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“Get drunk. Smoke weed. Have fun.”: A Content Analysis of Tweets About Marijuana and Alcohol

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Abstract

Purpose—To explore the sentiment and themes of Twitter chatter that mentions both alcohol and marijuana.

Design—Cross-sectional analysis of tweets mentioning both alcohol and marijuana during 1 month was performed.

Setting—The study setting was Twitter.

Participants—Tweets sent from February 4 to March 5, 2014, were studied.

Method—A random sample (n = 5000) of tweets that mentioned alcohol and marijuana were qualitatively coded as normalizing both substances, preferring one substance over the other, or discouraging both substances. Other common themes were identified.

Results—More than half (54%) of the tweets normalized marijuana and alcohol (without preferring one substance over the other), and 24% preferred marijuana over alcohol. Only 2% expressed a preference for alcohol over marijuana, 7% discouraged the use of both substances, and the sentiment was unknown for 13% of the tweets. Common themes among tweets that normalized both substances included using the substances with friends (17%) and mentioning substance use in the context of sex or romance (14%). Common themes among tweets that preferred marijuana over alcohol were the beliefs that marijuana is safer than alcohol (46%) and preferences for effects of marijuana over alcohol (40%).

Conclusion—Tweets normalizing polysubstance use or encouraging marijuana use over alcohol use are common. Both online and offline prevention efforts are needed to increase awareness of the risks associated with polysubstance use and marijuana use.

Keywords

Social Media; Alcohol; Marijuana; Twitter; Prevention Research

PURPOSE

In recent years, perceived risk and use of both marijuana and alcohol have shifted among youth and young adults in the United States. The percent of adolescents who believe that smoking marijuana regularly (once or twice a week) is of great harm decreased from 54.6% in 2007 to 39.5% in 2013.¹ Past month use of marijuana increased from 6.7% in 2007 to 7.9% in 2011, and then decreased slightly to 7.1% in 2013.¹ Likewise, among young adults ages 18 to 25 years, rates of past month marijuana use in 2009–2013 ranged from 18.2% to 19.1%, which is higher than past rates of use (2002–2008 range, 16.1%–17.3%).¹ In contrast, perceptions of great harm associated with binge drinking (5 or more drinks on the same occasion) once or twice a week have increased among adolescents in the past decade (from 38.2% in 2002 to 40.7% in 2011, then dropping slightly to 39.0% in 2013), and past month binge drinking has declined from 10.7% in 2002 to 6.2% in 2013.¹ Past month binge drinking among young adult men was lower in 2013 (44.4%) than in 2002–2010 (range, 48.1%–51.7%).¹ Even with the decreases in binge drinking during the past decade, rates are as high as or higher than marijuana use.

Social norms, peer influences, and media are among the most important factors having an impact on risky substance use attitudes and behaviors of young people.^{2–10} Social media has become increasingly popular among young people and combines both media and peer influences from a network of individuals across a wide range of geographic regions; thus, the impact on social norms, risk perceptions, and behaviors among youth could be substantial. Young people commonly communicate their substance use attitudes and behaviors on social media.^{11–13} For example, one-third of a sample of college students had posted a picture showing themselves drinking on a social networking site, and 83% said a friend had posted such pictures.¹⁴ It is also common for young people to “follow” social media profiles (i.e., automatically receive updates and posts from specific profiles) that promote substance use behaviors. For instance, we identified a popular Twitter account with a marijuana-focused handle (i.e., user name) that tweeted primarily promarijuana messages and had more than 1 million followers, most of whom were youth and young adults.¹⁵

Exposure to pictures of friends drinking or portraying alcohol use as normative on social network sites has also been associated with alcohol use and proalcohol perceptions. In a study of nearly 200 young adolescents ages 13 to 15 years, those who viewed Facebook profiles that normalized alcohol use among older peers had higher levels of risk-promoting cognitions (e.g., more willingness to drink, increased proalcohol use attitudes) than those who saw profiles of older peers that did not normalize drinking.¹⁶ Similarly, 10th-grade students who viewed pictures of friends on social networking sites that displayed partying or drinking were themselves more likely to smoke cigarettes and use alcohol.¹⁷

In light of changing attitudes about marijuana and alcohol, and the high prevalence of their use, we extend prior research on the communication of substance use on social media by focusing on posts that mention both alcohol and marijuana. We analyzed Twitter because it is one of the most popular social networking sites, especially among teens and young adults.^{18,19} We sought to better understand the sentiment of tweets that reference both marijuana and alcohol together in the same tweet, and to identify their most common

themes. Given the recent decrease in risk perceptions about marijuana and increase in risk perceptions about binge drinking, as well as the rather high prevalence of use for both substances, we hypothesized that a preference for marijuana over alcohol would be common and that many tweets would normalize both of the substances.

