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## Rolling and scrolling: The portrayal of marijuana cigars (blunts) on YouTube

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### Abstract

**Background**—Blunts are partially or fully hollowed-out cigars or cigarillos that are filled with marijuana. Despite the high prevalence of blunt use, very few studies assess this specific method of cannabis administration. YouTube, a popular video-sharing website, has the potential to provide insights into blunt use.

**Methods**—The purpose of this study was to examine the content of YouTube videos that discuss blunts. A sample of 41 videos was coded for content.

**Results**—The 41 videos had a total of 27,579,636 views. Most of the individuals in the videos were male (85%) and many appeared to be White (80%) and under the age of 25 (46%). Only 34% of the videos had an age restriction. The majority of messages in the videos promoted blunt use (93%) and showed at least one person rolling (76%) and/or smoking (66%) a blunt. The videos mainly consisted of introductions to blunt use (76%) and tips and personal experiences with blunt use (73%).

**Conclusions**—YouTube videos on blunt use are readily available and primarily promote the use of blunts. Future research should continue to monitor YouTube content and develop videos on social media platforms that inform consumers of the health effects associated with blunt use.

### Keywords

Blunts; marijuana; YouTube; cigar; social media

### Introduction

In 2014, 2.5 million people 12 years of age or older used marijuana for the first time during the past year, with an average of approximately 7,000 new users daily (Azofeifa et al., 2016). Further, the past year prevalence of marijuana use increased from 4.1% in 2001–2002 to 9.5% in 2012–2013 (Hasin et al., 2015). Marijuana use is associated with many neurological and social difficulties, such as delayed cognitive performance, deficits in attention, blunted motor activity, and relationship conflicts (Broyd, Van Hell, Beale, Yücel,

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#### Disclosure of potential conflicts of interest

The authors report no conflict of interest.

& Solowij, 2016; Cerdá et al., 2016). Despite the negative consequences of marijuana use, the perceived risk of marijuana has decreased over the past years (Okaneku, Vearrier, McKeever, LaSala, & Greenberg, 2015) and the methods of marijuana administration have evolved beyond traditional marijuana joints (e.g., bongs, edibles; Schauer et al., 2014).

One increasingly popular method of consuming marijuana is through blunts. Blunts are partially or fully hollowed-out tobacco cigar or cigarillo shells filled with marijuana. Approximately 66% of past-year marijuana users 12 years of age or older report smoking blunts in the past year (Fairman, 2015). Moreover, 6% of middle school and 24.1% of high school students report lifetime blunt use (Eggers et al., 2017). Blunt use is associated with an increased risk of cannabis use disorder relative to non-blunt marijuana use (e.g., joints; Schauer, Rosenberry, & Peters, 2017; Timberlake, 2009). Further, compared to joint smokers, blunt smokers are exposed to higher levels of carbon monoxide, thereby increasing their risk of cardiovascular problems (Cooper & Haney, 2009). Blunt users are also exposed to quantifiable levels of nicotine from the tobacco products used to make blunts (e.g., Swisher Sweets cigarillos; Peters, Schauer, Rosenberry, & Pickworth, 2016), putting them at an increased risk for developing tobacco use disorder (Schauer et al., 2017; Timberlake, 2009). Despite the high prevalence and negative health consequences associated with blunt use, a recent review of marijuana and tobacco co-administered products found only 34 studies on blunt use. It is important to gain additional insight into this practice to inform prevention, treatment, and policy intervention strategies. One potential avenue for monitoring blunt use is through social media, especially given the high levels of blunt-related content found on Instagram (Cavazos-Rehg, Krauss, Sowles, & Bierut, 2016) and Twitter (Cavazos-Rehg et al., 2015).

Similar to Instagram and Twitter, YouTube is another popular social media site with a growing audience. YouTube is the most popular video-sharing website in the world and provides a platform for users to upload, view, share, and comment on videos about a variety of topics, such as blunt use. About 5 billion videos are viewed on YouTube every single day, with over 30 million visitors per day (YouTube, 2017a). Given the strong association between media exposure and risky health behaviors (Hebert et al., 2017; Jernigan, Padon, Ross, & Borzekowski, 2017; Krauss et al., 2017a), several studies have evaluated substance use content on YouTube (e.g., alcohol and cigarette use; Cranwell et al., 2017; Krauss et al., 2017b; Merianos, Gittens, & Mahabee-Gittens, 2016). Only three studies have assessed marijuana content in YouTube videos and they focus on marijuana product reviews (Cavazos-Rehg, Krauss, Sowles, Murphy, & Bierut, 2017), edibles (Krauss et al., 2017b), and dabbing (Krauss et al., 2015). All three studies highlight the ease of access to marijuana-related videos and the normalization and promotion of marijuana use on YouTube. No studies to date have explicitly examined blunt use content on YouTube. Given the potential that YouTube has to promote blunt use, the current study was designed to address this critical gap in the literature. This study aims to gain a better understanding of the popularity of blunt use videos on YouTube and the messages and imagery regarding blunt use in popular YouTube videos.

