

A Decade of Super Bowl Ads (2015-2024): A Content Analysis of Trends and User Engagement

Peer review: This article has been subject to a double-blind peer review process



JoCTEC is an **open access journal** meaning that all content is freely available without charge to the user or their institution. Users are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author.

Open access is an ongoing publication practice that differs from the traditional manner academic journals are published and then received by the reading public. In Open Access publication model neither readers nor a reader's institution are charged for access to articles or other resources. We ask that users in turn give proper citation of the original publication or link to the full texts of these articles for any non-commercial purposes. A subscription to the journal in which these articles are published is not required.

Ruoxu Wang^a, Jin Yang^a, Joel Nichols^a, Aaliyah Brown^a, & Kittie Sullivan Baldwin^a

^aDepartment of Journalism and Strategic Media, University of Memphis, Memphis, Tennessee, USA

Correspondence: rwang4@memphis.edu

Abstract

A content analysis study of Super Bowl ads from 2015 to 2024 was conducted to examine the trends ($N = 606$), and user engagement ($N = 312$) of Super Bowl ads. The results revealed that ad length, ego appeals, sensory appeals, routine appeals, humor appeals, fear appeals, and the presence of a major role significantly predicted both user engagement. Food and beverage products, utilitarian goods, and low-involvement items were disproportionately represented in the ads. Overall, Super Bowl ads tended to be short, adopt a positive tone, employ multiple settings, incorporate music but rarely voice-overs, and frequently utilize ego and humor appeals. The use of celebrity endorsements and warmth appeals increased over the decade, while narratives were favored over statistical evidence. Although most ads featured humans, only one-third included a major role character, which was most often portrayed by a middle-aged Caucasian male.

Keywords: Super Bowl Ads; Content Analysis; Trend; User Engagement

Introduction

Watching Super Bowl ads is a popular activity among American audience. In 2024, the viewership of Super Bowl ads reached 200.5 million (Marketing Charts, 2024). Advertisers spent an average of seven million dollars to air a 30 second ad during the game (Statista, 2024). More than half of the audience (56%) believed watching Super Bowl ads could influence their purchase decisions, especially among the younger generations (Cint, 2024).

Recent Super Bowl ads research has frequently studied the content and strategies used in the ads (Alčaković, 2023; Kim et al., 2012; Poore, 2018). Researchers have also examined the influence of ad content on affect (Kelley & Turley, 2004) and likeability (Yelkur et al., 2013). Other studies examined the portrayal of matures (aged 65+) (Brooks et al., 2016), women, and minorities (Taylor et al., 2019) in the ads. Although there is a plethora of Super Bowl ads content analysis studies, few have examined the trends, evaluation, and user engagement of Super Bowl ads. It is important to study user engagement because previous study showed social media engagement could positively influence consumer's trust and purchase intention (Matin et al., 2020). It is possible that higher user engagement of Super Bowl ads could lead to higher purchase intention.

The goal of this study is two folds: to examine the trends and evaluation of Super Bowl ads from 2015 to 2024; and to examine the factors behind the user engagement of Super Bowl ads from 2015 to 2024. Trends are measured by product categories and product types; technical aspects; creative strategies; advertising appeals; narratives vs. statistics; and human/major role change. User engagement is measured by number of views, likes, and comments.

Literature Review

Product Categories and Product Types

Product category serves as the basis for advertisers to target audiences and different markets. The top five most common product categories in Super Bowl ads 2000 - 2024 were alcohol, auto, e-commerce, entertainment, and food/beverages (Morning Brew, 2024). The food and beverage category in Super Bowl ads represented over 37 percent of all products during the 1990s and about 33 percent during the 2000s (Tomkovick et al., 2001). Food and beverages Super Bowl ads were usually liked more than the other categories during the 1990s (Tomkovick et al., 2001). Products can generally be grouped into utilitarian vs. hedonic products; and low vs. high involvement products.

Utilitarian vs. Hedonic Products. Utilitarian products empathize

function or performance whereas hedonic products emphasize pleasure or self-expression (Park & Moon, 2003). Utilitarian products are useful to solve a specific problem while hedonic products can provide feeling or hedonic pleasure (Park & Moon, 2003). Research showed hedonic products elicited higher emotional acceptance than utilitarian products (Lee & Ko, 2021). People perceived Super Bowl ads with hedonic products as more memorable and more fitting (Lee & Ko, 2021).

Low vs. High Involvement Products. Consumers differentiate low vs. high involvement products by how much they are mentally engaged in decision making (Moore & Lee, 2012). Low-involvement products like ice creams require little thinking whereas high-involvement products like automobiles require more thinking before making the purchase decision (Moore & Lee, 2012). Low-involvement product ads tend to use emotional and persuasive appeals to resonate with consumers immediately (Huang et al., 2020). High involvement product ads tend to employ clear and straight forward information to justify the purchase decision (Moore & Lee, 2012).

Previous research has examined the product categories and product types in Super Bowl ads (Tomkovick et al., 2001; Yelkur et al., 2013), however, how product categories and product types have changed in Super Bowl ads from 2015 to 2024 remains unknown, thus, the following research question is raised:

RQ1a: How have product categories and product types changed in Super Bowl ads from 2015 to 2024?

Technical Aspects

In this study, five technical aspects of the Super Bowl ads were examined: length, tone, setting, voice over, and music.

Length. Tomkovick et al. (2001) studied the Super Bowl ads in the 1990s and found most of the ads were 45 seconds or longer. They also confirmed ad length was the second most significant predictor of ad's likeability (Tomkovick et al., 2001). Longer ads worked better than shorter ads because they gave the audience more time to process the favorable implications of ad messages (Tomkovick et al., 2001). Goodrich et al. (2015) reported 30-second ads did best at persuasion and conveying emotions. Jeong et al. (2011) found the length of ads was a significant predictor of brand recall and ads likability.

Tone. Tone of the ad defines the product, connects with the audience, and acts as an overall mood for the brand. Taylor (2016) found most Super Bowl ads used a positive and humorous tone.

Merritt (1984) found political ads with a negative tone evoked a negative effect toward both the targeted opponent and the sponsor. Stevens (2012) found the impact of negative political ads may be due more to the issue information it contained than to the arresting power of its negative tone.

Setting. Settings in ads were carefully selected by production personnel to convey desired imagery (Solomon & Greenberg, 1993). Research showed Latinos and African Americans were more likely to appear in social settings than Asian Americans (Rubie-Davies et al., 2013). Asian Americans were more likely to appear in business settings than family or social settings (Rubie-Davies et al., 2013). Taylor et al. (2019) found the amount of Super Bowl ads 2008 – 2017 featuring females in home settings was decreasing. For outdoor/nature setting, males were featured more frequently than mixed genders (Taylor et al., 2019). For business and home settings, mixed genders were featured more frequently than males (Taylor et al., 2019).

Voice Over. Using voice overs in ads could increase message credibility, lift brand awareness and ad recall, boost enjoyment and engagement, and attract attention (Voice Archive, n.d.). Moriuchi (2021) found voice overs using a non-native accent were perceived to be more entertaining than a native accent. Strach et al. (2015) found although men voice overs dominated the political ads, women voice overs were more likely to be used when the political ads were about feminine issues.

Music. Music is frequently used in ads. Among the 62 Super Bowl ads in 2023, 47 percent used licensed music, 39 percent used custom music, 10 percent used stock music, only 5 percent used no music at all (Marketing Brew, 2023). Hung (2001) found music enhanced the visual effects of teaser ads and ad messages, which helped viewers attribute meanings to them. Vermeulen and Beukeboom (2016) found there was a significant musical conditioning effect for low-involvement products but not for high-involvement products. The above-mentioned literature suggested length, tone, setting, voice over, and music are all important technical aspects of ads and may influence advertising effectiveness. However, few studies have examined the role and changes of these technical aspects in Super Bowl ads. Thus, the following research question is raised:

RQ1b: How have the technical aspects (length, tone, setting, voice over, music) of Super Bowl ads changed from 2015 to 2024?

[Message Strategy Wheel](#)

Taylor (1999) developed the six-segment message strategy wheel

as a model to analyze ads. The model (Taylor, 1999) has two views: transmission (ration, acute need, routine) and ritual (ego, social, sensory). Ration focuses on consumers' need for information with product examples like computers and cars (Taylor, 1999). Acute Need is largely based on consumers' immediate needs with product examples of batteries or tires (Taylor, 1999). Routine stresses the role of a product in a consumer's routine with product examples of coffee, cereal, and household products (Taylor, 1999). Ego refers to appealing to consumers' egos with product examples of luxury watches and cars (Taylor, 1999). Social places the consumption of a product within a social situation with product examples of jewelry, greeting cards, and holiday gifts (Taylor, 1999). Sensory appeals to consumers' senses of smell, touch, hearing, taste, or sight with product examples of food, beverages and phones (Taylor, 1999).

The message strategy wheel has been frequently applied in content analysis studies (Ahn et al., 2013; Golan & Zaidner, 2008; James, 2011; Wolburg & Venger, 2009). Golan and Zaidner (2008) found ego was the most frequently used strategy in viral ads based on themes like humor and sexuality. Similarly, James (2011) found ego was the most frequently used strategy for all luxury business sectors during both economic recession and growth times. Ahn et al. (2013)'s study revealed an even division between transmission and ritual views in cosmetic surgery websites. Websites incorporating the transmission views used the ration strategy while websites incorporating the ritual view used the ego, social, and sensory strategies. However, the use of the message strategy wheel has rarely been examined in Super Bowl ads. Thus, the following research question is raised:

RQ1c: How have the use of creative strategies changed in Super Bowl ads from 2015 to 2024?

[Advertising Appeals](#)

Humor. Humor appeal could be explained by the relief theory (Berlyne, 1972), superiority theory (Meyer, 2000), and incongruity theory (Berger, 1987). Alčaković (2023) found humor and celebrity endorsements were two common appeals used in Super Bowl ads 2017 - 2022. Another study found the most popular Super Bowl ads in 2005, 2007, and 2009 were those that include acts combining both humor and violence (Blackford et al., 2014). Poore (2018)'s study revealed the use of humor decreased in Super Bowl ads 2011 - 2024; humor was often used in ads featuring high involvement/thinking products 2011 – 2018.