DESIGN

This study is cross-sectional in nature because we examined Twitter data gathered during approximately 1 month to examine tweets that mentioned both alcohol and marijuana. Our research received an Institutional Review Board exemption (i.e., is exempt from Institutional Review Board oversight) because the Twitter data in the current study are publicly available existing data with minimal risk. Figure 1 depicts the flow of the study methodology.

Setting

The setting of the study was the social media site Twitter.

Participants

Tweets were the unit of analysis in our study. Tweets in the English language that mentioned both alcohol and marijuana were collected from February 5 to March 5, 2014.

METHOD

Data Collection

Marijuana-related tweets for the time period of interest were collected using Simply Measured (<http://simplymeasured.com>), a company that provides social media analytics and has access to the full stream of tweets. Tweets with at least one of the following terms (or their hashtag versions) were collected: “weed,” “marijuana,” “blunt,” “stoner,” “stoned,” “bong,” “pot,” “joint,” “kush,” “cannabis,” “pothead,” “ganja,” “indica,” “sativa,” and “#mmot” (meaning “Marijuana Movement on Twitter”). To compile this list, members from our research team initially composed a list of search terms that reflected the most commonly used terms for marijuana. We continued to build the list using terms related to marijuana on urbandictionary.com, a free online resource that tracks modern slang. We also added popular “related terms” as indicated by Google Trends, a key word research tool that provides near real-time search query trend data based on Google searches. For the terms “pot” and “joint,” we only included tweets that also had other words that would indicate the tweet was about marijuana (e.g., “smoke,” “legalize,” “roll”). We excluded tweets that included common terms that would render the tweet irrelevant for our purposes (e.g., Emily Blunt).

Among these marijuana-related tweets, those also containing at least one of the following alcohol-related terms (or their hashtag versions) were then identified: “drunk,” “alcohol,” “beer,” “liquor,” “vodka,” and “hangover.” To identify these alcohol-related search terms, we compiled an inclusive list of drinking-related terms with input from our research team, Web searches, and searches of urbandictionary.com. From an initial list of more than 50 drinking-related key words, we used only those with an estimated 500,000 tweets per month—alone, not in combination with marijuana-related terms—and that did not produce

large amounts of irrelevant tweets, as determined by searching the terms on Topsy. com, a real-time search engine that estimates tweet volume for specific key words over selected periods of time and shows recent tweets with those key words. We excluded terms that would indicate the tweet was not about alcohol (e.g., drunk in love, rubbing alcohol).

Analysis Strategies

To examine the themes of the most influential tweets that contained both marijuana- and alcohol-related terms, we used *proc surveysselect* in SAS version 9.4 (SAS Institute Inc., Cary, North Carolina) to randomly sample 5000 tweets (that were not direct @replies) from those whose handles were in the top 25th percentile for both number of followers and Klout score. Klout score is a measure of influence that considers the extent to which the user's content is "acted upon" by being clicked, replied, and/or retweeted.²⁰ We chose to sample from tweets in the top 25th percentile of these measures in order to focus on tweets that would have more influence and reach. A total of 5000 tweets randomly sampled from the 23,876 tweets that were in the top 25th percentile of both Klout score and number of followers would allow estimation of the sentiment of tweets (e.g., normalizes both substances) with 95% confidence level with a margin of error of at least $\pm 1.2\%$). Tweets that were direct @replies were excluded from qualitative analysis because the conversation often would also need to be reviewed in order to understand the context.

Each tweet (along with the content of any links) was qualitatively analyzed to determine sentiment about the substances, including whether the content normalized use of the substances (without preferring one substance over the other), reflected a preference of marijuana over alcohol, reflected a preference of alcohol over marijuana, or was against or discouraged both substances. If it was difficult to discern the tweet or it appeared neutral in sentiment to both alcohol and marijuana, the tweet was coded as "neutral/can't tell."

Subthemes for each sentiment were also coded to better understand the various sentiments about the substances. Two members of the research team with expertise in substance use disorder research scanned 500 random tweets in order to classify common subthemes of interest, such as reasons for preferring one substance over the other (e.g., liking the effects of marijuana better than alcohol, marijuana is safer than alcohol); mentioning sex or romance, tobacco or other drugs, famous people, music, or the entertainment industry; and using substances with friends. These subthemes were used to code the full set of sampled tweets, and multiple subthemes could be present in a tweet. The presence of subthemes of interest was coded as yes/no.

The source of the tweet was coded as a marijuana- or alcohol-focused handle (e.g., had a reference to alcohol or marijuana in the name), health or government organization/health professional, or other type of handle that does not fall into the above categories.