## Methods

### Data collection

We searched the YouTube video-sharing website on February 5, 2017 to identify videos related to blunts. The search terms were “marijuana blunt” and “cannabis blunt.” The videos were sorted through two different methods. First, the videos were sorted by YouTube’s default search strategy, “relevance,” to capture the videos that were most relevant to the search query. Second, videos were sorted by view count to capture the videos viewed most often. As consistent with other YouTube studies (Krausset et al., 2017b; Luo, Zheng, Zeng, & Leischow, 2014; Merianos et al., 2016), the first 20 videos were collected from each search and sorting method, resulting in 80 videos. Duplicates ( $N=27$ ) and videos that did not discuss or display blunts in the videos ( $N=12$ ) were removed. The final sample included 41 videos.

### Codebook development

We modeled our codebook after existing YouTube studies on other methods of marijuana administration, including dabbing (Krauss et al., 2015) and edibles (Krauss et al., 2017b). In addition, two coders watched the first five blunt videos with the most views to identify other important recurring and relevant themes. After developing the codebook and clearly defining each category, the two coders viewed each video and classified the videos accordingly. The median Krippendorff’s alpha across codes was 0.82, ranging between 0.61 and 1 (Hayes & Krippendorff, 2007; Krippendorff, 2004). The highest level of disagreement was found on a category assessing whether a professional organization or amateur created the video. We decided to remove this category from the code-book. Other minor discrepancies were discussed and a consensus was reached between the two coders. The codebook assessed characteristics of the videos (e.g., published date), characteristics of individuals in the video (e.g., perceived gender), and messages/imagery in the video (e.g., rolling a blunt).

### Classification of video content

**Characteristics of the videos**—We recorded the title, web address, channel name, published date, video length, and the date the channel joined YouTube for each video. We also recorded the view count, number of comments, number of likes, number of subscribers, whether or not the video was restricted to viewers 18 years of age or older (yes/no), and the video description. To further examine the popularity of blunt use videos on YouTube, we examined the view count on February 5, 2017 and 1 month later on March 5, 2017.

**Characteristics of individuals in videos**—We recorded the number of people in each video, along with the perceived gender (male/female/other/unable to tell), age (<25 years old/>26 years old/unable to tell), and race (African-American/Hispanic/White/Asian/Other) of the main messenger in each video. We also assessed the geographic location of individuals in the video (only if it was mentioned in the video or video description).

**Messages/Imagery included in the videos**—We classified all videos into one of three message-type categories: (1) pro, (2) anti, and (3) neutral. Similar to the study of Luo et al. on the portrayal of electronic cigarettes on Luo et al., (2014), “pro” messages referred to

videos that promoted the use of blunts (e.g., presenting advantages of blunt use). “Anti” messages referred to videos that displayed the negative consequences of using blunts (e.g., presenting disadvantages of blunt use). “Neutral” messages included videos that appeared either positive or negative depending on the perspective of the video viewer when he/she is watching or it presents both negative and positive aspects of blunt use. Using yes/no responses, we also classified videos by whether or not (1) at least one person rolled a blunt in the video, (2) at least one person smoked a blunt in the video, (3) anyone in the video discussed other types of marijuana use (e.g., vaping), (4) anyone in the video mentioned a specific cigar brand (e.g., Swisher Sweets), (5) anyone in the video mentioned specific cigar/blunt wrap flavors (e.g., grape), and (6) anyone in the video discussed alcohol or other types of drug use (e.g., cocaine).

We also categorized videos by genre. Some videos were classified into more than one genre. Following the work of Luo and colleagues (2014), we defined each genre as (1) advertisement (videos created by companies to promote a specific brand or product), (2) user sharing (videos uploaded by users to share experiences or tips), (3) product review (videos comparing multiple blunt use products), (4) introduction (videos introducing blunt use in general and/or discussing innovative ways to roll or smoke a blunt), (5) celebrity use (videos showing celebrities smoking or rolling blunts), (6) free trial (videos featuring URL links or store address to get free blunt products), (7) news clip (news reporting about blunts), and (8) TV program or movie clips (including TV shows, interviews, or movie clips which focused on blunts).