Warmth. Warmth appeal is “the positive, gentle, fleeting emotional, and psychological arousal that people feel from an ad, usually from

love, family, or friendship” (Aaker et al., 1986, p. 365). Research showed warmth appeal increased favorable attitude and purchase intention among low involvement products (Zawisza & Pittard, 2015). Another study found warmth appeal increased brand attitudes and purchase intentions for self-transcendence brands but not for self-enhancement brands (Jin et al., 2022). In Super Bowl ads, brands like Coca Cola have frequently used the warmth appeal to celebrate unity and diversity (ReferralCandy, 2023).

Fear. Fear appeal has been applied in ads about health, auto safety, and financial services to communicate potential unfavorable outcomes if consumers do not use their products (Tannenbaum et al., 2015). Fear appeal can capture attention and give brands a memorable moment regardless of the busy environment of Super Bowl ads (Alhabash et al., 2022). However, the use of fear appeal should be moderate as the overuse of fear appeal may weaken the ad’s credibility and turn off viewers (Bartikowski et al., 2019).

Bandwagon. Bandwagon capitalizes a person’s fear of missing out or desire to belong to the in-group (Bindra et al., 2022). Bandwagon is often operationalized as the number of likes, comments, and shares received by a social media post (Lim et al., 2021; Yang, 2022). Lim et al. (2021) found the bandwagon effect of social media metrics on the attitude toward the ad and donation intentions were significant for people with moderate and high conscientiousness. Yang (2022) found participant’s humor perception was enhanced when exposed to a meme post with a high level of bandwagon cues. In Super Bowl ads, the bandwagon effect could be a large group of people endorsing a product/brand altogether.

Sex Appeal. Sex appeal is using sexual imagery in ads to draw consumer’s interest to a particular product (Moses & Charles, 2014). Research showed North Americans were more favored toward sex appeals in ads than Asians (Sawang, 2010). Men and liberal women were more likely to have a positive attitude toward sex appeals in ads (Sengupta & Dahl, 2008). Taylor (2016) suggested the use of overt sex appeals in Super Bowl ads was quite limited in recent years and using a sexy model alone without reinforcing the brand image was not effective.

Celebrity Endorsement. The role of celebrity endorsement is to transfer consumers’ feelings toward a celebrity to a product to increase consumers’ purchase intention (Wang et al., 2013). Research showed celebrity endorsements could positively influence consumer purchase intentions (Wang et al., 2013). In contrast, Tomkovick et al. (2001)’s study showed celebrity endorsement did not enhance the likeability toward Super Bowl ads. Taylor (2016) suggested although the use of celebrity endorsement in Super Bowl

ads continued to be strong, it was not a guarantee of success. The above-mentioned literature suggested humor, warmth, fear, bandwagon, sex appeal, and celebrity endorsement have all been used in Super Bowl ads, however, how the use of these advertising appeals has changed in Super Bowl ads during the last decade remains unknown, thus, the following research question is raised:

RQ1d: How have the use of advertising appeals changed in Super Bowl ads from 2015 to 2024?

Narratives vs. Statistics

A narrative ad tells a story with who, what, when, where, why, how, and chronology (Kim et al., 2017). A statistical ad uses quantitative information to support a conclusion (Allen et al., 2000). Researchers have demonstrated narratives were more persuasive than statistics (Betsch et al., 2011; Kim et al., 2017; Lien & Chen, 2013). Lien and Chen (2013) found both visual and verbal narrative ads led to greater persuasive effects than non-narrative ads. Other scholars found statistics could outperform narratives (Allen & Preiss, 1997; Allen et al., 2000). Allen and Preiss (1997)'s meta-analysis showed statistical evidence was more persuasive than narrative evidence. Another study suggested a message combining narrative and statistical evidence was more persuasive than a message using either narrative or statistical evidence alone (Allen et al., 2000). However, how narratives and statistics have been used in Super Bowl ads remains unknown. Thus, the following research question is raised:

RQ1e: How have the use of narratives and statistics in Super Bowl ads changed from 2015 to 2024?

Human and Major Role

Both human and animal have been used as a major role in Super Bowl ads. Research showed featuring animals as a major role in a Super Bowl ad received better performance and higher likability compared with the other ads (Taylor, 2016; Tomkovick et al., 2001). Scholars have also investigated featuring humans as a major role in a Super Bowl ad (Brooks et al., 2016; Taylor et al., 2019). Research showed matures were featured in nearly one third of all ads and were mostly framed positively in the Super Bowl ads 2010 - 2014 (Brooks et al., 2016). Another study found although the overall representation of women and minorities in Super Bowl ads 2008 - 2017 was strong, these groups were rarely portrayed as major roles (Taylor et al., 2019). Women as major roles were usually portrayed in the home setting, sexual appeals, emotional messages, and music (Taylor et al., 2019). In addition, minority major roles were more likely to be celebrities and be included in ads with music or technical products (Taylor et al., 2019). It is unclear how the use of humans and major

roles have changed in Super Bowl ads in the past decade. Thus, the following research question is raised:

RQ1f: How has the use of human/major roles changed in Super Bowl ads from 2015 to 2024?

User Engagement

User engagement has multiple definitions. In Human Computer Interaction, user engagement is a process which contains the user's initial reactions to technologies and re-engagement with information systems over time (O'Brien & Toms, 2008). In advertising, user engagement emerges from people's thoughts and feelings about one or more rich experiences of reaching a personal goal (Calder et al., 2016). Hollebeek et al. (2014) conceptualized consumer brand engagement as a consumer's positively valenced brand related cognitive, emotional and behavioral activity during or related to focal consumer/brand interactions. In this study, user engagement is conceptualized as the degree to which the audience is involved with the Super Bowl ads uploaded to YouTube as represented by the number of views, likes, and comments.

Previous research has examined the user engagement with consumer technology video ads on YouTube (Wang et al., 2023) and the consumer engagement with Super Bowl ad tweets and advertiser's official Twitter accounts (Noh et al., 2021). However, few studies have examined the user engagement of Super Bowl ads from the perspective of content analysis. Thus, the following research question was raised:

RQ2: What is the relationship between trends and user engagement of Super Bowl ads on YouTube 2015 – 2024?

Method

Sampling

This study collected Super Bowl ads from 2015 to 2024 using the USA Today Super Bowl archive, the Ad Age Super Bowl archive, and the Super Bowl Ads.com archive. USA Today Super Bowl archive was the primary source for ads collection. The Super Bowl ad was usually posted on the brand's official YouTube account. If the YouTube video was unavailable, the video from the Ad Age Super Bowl archive or the Super Bowl Ads.com archive was used. A total of six hundred and six Super Bowl ads (N = 606) were collected. The trend of these 606 video ads was analyzed.

Among the 606 Super Bowl ads, three hundred and twelve ads (n = 312) had official YouTube video links. Thus, user engagement (number of views, likes, and comments) of the 312 video ads were coded. Table 1 showed the best Super Bowl ads 2015 – 2024.

The unit of measurement of this study was each Super Bowl ad.

Coder Training

Two coders were trained to code in this study. At first, both coders coded ten percent of the sample size ($n = 60$) together. These 60 ads were randomly selected from the Super Bowl ads pool released before 2015. The reliability score was calculated using Krippendorff's α to make sure it passed .8 for each variable. If the score did not pass .8, the code sheet was modified until the threshold of the reliability was met. A total of 42 variables were coded with the reliability scores ranging from .8 to 1. After the coder training, the two coders divided the 606 ads and coded independently.

Measured Variables

Independent Variables. The independent variables of this study are types of products (utilitarian vs. hedonic product; low vs. high involvement product), technical aspects (length, tone, setting, voice over, music), creative strategies (routine, acute need, ration, ego, social, sensory), advertising appeals (humor, warmth, fear, bandwagon, sex appeal, celebrity endorsement), narratives and statistics, and human/major role. All variables except for length, setting (Taylor et al., 2019), and tone were coded by 1 = no; 2 = yes. For example, if the product used in the ad belongs to a utilitarian product, it was coded as 2, otherwise, it was coded as 1.

Dependent Variables. The dependent variables of this study are social media engagement. Social media engagement was measured by number of views ($M = 6487160.37$, $SD = 16783892.77$, Range: 96 - 140765554), number of likes ($M = 16065.58$, $SD = 58770.272$, Range: 1 - 578000), and number of comments ($M = 1713.59$, $SD = 5847.579$, Range: 1 - 50641) on YouTube.

Other Variables. Other variables of this study include video URL, brand name, ad title, year, posted date, coding date, product category (Yelkur et al., 2013), major role's age, major role's gender, and major role's race. A total of 239 different brand names has appeared in Super Bowl ads 2015 – 2024, among which, Anheuser-Busch ($n = 29$, 5%) appeared the most frequently, followed by T-Mobile ($n = 23$, 4%), Universal ($n = 17$, 3%), Amazon ($n = 15$, 2%), Michelob ULTRA ($n = 15$, 2%), Toyota ($n = 13$, 2%), Disney ($n = 12$, 2%), NFL ($n = 12$, 2%), Doritos ($n = 11$, 2%), and Paramount ($n = 11$, 2%). The codebook is available on request.

Results

RQ1a-f asked how the use of product categories, product types, technical aspects, creative strategies, advertising appeals, narrative/statistics, human/major role have changed in Super Bowl

ads from 2015 to 2024. To answer RQ1a-f, a series of frequency tests and Chi-Square tests were performed.

Product Categories

The frequency test showed food/beverages ($n = 160$, 26.4%) was the most frequently appeared product category, followed by technology/game ($n = 112$, 18.5%), auto/vehicle ($n = 93$, 15.3%), sports/entertainment ($n = 88$, 14.5%), finance/insurance/real estate ($n = 60$, 9.9%), retail/clothing ($n = 46$, 7.6%), health/beauty/cosmetics ($n = 23$, 3.8%), politics/religion ($n = 8$, 1.3%), healthcare/medical ($n = 7$, 1.2%), delivery ($n = 7$, 1.2%), and public service announcement ($n = 2$, .3%) in the past decade.

