cheer up: Y/N; “Drinking Smirnoff will make your life fun!” A drink that makes you feel happier, relaxed, and loving

U. Context: Get drunk: Y (1)/No (0); “Drink it to get wasted”

V. Context: Socializing: Y (1)/No (0); “Drink to entertain,” friends pictured

W. Context: Food: Y (1)/No (0); “To be enjoyed over cheese and crackers with close friends”

X. Context: Recipes: Y (1)/No (0); “Can put in sweet recipes,” lists a recipe

Y. Context: Sophistication: Y (1)/No (0) “An elegant drink to have with friends over lunch”

Z. Context: Adventurous: Y (1)/No (0)

AA. Context: Healthy: Y (1)/No (0)

BB. Context: Joke/Humor: Y (1)/No (0)

CC. Sexual context:
   1. Feminine (“A typical girly night involves White Claws”)
   2. Masculine (“Budweiser is for real men”)
   3. “For sexy times,” promiscuity pictured
   4. Can’t determine
   0: none

DD. Age:
   1: Young (“keeps you young”)
   2: Old (“It’s more of a classy drink, for mature adults”)
   3: Can’t determine
   0: None

EE. Regional:
1. American (“Bud light is for America”)
2. Regional
0: none

FF. Covid-related: Y (1)/No (0)

GG. Context_Can’t determine from this list/other: Y (1)/No (0)

HH. Is there a responsibility warning, 21+, or health message within the caption?
Y(1)/No(0)

II. Number of Pictures:

JJ. Number of videos:

The following questions (KK - EEE) are related to only the advertisements first picture/video, and not the caption.

What message or messages best encapsulates the first/picture or video?

KK. Tastes: Y (1)/No (0)
i.e. Tastes, tastes good/is easy to drink/refreshing: “ Goes with everything and tastes
good”
i.e. Promoting variety: “Tons of flavors” “Many ways to drink”

LL. Occasion: Y (1)/No (0)
8. PARTY: E.g., Partying/festivals: “Party”
9. Family/friends get together: “Very casual, something to share with friends at a casual get together”
10. Romantic: “Romantic and classy”
11. Outdoors: Enjoy outdoors/picnic: “Good to drink outside”
12. Working out, exercise, activity
13. Sporting game
14. Any; Can Drink at any occasion: “Drink whenever, wherever, it’s all good” - normalizing drinking
0. Can’t determine from this list

MM. Season_seasonal: Y (1)/No (0); “A good drink for summer”

NN. Holiday_holiday: Y (1)/No( 0); “Smirnoff is the perfect way to celebrate the 4th of July”

OO. Context_celebrating: Y (1)/No (0); way to celebrate: “Celebrate with a White Claw”

PP. Context_relaxing: Y (1)/No( 0); “Great for relaxing”

QQ. ContextFeel_good/fun/happy/cheer up: Y/N; “Drinking Smirnoff will make your life fun!” A drink that makes you feel happier, relaxed, and loving”

RR. Context_get drunk: Y (1)/No (0); “Drink it to get wasted”

SS. Context_socializing: Y(1)/No (0); “Drink to entertain,” friends pictured
TT. **Context_food**: Y(1)/No (0); “To be enjoyed over cheese and crackers with close friends”  
UU. **Context_recipes**: Y(1)/No (0); “Can put in sweet recipes,” lists a recipe  
VV. **Context_sophistication** Y(1)/No (0) “An elegant drink to have with friends over lunch”  
WW. **Context_adventurous** Y (1)/No (0)  
XX. **Context_healthy**: Y (1)/No (0)  
YY. **context_joke/humor**: Y (1)/No (0)  
ZZ. **Sexual context**:  
   1. Feminine (“A typical girly night involves White Claws”)  
   2: masculine (“Budweiser is for real men”)  
   3. “For sexy times,” promiscuity pictured  
   4: can’t determine  
   0: none  
AAA. **Age**:  
   1: young (“keeps you young”)  
   2: old (“It’s more of a classy drink, for mature adults”)  
   3: can’t determine  
   0: none  
BBB. **Regional**:  
   1. American (“Bud light is for America”)  
   2. Regional  
   0: none  
CCC. **Covid-related**: Y (1)/No (0)  
DDD. **Context_Can’t determine from this list/other**: Y(1)/No(0)  
EEE. **Is there a responsibility warning, 21+, or health message within the picture?**  
   Y(1)/No(0)

[1] Note: if the Cramer’s V is less than 0.2, the result is weak association, if it’s between 0.2 and 0.6, the result is moderate association, and if it’s more than 0.6, the result is strong association (Cohen, 1988).