## Results

### Characteristics of the videos

The final sample included 41 videos. On February 5, 2017, the videos had a median of 632,252 views and a total of 27,579,636 views across all videos. As shown in Table 1, the videos also had a high number of likes (186,902), comments (40,537), and channel subscribers (6,187,118). Between February 5 and March 5, the videos had a median of 5,197 new views (range 334–34,716) with a new total of 27,990,466 views. The average length for each video was 5.2 min, with a range between 50 s and 35 min. A small number of videos (34%) were restricted to YouTube users 18 years of age or older. All of the videos were published between 2007 and 2017, with the highest rates of videos published in 2014 (22%) and 2015 (32%). Most of the videos were created by channels who joined YouTube in 2014 (24%).

### Individual characteristics in videos

As shown in Table 2, the primary messenger in each of the videos appeared to be White (80%) and male (85%). The majority of individuals appeared to be under the age of 25 (46%). The location was not revealed in most of the videos. Among the videos that provided location information in the video description or during conversations in the videos ( $N = 8$ ), California was the most popular location for YouTube videos on blunt use.

### Messages/Imagery in videos

The majority of messages were “pro” blunt use (93%). Nearly half of the videos mentioned specific brands (49%; e.g., zigzag wraps) and approximately one-third of videos mentioned flavors (37%; e.g., strawberry). Most videos showed at least one person rolling (76%) and/or smoking (66%) a blunt. A few videos included discussions of other methods of marijuana administration (39%), such as joints and edibles, with a much smaller number discussing alcohol or other drugs (7%). As shown in Table 3, the majority of videos consisted of introductions to blunt use (76%) and/or user sharing experiences (73%).

### Discussion

To the authors’ knowledge, this is the first study to examine blunt use content on YouTube videos. We assessed the characteristics of the videos, characteristics of the primary messenger in the videos, and messages/imagery in the videos to gain insight into the practice and to inform future interventions. The most popular blunt use videos on YouTube had a total of over 27 million views, with a 1% increase in the following month. The total number of views of blunt use content on YouTube is higher than that of other methods of marijuana administration, including dabbing (116 videos, 9,545,482 views; Krauss et al., 2015) and edibles (51 videos, 9,039,308 views; Krauss et al., 2017b). Further, the median views of blunt use videos on YouTube ( $N = 632,252$ ) are higher than and similar to that of alcohol (70 videos, 132,939 views; Primack, Colditz, Pang, & Jackson, 2015) and cigarette (66 videos, 606,884 views; Carroll, Shensa, & Primack, 2013) videos on YouTube, respectively. These findings suggest that YouTube is a popular information-sharing platform for blunts and that interest in blunt use mirrors that of mainstream drugs such as alcohol and tobacco.

The unregulated discussion and portrayal of blunt use on YouTube provides a unique opportunity to not only assess this risky health behavior but also suggests that YouTube could be an influential vehicle for the dissemination of health information about blunts. A recent review of health videos on YouTube revealed the site is increasingly being used to disseminate information related to the pathogenesis, diagnosis, treatment, and prevention of various health conditions (Madathil et al., 2015). The current study suggests that millions of people view YouTube as a viable option to learn about blunts and that they are willing to engage (e.g., comment, like) with online content related to blunt use. Anecdotal and scientific data (Dickinson et al., 2016; Sinclair, Foushee, Scarinci, & Carroll, 2013; Yerger, Pearson, & Malone, 2001) highlight misconceptions regarding many aspects of blunt use among adolescents and adults. Future studies might consider creating and assessing the effectiveness of YouTube videos that provide health education about blunts, using existing studies on the effectiveness of health education YouTube videos as a guide (Azer, Algrain, AlKheilaif, & AlEshaiwi, 2013; Fernandez-Llatas, Traver, Borrás-Morrell, Martínez-Millana, & Karlsen, 2017).

Findings from the current study also suggest that the primary messengers in the videos appeared to be mostly White, male, and under the age of 25. Given the popularity of blunts among young males (Schauer et al., 2017), it is no surprise that the messengers in the YouTube videos were mostly male and under the age of 25. However, other social media studies on marijuana/blunt use suggest that messages regarding blunt use are most popular

among African-American young adults. For instance, in an analysis of marijuana-related tweets (messages) among influential Twitter users (i.e., users in the top 25th percentile for both numbers of followers and Klout score [a measure of influence vs. number of followers]), a greater proportion of the Tweeters were African-American compared to the Twitter average (Cavazos-Rehg et al., 2015). This finding is also consistent with that of marijuana-related posts on Instagram (Cavazos-Rehg et al., 2016). The inconsistent finding on YouTube suggests that White individuals may be more comfortable sharing information about their blunt use in online videos, while African-American individuals may prefer to have written discussions and share pictures online about their blunt use. Additional research is needed to support this claim. It is also important to note that the racial makeup of individuals on Twitter, Instagram, and YouTube was inferred by researchers or through a series of algorithms in the studies described above. Future research should consider gathering demographic information directly from social media users and/or using other innovative approaches to capture the demographic characteristics of users.