The Chi-Square test showed the relationship between product categories and year was significant, $\chi^2(90, N = 606) = 127.15$, $p < .01$, Cramer's $V = .15$. Food/beverages was the most popular product category 2016 – 2021, 2023, and 2024. Technology/games was the most popular product category in 2017 and 2022. Sports/entertainment/media was the most popular product category in 2015. See Figure 1.

Product Types

The frequency test showed utilitarian products ($n = 356$, 58.7%) appeared more frequently than hedonic products ($n = 202$, 33.3%); and low involvement products ($n = 370$, 61.1%) appeared more frequently than high involvement products ($n = 196$, 32.3%) in the past decade.

The Chi-Square tests showed the relationship between utilitarian product and years was non-significant, $\chi^2(9, N = 606) = 10.48$, $p = .31$, Cramer's $V = .13$; the relationship between high involvement product and years was also non-significant, $\chi^2(9, N = 606) = 15.61$, $p = .08$, Cramer's $V = .16$. This indicated utilitarian products and high involvement products remained stable from 2015 to 2024. However, the Chi-Square tests showed the relationship between hedonic product and years was significant, $\chi^2(9, N = 606) = 63.87$, $p < .001$, Cramer's $V = .33$; and the relationship between low involvement product and years was also significant, $\chi^2(9, N = 606) = 43.90$, $p < .001$, Cramer's $V = .27$. Hedonic products appeared the most frequently in 2018 ($n = 34$, 16.80%); and low involvement products appeared the most frequently in 2017 ($n = 53$, 14.30%). See Figure 2.

Technical Aspects

The frequency test showed the average length of a Super Bowl ad was 46 seconds ($M = 45.78$, $SD = 24.81$, Range: 10 – 171) in the

past decade. The average length of a Super Bowl ad was 54.05 seconds (SD = 34.23, Range: 14 - 164) in 2015 and 42.54 seconds (SD = 18.25, Range: 15 - 120) in 2024. Ads were becoming shorter over the decade. See Figure 3.

The average tone of the Super Bowl ad was 2.45 (SD = .57, Range: 1 – 3) in the past decade; most of the ads had a positive tone (n = 297, 49%), followed by neutral (n = 285, 47%), and negative (n = 24, 4%). The average tone of an ad was 2.31 (SD = .59, Range: 1 - 3) in 2015 and 2.58 (SD = .56, Range: 15 - 120) in 2024. Ad tone was becoming more positive over the decade. See Figure 4.

Multiple settings (n = 261, 43.1%) appeared most frequently in the ads, followed by outdoor/natural scene (n = 130, 21.5%), home (n = 96, 15.8%), other/unknown (n = 53, 8.7%), social (n = 34, 5.6%), and business (n = 32, 5.3%) in the past decade. The Chi-Square test showed the relationship between settings and year was significant, $\chi^2(45, N = 606) = 74.42, p < .01$, Cramer's V = .16. Business (n = 6, 18.8%) appeared most frequently in 2023; home (n = 14, 14.60%) appeared most frequently in 2017; outdoor/natural scene (n = 17, 13.10%) appeared most frequently in 2020; social (n = 6, 17.60%) appeared most frequently in 2024; multiple settings (n = 34, 13%) appeared most frequently in 2018; and other/unknown (n = 12, 22.60%) appeared most frequently in 2016. See Figure 5.

Only 210 ads (34.7%) used voice overs in the past decade. Most of the ads (n = 396, 65.3%) did not use any voice overs. About 12 ads used voice overs in 2015 and 28 used voice overs in 2024. The use of voice over has increased in the past decade. See Figure 6.

About 85.8 percent (n = 520) ads used music while 14 percent (n = 85) used no music at all in the past decade. About 54 ads used music in 2014 and 53 used music in 2025. Music usage remained stable over the decade. See Figure 7.

Creative Strategies

The frequency test showed the most frequently used creative strategy was ego (n = 334, 55.1%), followed by routine (n = 302, 49.8%), ration (n = 259, 42.7%), sensory (n = 181, 29.9%), acute need (n = 168, 27.7%), and social (n = 139, 22.9%) in the past decade.

The Chi-Square tests showed the relationship between routine and year was significant, $\chi^2(9, N = 606) = 420.45, p < .001$, Cramer's V = .83; the relationship between acute need and year was significant, $\chi^2(9, N = 606) = 134.97, p < .001$, Cramer's V = .47; the relationship between ration and year was significant, $\chi^2(9, N = 606) = 301.45, p < .001$, Cramer's V = .71; the relationship between ego and year was

significant, $\chi^2 (9, N = 606) = 226.46, p < .001$, Cramer's $V = .61$; the relationship between social and year was significant, $\chi^2 (9, N = 606) = 19.52, p < .05$, Cramer's $V = .18$; and the relationship between sensory and year was significant, $\chi^2 (9, N = 606) = 164.24, p < .001$, Cramer's $V = .52$.

Routine was most frequently used in 2024 ($n = 52, 17.20\%$); *acute need* was most frequently used in 2020 ($n = 35, 20.80\%$); *ration* was most frequently used in 2020 ($n = 48, 18.50\%$), 2022 ($n = 48, 18.50\%$), and 2024 ($n = 48, 18.50\%$); *ego* was most frequently used in 2022 ($n = 58, 17.40\%$); *social* was most frequently used in 2020 ($n = 23, 16.50\%$); and *sensory* was most frequently used in 2016 ($n = 42, 23.20\%$).

Except for *sensory*, use of *routine*, *acute need*, *ration*, *ego*, and *social* all increased over the decade. See Figure 8.

Advertising Appeals

The frequency test showed the most frequently used advertising appeal was *humor* ($n = 300, 49.5\%$), followed by *celebrity endorsement* ($n = 178, 29.4\%$), *warmth* ($n = 42, 6.9\%$), *sex appeal* ($n = 26, 4.3\%$), *bandwagon* ($n = 19, 3.1\%$), and *fear* ($n = 16, 2.6\%$).

The Chi-Square tests showed the relationship between celebrity endorsement and year was significant, $\chi^2 (9, N = 606) = 19.07, p < .05$, Cramer's $V = .18$; and the relationship between warmth and year was also significant, $\chi^2 (9, N = 606) = 23.34, p < .01$, Cramer's $V = .20$. *Celebrity endorsement* was most frequently used in 2020 ($n = 27, 15.20\%$). *Warmth* was most frequently used in 2020 ($n = 10, 23.80\%$). The Chi-Square tests showed the relationship between humor and year was non-significant, $\chi^2 (9, N = 606) = 15.66, p = .07$, Cramer's $V = .16$; the relationship between fear and year was non-significant, $\chi^2 (9, N = 606) = 11.57, p = .24$, Cramer's $V = .14$; the relationship between bandwagon and year was non-significant, $\chi^2 (9, N = 606) = 14.25, p = .11$, Cramer's $V = .15$; and the relationship between sex appeal and year was also non-significant, $\chi^2 (9, N = 606) = 8.10, p = .52$, Cramer's $V = .12$.

This indicates *celebrity endorsement* usage was increasing; *warmth* usage had some ups and downs but in general was increasing; usage of *humor*, *fear*, *bandwagon*, and *sex appeal* remained stable over the decade. See Figure 9.

Narratives/Statistics

The frequency test showed narrative ($n = 423, 69.80\%$) was more likely to be used than statistics ($n = 22, 3.6\%$). The Chi-Square tests showed the relationship between narratives and years was significant, $\chi^2 (9, N = 606) = 181.40, p < .001$, Cramer's $V = .55$; and

the relationship between statistics and years was also significant, $\chi^2 (9, N = 606) = 16.72, p = .05$, Cramer's $V = .17$. *Narrative* was most frequently used in 2022 ($n = 61, 14.40\%$) and *statistics* was most frequently used 2023 ($n = 5, 22.7\%$). Usage of both narrative and statistics were increasing over the decade. See Figure 10

Human/Major Role

The frequency test showed most ads used *humans* ($n = 571, 94.2\%$). Less than one third of the ads featured a *major role* ($n = 138, 22.8\%$). The Chi-Square tests showed the relationship between human and year was non-significant, $\chi^2 (9, N = 606) = 15.15, p = .09$, Cramer's $V = .16$; and the relationship between major role and year was also non-significant, $\chi^2 (9, N = 606) = 15.02, p = .09$, Cramer's $V = .16$. This indicates the use of humans and major roles remain unchanged over the decade. If the ad used a major role, it was most likely to be a *middle-aged* ($n = 92, 66.7\%$) *Caucasian* ($n = 96, 69.6\%$) *male* ($n = 92, 66.7\%$).

The Chi-Square tests showed the relationship between major role's age and year was non-significant, $\chi^2 (27, N = 138) = 38.23, p = .07$, Cramer's $V = .30$; the relationship between major role's gender and year was non-significant, $\chi^2 (9, N = 138) = 10.58, p = .30$, Cramer's $V = .28$; and the relationship between major role's race and year was also non-significant, $\chi^2 (36, N = 138) = 10.58, p = .33$, Cramer's $V = .27$. This shows major role's age, gender, and race remain unchanged in the past decade.

RQ 2 asked the relationship between trends of the Super Bowl ads and user engagement of the Super Bowl ads. To answer RQ2, three hierarchical regressions were conducted. Duration (coding date minus posted date) was entered as a control variable as it may influence user engagement.

User Engagement

Results showed for likes, *length* ($\beta = .12, p = .05$) and *sensory* ($\beta = .14, p = .05$) were positive predictors while *major role* ($\beta = -.11, p = .08$) was a negative predictor. Together, they explained 11% of the variance, $F (24, 286) = 1.65, p < .05$. This showed longer ads and ads using the sensory strategy received more likes while ads using a major role received less likes. See Table 2.

For views, *ego* ($\beta = -.16, p < .05$) was a negative predictor. Ego explained 6% of the variance, $F (24, 286) = .87, p = .64$. This showed ads using the ego strategy received less views. See Table 3.

For comments, *length* ($\beta = .15, p < .05$) was a positive predictor whereas *duration* ($\beta = -.19, p < .05$), *routine* ($\beta = -.26, p < .01$), *humor* ($\beta = -.11, p = .06$), and *major role* ($\beta = -.11, p = .07$) were negative

predictors. Together, they explained 14% of the variance, $F(24, 286) = 2.10, p < .01$. This showed longer ads received more comments while ads posted on YouTube for a long time, using the routine strategy, the humor appeal, or a major role received less comments. See Table 4.

Discussion

This study examined both the trend and user engagement of Super Bowl ads in the last decade. A fruitful of findings emerged in this study. First, several factors could predict user engagement of Super Bowl ads. Longer ads received more likes, more comments and better ratings. This is probably because longer ads allow the audience more time to process the favorable implications of the messages (Tomkovick et al., 2001).

Ads using the ego strategy received less views but higher rankings. Previous research showed ego was frequently used in viral ads (Golan & Zaidner, 2008) and luxury ads (James, 2011). Consistent with previous research, this study found ego (55.1%) was the most frequently used strategy in Super Bowl ads from 2015 to 2024. Being a popular strategy in Super Bowl ads makes people rank such ads high but they don't bother to comment on such ads. Ads using the sensory strategy received more likes. Since most of the products in Super Bowl ads were food and beverages (26.4%), these ads usually used the sensory strategy to satisfy the five senses of human beings (Taylor, 1999) thereby receiving more likes. Ads using the routine strategy received less comments. This is likely because such ads usually featured everyday products, thus, people were less motivated to comment.

Ads using the humor appeal received higher rankings but less comments. Previous research found using humor in Super Bowl ads could boost likability (Yelkur et al., 2013), thus, such ads were more likely to receive higher rankings. Since humor has frequently been used in Super Bowl ads (Alčaković, 2023), people would rather like than comment on such ads. Ads using the fear appeal received lower rankings. This is probably because the overuse of fear appeal weakened the ad's credibility and turned off viewers (Bartikowski et al., 2019). This study also showed fear (2.6%) was the least frequently used strategy in Super Bowl ads.

Ads using a major role received less likes and comments. It is likely because ads using animals as a major role tend to receive better performance and higher likability (Taylor, 2016; Tomkovic et al., 2001). People were more interested in liking and commenting on ads featuring animals rather than humans.

Second, there were some changes in Super Bowl ads' trend from

2015 to 2024. Food/beverages, utilitarian, and low involvement products were more likely to appear in Super Bowl ads. This is consistent with previous research which showed food/beverages were the most frequently appeared products in Super Bowl ads during the 1990s and 2000s (Tomkovick et al., 2001). Food/beverages are usually low involvement products thereby there were more low involvement products in Super Bowl ads. This study found technology/games (18.5%) was the second most frequently appeared category in Super Bowl ads. These are usually utilitarian products, thus, there were more utilitarian products in the ads.

Super Bowl ads tend to be short, have a positive tone, use multiple settings, use music but no voice overs. Over the decade, the ad has become shorter, the tone has become more positive, and the use of voice over has decreased. The concise nature of Super Bowl ads is largely a function of their high cost. Advertisers spent an average of seven million dollars to air a 30-second ad during the game (Statista, 2024). Super Bowl ads being tone positive is likely because such ads were more likely to be accepted by the consumers. Previous research also found most Super Bowl ads used a positive and humorous tone (Taylor, 2016). Multiple settings are popular because modern Super Bowl ads do not limit the setting in just one environment. Music was popular in Super Bowl ads because music could enhance the visual effects of ads and ad messages (Hung, 2001). Most ads did not use voice overs because the use of music was already persuasive enough. Adding the voice over may add burden to information processing.

Ego and humor were frequently used in Super Bowl ads. Celebrity endorsement and warmth usage increased over the decade. This finding is consistent with previous research which found ego being a popular strategy in viral ads, luxury ads, and consumer technology video ads (Golan & Zaidner, 2008; James, 2011; Wang et al., 2023); and humor and celebrity endorsements being the two most common strategies in Super Bowl ads (Alčaković, 2023). Warmth appeal was increasing is likely because warmth appeal could increase favorable attitude and purchase intention among low involvement products (Zawisza & Pittard, 2015).

Most Super Bowl ads used humans, however, only one third of the ads used a major role. If the ad had a major role, it was most likely to be a middle-aged Caucasian male. The reason that the use of a major role was low is most of the ads featured more than one person. The finding of a major role being a middle-aged Caucasian male is interesting, which is consistent with previous finding: women and minorities were rarely portrayed as major roles in Super Bowl ads 2008 - 2017 (Taylor et al., 2019).

Theoretical and Practical Implications

This study has some theoretical implications as it expanded the existing literature on high-stakes advertising by shifting the focus from traditional surface-level content analyses to digital audience behaviors. While prior advertising scholarship has extensively documented broad content trends and the representation of specific demographic groups, the factors behind the Super Bowl ads' social media engagement has been under examined. Furthermore, the current study proved that specific technical aspects such as ad length and creative strategies including sensory, routine, and ego could systematically shape how consumers react to video ads.

From a practical standpoint, the findings of the study offered actionable guidelines for brand strategists and creative directors aiming to optimize multi-million-dollar ad investments for online viral reach and audience participation. To maximize user engagement metrics such as number of likes, comments, and shares, incorporate sensory appeals particularly for fast-moving consumer goods like food and beverages. Employing humor appeals could effectively elevate ad ratings and ego-driven framing could help boost ad rankings.

Conversely, this study highlighted several strategic pitfalls that practitioners should be cautious. Creative teams should be mindful that featuring a single human major role may suppress number of likes and comments, as audiences frequently demonstrated stronger social media engagement with animal protagonists or diverse ensemble casts. Similarly, while ego strategies increased the overall rankings, they are statistically associated with lower number of views, and routine or humor-focused appeals could unintentionally reduce the number of user comments. Finally, brands must strictly avoid overusing fear appeals, as this strategy risks alienating viewers, eroding brand credibility, and driving down overall ad rankings.

Limitations and Future Directions

This study is not without limitations. First, the current study examined Super Bowl ads on YouTube, the user engagement on YouTube videos might be different from the user engagement on Instagram reels and Facebook reels. Future study could examine the user engagement of Super Bowl ads on other social media platforms. Second, the descriptive nature of content analysis makes it hard to examine the underlying mechanism of user engagement. Future study could conduct an experiment to examine the effects of watching Super Bowl ads on advertising effectiveness with user engagement as a potential mediating variable..

References

- Aaker, D. A., Stayman, D. M., & Hagerty, M. R. (1986). Warmth in advertising: Measurement, impact, and sequence effects. *Journal of Consumer Research*, 12(4), 365-381.
- Ahn, H. Y., Wu, L., & Taylor, R. E. (2013). Communication strategies in cosmetic surgery websites: An application of Taylor's six-segment message strategy wheel. *Health Marketing Quarterly*, 30 (2), 97-113.
- Alčaković, S. (2023). Super bowl ads in the period from 2017-2022. *The European Journal of Applied Economics*, 20(1), 39–51.
- Alhabash, S., Dong, Y., Moureaud, C., Muraro, I. S., & Hertig, J. B. (2022). Effects of fear and humor appeals in public service announcements (PSAs) on intentions to purchase medications via social media. *International Journal of Environmental Research and Public Health*, 19(19), 12340.
- Allen, M., Bruflat, R., Fucilla, R., Kramer, M., McKellips, S., Ryan, D. J., & Spiegelhoff, M. (2000). Testing the persuasiveness of evidence: Combining narrative and statistical forms. *Communication Research Reports*, 17(4), 331-336.
- Allen, M., & Preiss, R. W. (1997). Comparing the persuasiveness of narrative and statistical evidence using meta-analysis. *Communication Research Reports*, 14(2), 125-131.
- Bartikowski, B., Laroche, M., & Richard, M. O. (2019). A content analysis of fear appeal advertising in Canada, China, and France. *Journal of Business Research*, 103, 232-239.
- Berlyne, D. E. (1972). Humor and its kin. *The psychology of humor: Theoretical perspectives and empirical issues*, 43-60.
- Berger, A. A. (1987). Humor: An introduction. *American Behavioral Scientist*, 30(3), 6-15.
- Betsch, C., Ulshöfer, C., Renkewitz, F., & Betsch, T. (2011). The influence of narrative v. statistical information on perceiving vaccination risks. *Medical Decision Making*, 31(5), 742-753.
- Bindra, S., Sharma, D., Parameswar, N., Dhir, S., & Paul, J. (2022). Bandwagon effect revisited: A systematic review to develop future research agenda. *Journal of Business Research*, 143, 305-317.
- Blackford, B. J., Gentry, J., Harrison, R. L., & Carlson, L. (2014). The prevalence and influence of the combination of humor and violence in Super Bowl commercials. In *Advertising and Violence* (pp. 60-73). Routledge.
- Brooks, M. E., Bichard, S., & Craig, C. (2016). What's the score?: A content analysis of mature adults in Super Bowl commercials. *Howard Journal of Communications*, 27(4), 347–366.