The majority of YouTube videos in the current study promoted blunt use and also showed at least one person rolling and/or smoking a blunt. As suggested above, a great proportion of adolescents and young adults are using YouTube to learn about blunts and other risky health behaviors. In fact, a few of the messengers in the videos stated that their video was in response to a request from their subscribers to share a tutorial on a particular topic (e.g., how to roll a particular type of blunt, such as a honey or rose blunt). Similar to existing studies (Allem, Escobedo, Chu, Boley, & Unger, 2017; Krauss et al., 2017b; Roditis, Delucchi, Chang, & Halpern-Felsher, 2016), the images of individuals rolling and smoking blunts have the potential to normalize the practice and encourage the use of blunts to consume marijuana. Although very few videos consisted of advertisements by cigar/blunt wrap companies (20%), several messengers displayed a proud sense of loyalty to particular brands of cigar/blunt wraps (e.g., Swisher Sweets) and flavors (e.g., grape). The loyalty of YouTube messengers to certain blunt use products and flavors provides an informal method of advertisement that should be further assessed in future studies. Advertising guidelines on YouTube prohibit ads that advertise drugs and dangerous products or substances but allow for videos on “drugs or dangerous substances for educational, documentary, and artistic purposes ... so long as drug use or substance use is not graphic or glorified” (YouTube, 2017b). Although content on YouTube is protected by the first amendment, the site has the right to age restrict or remove dangerous and harmful content if it meets certain criteria (e.g., serious acts of violence, YouTube, 2017b). Only 34% of the most popular blunt use videos had an age restriction, suggesting that the videos can be easily accessed by adolescents. Future research on policies and regulations regarding the marketing of cigars and marijuana should include policies that will monitor and provide clearer and stricter guidelines regarding blunt use content on social media sites, such as YouTube.

Although this study provides several insights into the understudied practice of blunt use on a popular social media site, a few limitations should be noted. First, we only used two terms (i.e., “marijuana “ and “ blunt cannabis blunt”) to identify YouTube videos about blunt use. Therefore, the sample may not be fully representative of all blunt use videos on YouTube. Second, the content on YouTube videos is constantly changing, suggesting that the results might vary at a subsequent point of time. Third, since the sample was limited to videos in



English, the results are only mainly generalizable to the United States and perhaps other countries with large English-speaking populations who use blunts.

In summary, this is the first study to examine blunt use content and imagery on YouTube. Approximately 27 million people have viewed popular blunt use YouTube videos. The videos primarily promote the use of blunts and display images of individuals smoking and rolling blunts. Given the nondirected open exchange of ideas and imagery regarding blunt use on YouTube, it is critical to develop and assess YouTube health campaigns to inform blunt users of potential harms associated with blunt use. Future studies should also assess the relationship between exposure to blunt use messages on YouTube and actual blunt use.

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**Table 1**Characteristics of YouTube videos on blunts ( $N = 41$ ).

<b>Video characteristics</b>	<b>Median (range)</b>	<b>Total across videos</b>
Number of views	632,252 (1,970–2,803,182)	27,579,636
Number of likes	2,195 (9–42,835)	186,902
Number of comments	361 (4–8,405)	40,537
Number of subscribers	18,934 (0–1,250,930)	6,187,118

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**Table 2**

Characteristics of individuals in YouTube videos on blunts ( $N=41$ ).

<b>Variable</b>	<b><i>n</i> (%)</b>
<b>Perceived gender of messenger</b>	
Male	35 (85)
Female	6 (15)
<b>Perceived race of messenger</b>	
African-American	6 (15)
Latin American	2 (5)
White	33 (80)
<b>Perceived age of messenger</b>	
<25	19 (46)
>25	16 (39)
Unknown	6 (15)
<b>Location</b>	
California	4 (10)
Oregon	2 (5)
Colorado	1 (2)
Seattle	1 (2)
Not revealed	33 (80)

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**Table 3**Genres of YouTube videos on blunts ( $N = 41$ ).

Variable	<i>n</i> (%)
<b>Advertisement</b>	
Yes	8 (20)
No	33 (80)
<b>User sharing</b>	
Yes	30 (73)
No	11 (27)
<b>Product review</b>	
Yes	6 (15)
No	35 (85)
<b>Introduction</b>	
Yes	31 (76)
No	10 (24)
<b>Celebrity use</b>	
Yes	2 (5)
No	39 (95)
<b>Free trial</b>	
Yes	2 (5)
No	39 (95)
<b>News clip</b>	
Yes	1 (2)
No	40 (98)
<b>TV program or movie clip</b>	
Yes	3 (7)
No	38 (93)