- Calder, B. J., Isaac, M. S., & Malthouse, E. C. (2016). How to capture consumer experiences: A context-specific approach to measuring engagement: Predicting consumer behavior across qualitatively different experiences. *Journal of Advertising Research*, 56(1), 39-52.
- Cint. (2024). Ads in the big game: Good Bang for your buck? Retrieved from <https://www.cint.com/lp-2024-big-game-advertising-report-wp>
- Golan, G. J., & Zaidner, L. (2008). Creative strategies in viral advertising: An application of Taylor's six-segment message strategy wheel. *Journal of Computer-Mediated Communication*, 13(4), 959-972.
- Goodrich, K., Schiller, S. Z., & Galletta, D. (2015). Consumer reactions to intrusiveness of online-video advertisements: do length, informativeness, and humor help (or hinder) marketing outcomes?. *Journal of Advertising Research*, 55(1), 37-50.
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149-165.
- Huang, S., Aral, S., Hu, Y. J., & Brynjolfsson, E. (2020). Social advertising effectiveness across products: A large-scale field experiment. *Marketing Science*, 39(6), 1142-1165.
- Hung, K. (2001). Framing meaning perceptions with music: The case of teaser ads. *Journal of Advertising*, 30(3), 39-49.
- James, W. M. (2011). The appeals of luxury advertising: an application of Taylor's six segment message strategy wheel. *The Elon Journal of Undergraduate Research in Communications*, 2(2), 62-75.
- Jeong, Y., Sanders, M., & Zhao, X. (2011). Bridging the gap between time and space: Examining the impact of commercial length and frequency on advertising effectiveness. *Journal of Marketing Communications*, 17(4), 263-279.
- Jin, F., Zhang, J., Wu, B., & Zhu, X. (2022). How warmth appeal affects persuasion: The moderating role of brand concepts. *Frontiers in Psychology*, 13, 831373.
- Kim, K., Cheong, Y., & Kim, H. (2012). Information content of Super Bowl commercials 2001–2009. *Journal of Marketing Communications*, 18(4), 249–264.
- Kim, E., Ratneshwar, S., & Thorson, E. (2017). Why narrative ads work: An integrated process explanation. *Journal of Advertising*, 46(2), 283-296.
- Kelley, S. W., & Turley, L. W. (2004). The effect of content on perceived affect of Super Bowl commercials. *Journal of Sport Management*, 18(4), 398–420.

- Lee, J. G., & Ko, K. A. (2021). The market responses to Super Bowl advertising: The role of product type and multiple executions. *Sustainability*, 13(13), 7127.
- Lien, N. H., & Chen, Y. L. (2013). Narrative ads: The effect of argument strength and story format. *Journal of Business Research*, 66(4), 516-522.
- Lim, H. S., Bouchacourt, L., & Brown-Devlin, N. (2021). Nonprofit organization advertising on social media: The role of personality, advertising appeals, and bandwagon effects. *Journal of Consumer Behaviour*, 20(4), 849-861.
- Marketing Brew. (2023). How brands used music and sonic logos in their Super Bowl ads this year. Retrieved from <https://www.marketingbrew.com/stories/2023/02/17/how-brands-used-music-and-sonic-logos-in-their-super-bowl-ads-this-year>
- Marketing Charts. (2024). Super Bowl 2024 data. Retrieved from <https://www.marketingcharts.com/advertising-trends-232099>
- Matin, A., Khoshtaria, T., & Tutberidze, G. (2020). The impact of social media engagement on consumers' trust and purchase intention. *International Journal of Technology Marketing*, 14(3), 305-323.
- Merritt, S. (1984). Negative political advertising: Some empirical findings. *Journal of Advertising*, 13(3), 27-38.
- Meyer, J. C. (2000). Humor as a double-edged sword: Four functions of humor in communication. *Communication Theory*, 10(3), 310-331.
- Moore, D. J., & Lee, S. P. (2012). How advertising influences consumption impulses. *Journal of Advertising*, 41(3), 107-120.
- Moses, A., & Charles, M. (2014). Sex as an advertising appeal: A review of its ethical basis, functions and effects. *International Journal of Management Sciences*, 4(1), 25-34.
- Moriuchi, E. (2021). English accent variations in YouTube voice-over ads and the role of perceptions on attitude and purchase intentions. *Journal of Interactive Advertising*, 21(3), 191-208.
- Morning Brew. (2024). The industries that dominate Super Bowl ads. Retrieved from <https://www.morningbrew.com/daily/stories/2024/02/09/the-industries-that-dominate-super-bowl-ads>
- Noh, Y., Kim, H., Kim, K., & Cheong, Y. (2021). The relationship between consumer engagements with Super Bowl ad tweets and the advertisers' official Twitter accounts: A panel data analysis of 2019 Super Bowl advertisers. *International Journal of Advertising*, 40(6), 852-869.

- O'Brien, H. L., & Toms, E. G. (2008). What is user engagement? A conceptual framework for defining user engagement with technology. *Journal of the American society for Information Science and Technology*, 59(6), 938-955.
- Park, C. W., & Moon, B. J. (2003). The relationship between product involvement and product knowledge: Moderating roles of product type and product knowledge type. *Psychology & Marketing*, 20(11), 977-997.
- Poore, W. (2018). The use of humor in Super Bowl advertising: A content analysis (Order No. 10792926). Available from ProQuest Dissertations & Theses Global. (2036848355).
- Referral Candy. (2023). 9 brilliant Coca Cola advertising examples of referral marketing. Retrieved from <https://www.referralcandy.com/blog/coke-word-of-mouth-marketing-strategy>
- Rubie-Davies, C. M., Liu, S., & Lee, K. C. K. (2013). Watching each other: Portrayals of gender and ethnicity in television advertisements. *The Journal of Social Psychology*, 153(2), 175-195.
- Sawang, S. (2010). Sex appeal in advertising: What consumers think. *Journal of Promotion Management*, 16(1-2), 167-187.
- Sengupta, J., & Dahl, D. W. (2008). Gender-related reactions to gratuitous sex appeals in advertising. *Journal of Consumer Psychology*, 18(1), 62-78.
- Solomon, M. R., & Greenberg, L. (1993). Setting the stage: Collective selection in the stylistic context of commercials. *Journal of Advertising*, 22(1), 11-23.
- Statista. (2024). Average cost of a 30-second Super Bowl TV commercial in the United States from 2002 to 2024. Retrieved from <https://www.statista.com/statistics/217134/total-advertisement-revenue-of-super-bowls/>
- Stevens, D. (2012). Tone versus information: Explaining the impact of negative political advertising. *Journal of Political Marketing*, 11(4), 322-352.
- Strach, P., Zuber, K., Fowler, E. F., Ridout, T. N., & Searles, K. (2015). In a different voice? Explaining the use of men and women as voice-over announcers in political advertising. *Political Communication*, 32(2), 183-205.
- Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracín, D. (2015). Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological Bulletin*, 141(6), 1178.
- Taylor, C. R., Mafael, A., Raithel, S., Anthony, C. M., & Stewart, D. W. (2019). Portrayals of minorities and women in super bowl advertising. *Journal of Consumer Affairs*, 53(4), 1535-1572.
- Taylor, R. E. (1999). A six-segment message strategy wheel. *Journal of Advertising Research*, 39(6), 7-17.

Tomkovick, C., Yelkur, R., & Christians, L. (2001). The USA's biggest marketing event keeps getting bigger: An in-depth look at Super Bowl advertising in the 1990s. *Journal of Marketing Communications*, 7(2), 89-108.

Vermeulen, I., & Beukeboom, C. J. (2016). Effects of music in advertising: Three experiments replicating single-exposure musical conditioning of consumer choice (Gorn 1982) in an individual setting. *Journal of Advertising*, 45(1), 53-61.

Voice Archive. (n.d.). Psychology confirms: Voice-over makes your ads more memorable. Retrieved from <https://www.voicearchive.com/psychology-confirms-ads-voice-over-makes-them-more-memorable/>

Wang, J. S., Cheng, Y. F., & Chu, Y. L. (2013). Effect of celebrity endorsements on consumer purchase intentions: Advertising effect and advertising appeal as mediators. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 23(5), 357-367.

Wang, R., Yang, J., & Haught, M. (2023). User engagement with consumer technology video ads on YouTube: A study of content analysis and experiment. *Telematics and Informatics Reports*, 12, 100107.

Yang, G. (2022). Using funny memes for social media marketing: The moderating role of bandwagon cues. *Journal of Promotion Management*, 28(7), 944-960.

Yelkur, R., Tomkovick, C., Hofer, A., & Rozumalski, D. (2013). Super Bowl ad likeability: Enduring and emerging predictors. *Journal of Marketing Communications*, 19(1), 58-80.

Zawisza, M., & Pittard, C. (2015). When do warmth and competence sell best? The “golden quadrant” shifts as a function of congruity with the product type, targets' individual differences, and advertising appeal type. *Basic and Applied Social Psychology*, 37(2), 131-141. /

To cite this article:

Wang, R., Yang J., Nichols, J., Brown, A., & Baldwin, K.D. (2026). A decade of Super Bowl Ads (2015-2024): A content analysis of trends and user engagement. *Journal of Communication TechnologyEC*, 8(2). DOI: 10.51548/82202602

Appendix: Codebook

Video ID _____
Coder _____
Video URL _____
Length (in seconds) _____
Brand Name _____
Ad Title _____
Year _____
Posted Date _____
Coding Date _____
Number of Likes _____
Number of Views _____
Number of Comments _____

Voice Over

1 = No
2 = Yes

Music

1 = No
2 = Yes

Product Category

1 = Food/Beverages
2 = Retail/Clothing
3 = Auto/Vehicles
4 = Technology/Games
5 = Sports and Entertainment
6 = Health and Beauty/Cosmetics
7 = Healthcare/Medical
8 = Finance/Insurance/Real Estate
9 = Public Service Announcements
10 = Political/Religion
11 = Delivery

Utilitarian Product

1 = No
2 = Yes

Hedonic Product

1 = No
2 = Yes

High Involvement Product

1 = No
2 = Yes

Low Involvement Product

1 = No
2 = Yes

Routine

1 = No
2 = Yes

Acute Need

1 = No
2 = Yes

Ration

1 = No
2 = Yes

Ego

1 = No
2 = Yes

Social

1 = No

2 = Yes

Sensory

1 = No
2 = Yes

Humor

1 = No
2 = Yes

Warmth

1 = No
2 = Yes

Fear

1 = No
2 = Yes

Bandwagon

1 = No
2 = Yes

Sex Appeal

1 = No
2 = Yes

Celebrity Endorsement

1 = No
2 = Yes

Setting

1 = Business setting
2 = Home setting (indoor or outdoor)
3 = Outdoor/natural scenery

JoCTEC: Journal of Communication Technology

- 4 = Social setting outside the home
(bar, restaurant)
- 5 = Multiple settings
- 6 = Other/Unknown

Tone

- 1 = Negative
- 2 = Neutral
- 3 = Positive

Narrative/Storytelling

- 1 = No
- 2 = Yes

Statistics

- 1 = No
- 2 = Yes

Human

- 1 = No
- 2 = Yes

Major Role

- 1 = No
- 2 = Yes

**If yes for the previous question,
then do the rest of the categories:**

Age

- 1 = Children (0-14)

- 2 = Youth (15-24)
- 3 = Young Adults (25-35)
- 4 = Middle-Aged (36-64)
- 5 = Seniors (65 and above)

Gender

- 1 = Male
- 2 = Female

Race

- 1 = Caucasians
- 2 = African Americans
- 3 = Asians
- 4 = Latinos
- 5 = Native Americans
- 6 = Other

Table 1. Best Super Bowl ad from 2015 to 2024

Year	Brand Name	Ad Title	Link	Length (in seconds)	Rating (1 – 10)
2015	<i>Budweiser</i>	Lost Dog	https://shorturl.at/9fElw	60	8.1
2016	<i>Hyundai</i>	First Date	https://shorturl.at/OHG2O	60	6.9
2017	<i>Kia</i>	Hero's Journey	https://shorturl.at/sM2XG	60	7.47
2018	<i>Amazon</i>	Alexa Loses Her Voice	https://shorturl.at/5qxaf	90	7.18
2019	<i>NFL</i>	The 100-Year Game	https://shorturl.at/8G7nK	120	7.69
2020	<i>Jeep</i>	Groundhog Day	https://tinyurl.com/37kevk3u	60	7.01
2021	<i>Rocket Mortgage</i>	Certain is Better	https://tinyurl.com/f7and3ce	80	7.38
2022	<i>Rocket Mortgage</i>	Dream House	https://tinyurl.com/mtynwx67	60	6.82
2023	<i>The Farmer's Dog</i>	Forever	https://tinyurl.com/3e2x4tpp	60	6.56
2024	<i>State Farm</i>	Like a Good Neighbarr	https://tinyurl.com/yune2pc9	60	6.68

Table 2. Hierarchical regression on number of likes

		Model 1		Model 2	
		β (B)	t (SE)	β (B)	t (SE)
Constant		(6673.34 1)	(1.278)	(69298.06)	(1.198)
<i>Control Variable</i>					
	Duration	0.11	1.94	-0.14	-1.411
R ² (%)		.01			
<i>Technical Aspects</i>					
	Length			.12*	1.96
	Voice Over			0.04	0.61
	Music			-0.05	-0.83
<i>Product Types</i>					
	Utilitarian			-0.05	-0.65
	Hedonic			0.13	1.73
	High Involvement			-0.13	-1.38
	Low Involvement			-0.08	-0.85
<i>Creative Strategies</i>					
	Routine			-0.06	-0.66
	Acute Need			0.03	0.50
	Ration			-0.03	-0.41
	Ego			-0.06	-0.74
	Social			0.01	0.16
	Sensory			0.14*	1.94
<i>Advertising Appeals</i>					
	Humor			-0.05	-0.75
	Warmth			-0.07	-1.06
	Fear			0.06	0.98
	Bandwagon			-0.01	-0.09
	Sex Appeal			-0.06	-1.02
	Celebrity Endorsement			0.01	0.14
<i>Narratives/Statistics</i>					
	Narratives			-0.04	-0.57
	Statistics			-0.01	-0.20
<i>Human/Major Role</i>					
	Human			0.04	0.66
	Major Role			-0.11 [†]	-1.76
Inc R ² (%)		.11			
Total R ² (%)		.12			
N		310			

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, [†] $p < .10$

Table 3. Hierarchical regression on number of views

		Model 1		Model 2	
		β (B)	t (SE)	β (B)	t (SE)
Constant		(7266472.7 4)	(1564345.2 1)	(- 10287087)	(21260468. 5)
<i>Control Variable</i>					

	Duration	-0.04	-0.61	-0.16	-1.62
R ² (%)		.00			
<i>Technical Aspects</i>					
	Length			0.11	1.69
	Voice Over			0.05	0.76
	Music			0.02	0.41
<i>Product Types</i>					
	Utilitarian			-0.02	-0.23
	Hedonic			0.12	1.62
	High Involvement			0.06	0.57
	Low Involvement			-0.08	-0.82
<i>Creative Strategies</i>					
	Routine			0.00	0.04
	Acute Need			0.03	0.38
	Ration			0.00	0.03
	Ego			-0.16*	-2.06
	Social			0.07	1.07
	Sensory			0.03	0.40
<i>Advertising Appeals</i>					
	Humor			0.03	0.39
	Warmth			0.02	0.33
	Fear			0.00	0.05
	Bandwagon			-0.01	-0.17
	Sex Appeal			-0.04	-0.67
	Celebrity Endorsement			0.03	0.45
<i>Narratives/Statistics</i>					
	Narratives			-0.01	-0.12
	Statistics			0.03	0.49
<i>Human/Major Role</i>					
	Human			0.10	1.59
	Major Role			-0.03	-0.40
Inc R ² (%)		.07			
Total R ² (%)		.07			
N		310			

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .10$

Table 4. Hierarchical regression on number of comments

		Model 1		Model 2	
		β (B)	t (SE)	β (B)	t (SE)
Constant		(661.22)	(461.80)	(6362.81)	(6013.64)
<i>Control Variable</i>					
	Duration	0.09	1.51	-0.19*	-2.01
R ² (%)		.01			
<i>Technical Aspects</i>					
	Length			0.15*	2.44
	Voice Over			0.07	1.25
	Music			0.01	0.15
<i>Product Types</i>					

Utilitarian	0.01	0.11
Hedonic	0.10	1.44
High Involvement	-0.13	-1.38
Low Involvement	-0.04	-0.42
<i>Creative Strategies</i>		
Routine	-0.26*	-2.82
Acute Need	-0.01	-0.16
Ration	0.04	0.50
Ego	-0.03	-0.36
Social	-0.04	-0.65
Sensory	0.12	1.79
<i>Advertising Appeals</i>		
Humor	-0.11 [†]	-1.87
Warmth	-0.06	-0.99
Fear	0.05	0.91
Bandwagon	-0.02	-0.35
Sex Appeal	-0.05	-0.94
Celebrity Endorsement	0.05	0.81
<i>Narratives/Statistics</i>		
Narratives	0.07	0.91
Statistics	-0.03	-0.51
<i>Human/Major Role</i>		
Human	0.04	0.62
Major Role	-0.11 [†]	-1.82
Inc R ² (%)	.14	
Total R ² (%)	.15	
N	310	

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, [†] $p < .10$

Figure 1. *Product categories of Super Bowl ads 2015 - 2024*

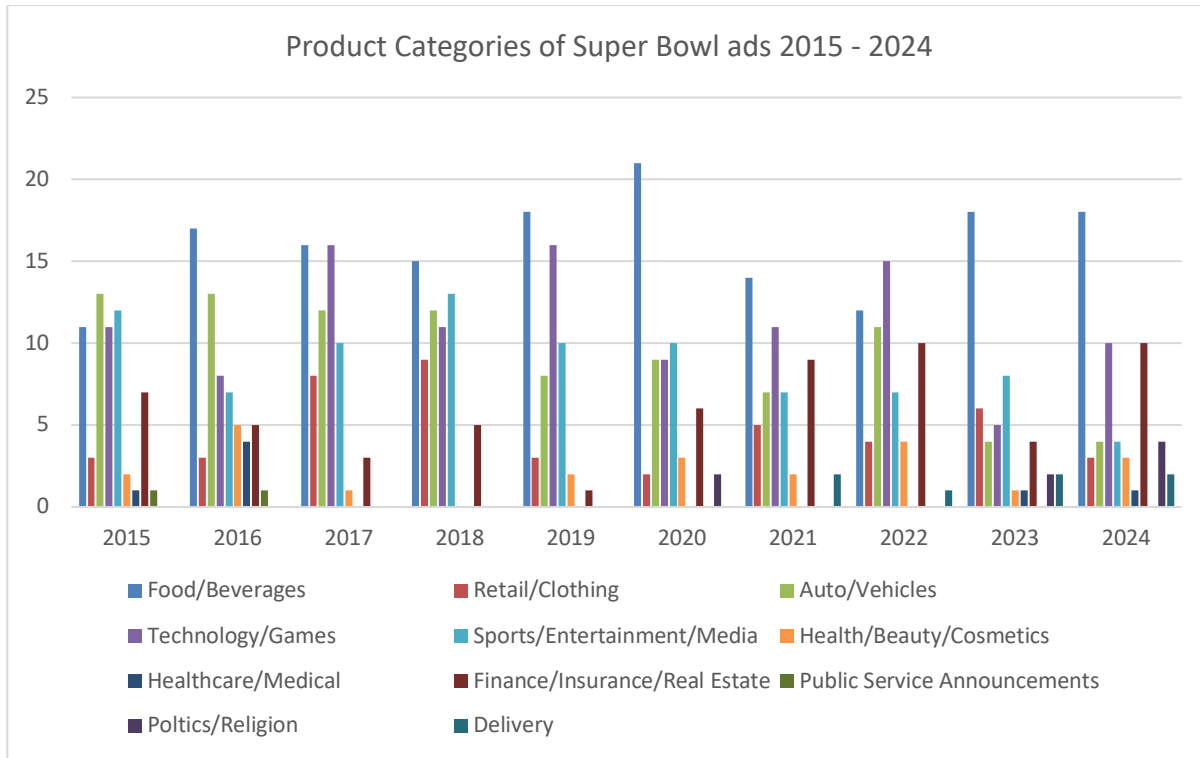


Figure 2. Hedonic and low involvement products in Super Bowl ads 2015 - 2024

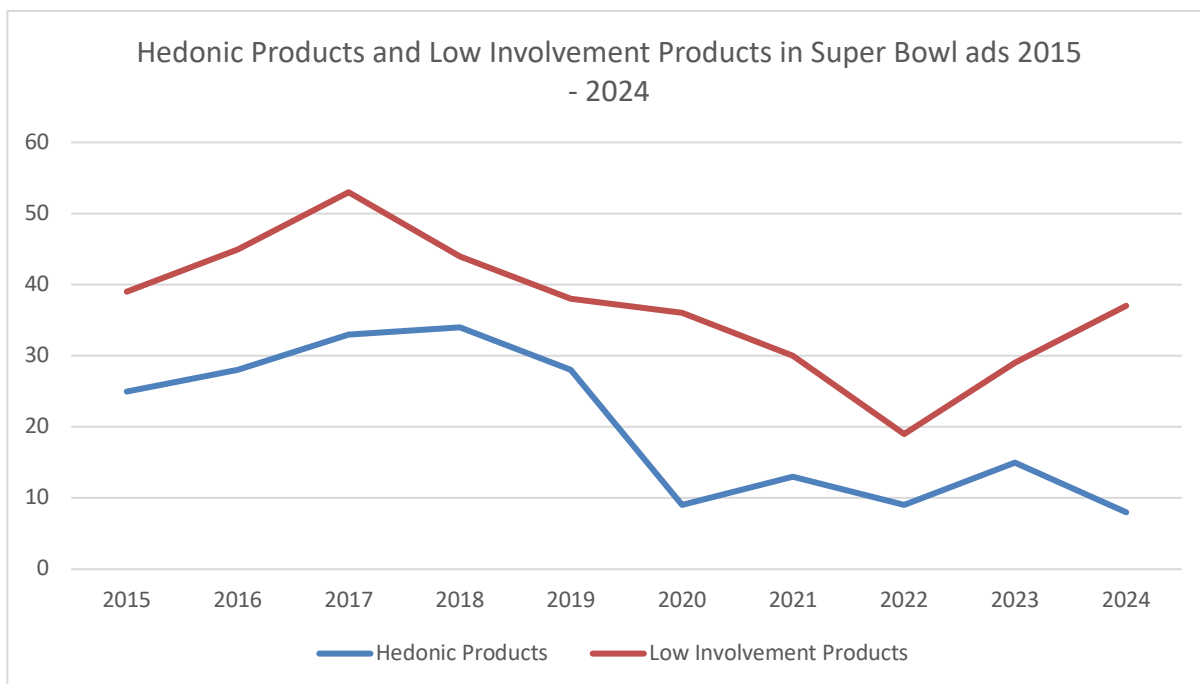


Figure 3. Length of Super Bowl ads 2015 - 2024

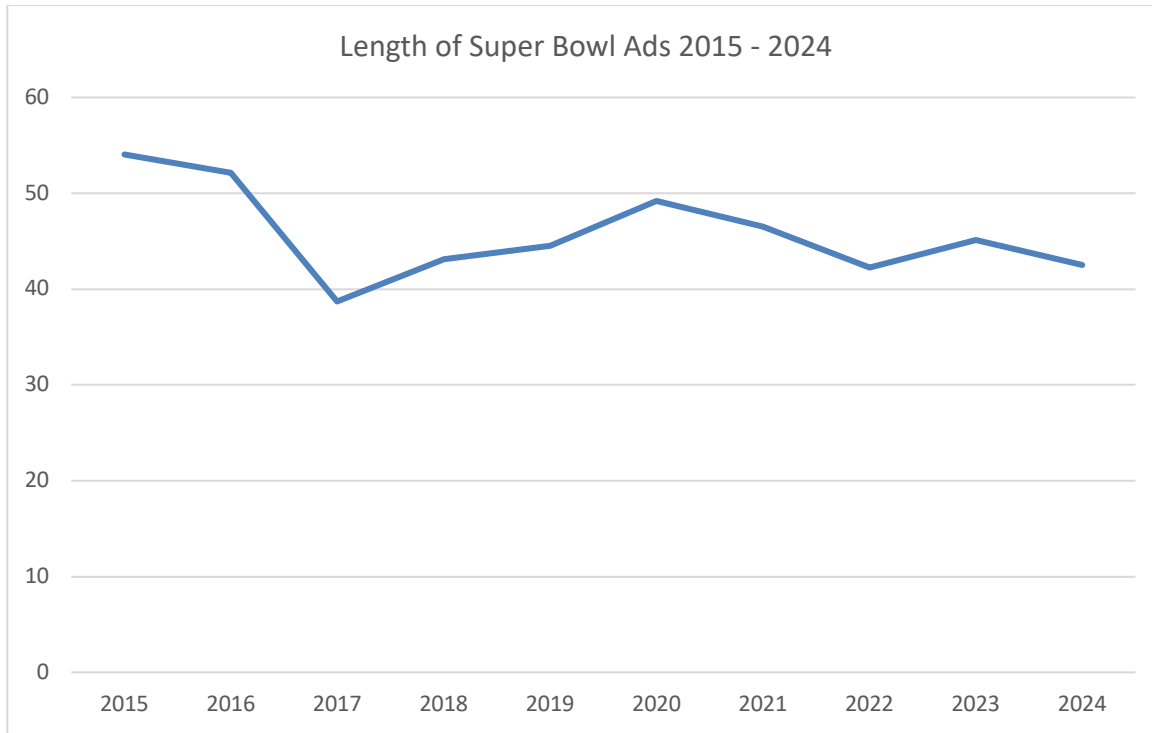


Figure 4. *Tone of Super Bowl ads 2015 - 2024*

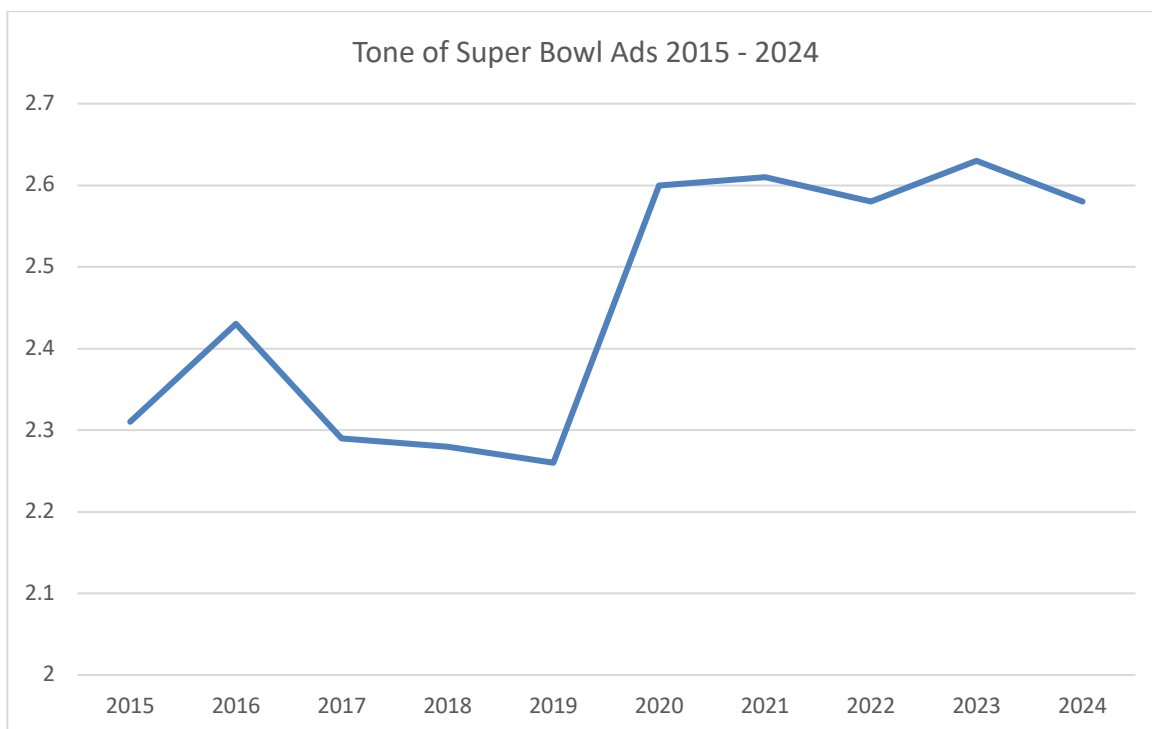


Figure 5. *Setting of Super Bowl ads 2015 - 2024*

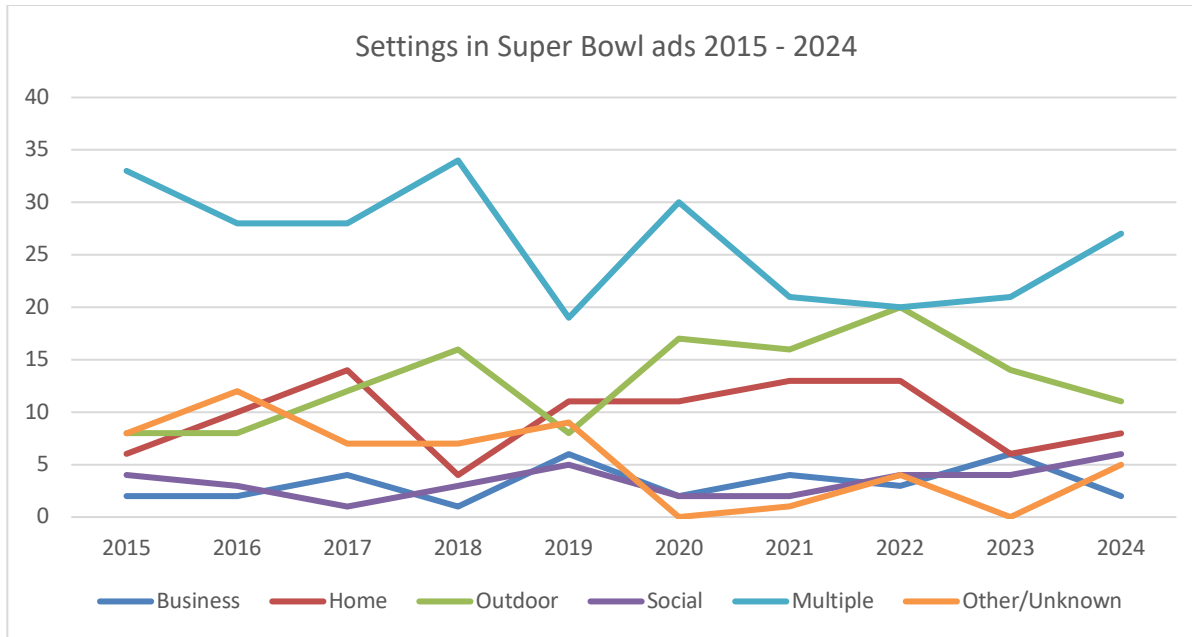


Figure 6. *Voice over in Super Bowl ads 2015 - 2024*

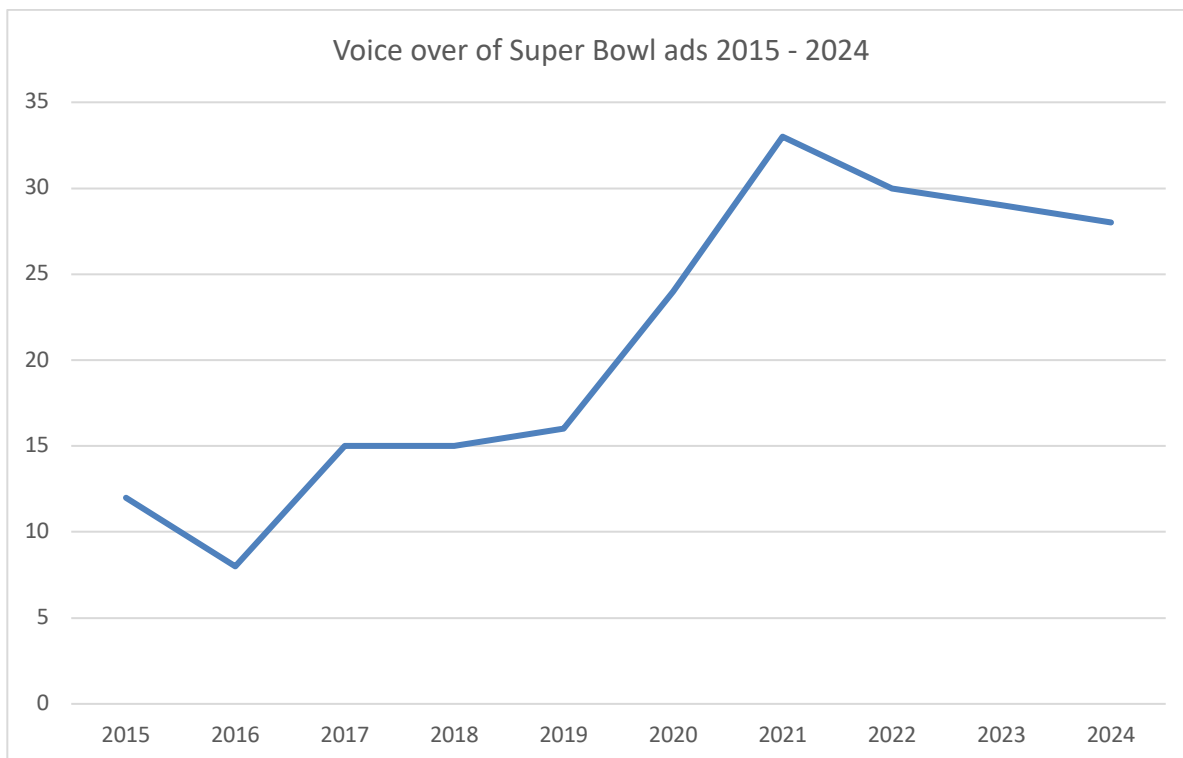


Figure 7. *Music in Super Bowl ads 2015 - 2024*

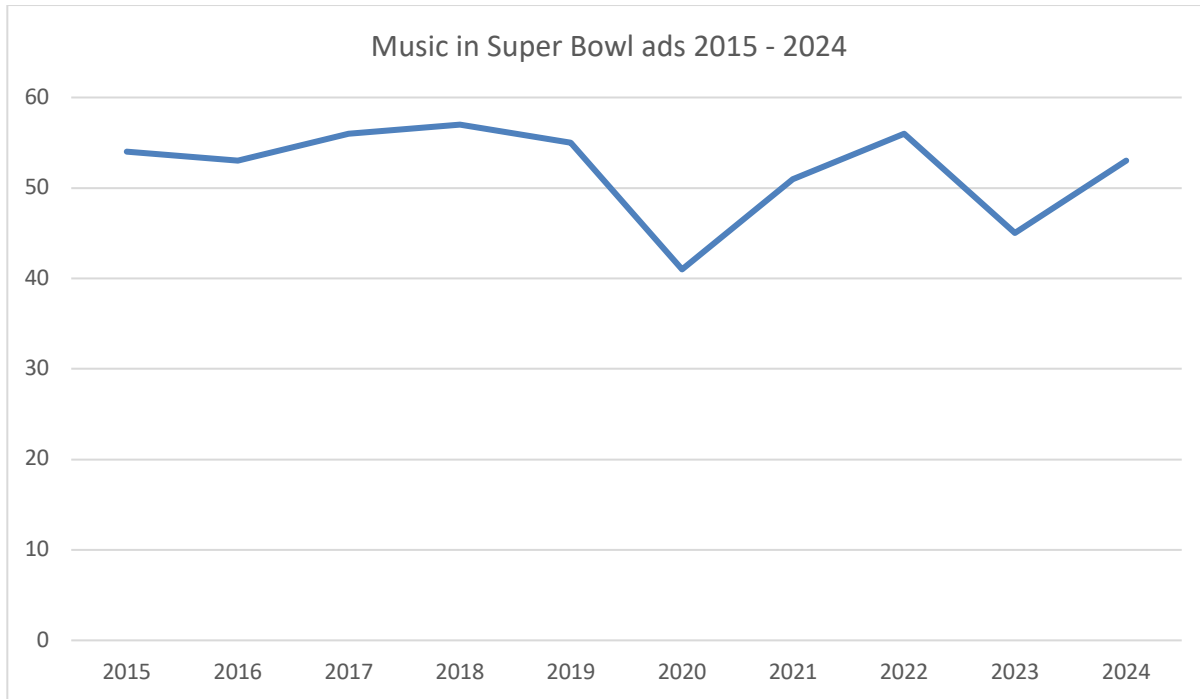


Figure 8. Creative strategies in Super Bowl ads 2015 - 2024



Figure 9. Advertising appeals in Super Bowl ads 2015 - 2024

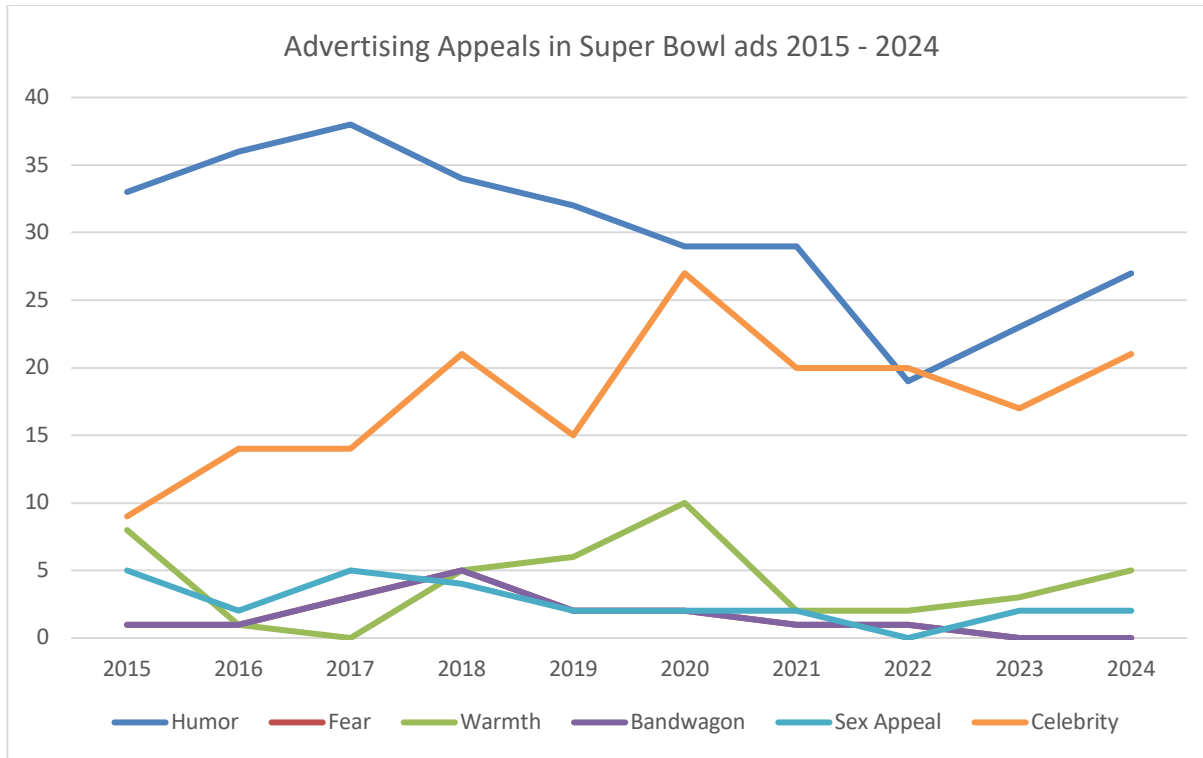


Figure 10. Narrative and statistics in Super Bowl ads 2015 - 2024