We used the crowdsourcing services of CrowdFlower to code the tweets (<http://www.crowdflower.com>). Crowdsourcing involves using a large network of online (i.e., virtual) workers to complete microtasks. Similar crowdsourcing methodologies have previously been used, with high levels of agreement between trained research coders and crowdsourced coders.²¹ The sample of tweets and coding instructions were uploaded onto

the online platform for CrowdFlower contributors (i.e., persons who work on the coding tasks) to code. A set of 200 tweets (from the total 5000 tweets) coded by two trained members of the research team were used as test tweets. Before CrowdFlower contributors could begin coding they were required to correctly code at least 7 of 10 test tweets. Additional test tweets were hidden from contributors and also were interspersed throughout the full sample of tweets to ensure that the CrowdFlower contributors responded to tasks to a high standard. If a contributor's accuracy on test items (i.e., trust score) fell below 70%, he or she was dropped from the project; all prior codes from those coders were discarded and new coders were assigned in their place.

Each tweet was coded by at least three CrowdFlower contributors. The response with the highest confidence score was chosen. Confidence score describes the level of agreement between multiple contributors, is weighted by the contributors' trust scores, and indicates "confidence" in the validity of the result (<https://success.crowdfLOWER.com/hc/en-us/articles/201855939-Get-Results-How-to-Calculate-a-Confidence-Score>). We coded a random sample of 200 tweets that were nontest items and compared our responses with final CrowdFlower responses. We report percent agreement, which indicates the simplest calculation of agreement in responses between the research team and final CrowdFlower responses. Because percent agreement does not take into account agreement due solely to chance, we also report Cohen kappa, a measure of interrater agreement that does account for agreement that occurs by chance.²² Agreement was moderate for sentiment, which had multiple categories of response (percent agreement, 77%; kappa, .60; 95% confidence interval, .50–.69), and there was no indication of systematic differences in sentiment coding between the research team and Crowd-Flower responses (Bhapkar test for marginal homogeneity $p = .175$; Bhapkar test evaluates the difference of the marginal distribution for categorical variables, and a nonsignificant finding indicates no difference in marginal distributions).²³ Agreement was good for the source of the tweets (percent agreement, 96%; kappa, .83) and presence of subthemes (median percent agreement, 94%; interquartile range, 91%–97%; median kappa, .76; interquartile range, .61–.87).

RESULTS

Marijuana- and Alcohol-Related Tweet Volume and Popular Retweets

A total of 195,277 tweets with both the marijuana- and alcohol-related terms of interest were collected from February 4 to March 5, 2014. This represented approximately 3% of the more than 7.5 million marijuana-related tweets collected during that month. The median number of followers of the marijuana and alcohol tweets was 332 (interquartile range, 153–709), and the median Klout score was 39.2 (interquartile range, 32.1–43.6). Examples of some of the most popular retweets include: "Stoner chicks over drunk chicks any day" (tweeted on February 12; more than 1500 retweets), and "You smoke pot? Sorry, we can't hire you. You get shitfaced every weekend at the club after 6 beers and 12 shots? You're hired!" (tweeted on February 22; nearly 1000 retweets).

Sentiment, Subthemes, and Source of Tweets

We randomly sampled from tweets that were not direct @replies and were in the top 25th percentile of both followers and Klout score (709 followers and 44 for Klout score, $n = 23,876$). Among the randomly sampled 5000 tweets, 4910 (98%) were about alcohol and marijuana. Only 90 tweets (2%) were not discernibly about marijuana and alcohol and were excluded from further analysis. Sentiment, potential reach of the tweets, and example tweets are shown in Figure 2. Among the 4910 marijuana- and alcohol-related tweets, 2648 (54%) normalized marijuana and/or alcohol (without preferring one substance over the other), 1166 (24%) preferred marijuana over alcohol, 102 (2%) preferred alcohol over marijuana, and 365 (7%) were against/discouraged both substances. The sentiment could not be determined or was neutral for approximately 13% ($n = 629$) of the tweets. The potential reach, or total of all of the followers of the tweets, was greatest for tweets normalizing the substances (without a preference for one over the other), with more than 16 million total followers (16,225,472), followed by tweets that preferred marijuana over alcohol (13,848,127 total followers). The potential reach does not take into account the extended audience (i.e., followers' followers and their followers), which would render the potential reach ever larger than currently estimated.

Subthemes among the tweets that normalized marijuana and/or alcohol (with no preference of one substance over the other, $n = 2648$) are shown in Figure 3. Approximately 17% ($n=461$) mentioned using marijuana and/or alcohol with friends, followed by 14% ($n = 369$) mentioning sex/romance, and 13% ($n = 336$) mentioning tobacco or other drugs.

Among the tweets that preferred marijuana over alcohol ($n = 1166$; Figure 4), the most common subtheme was that marijuana is safer than alcohol or that marijuana should be legal if alcohol is legal ($n = 532$; 46%). Another common subtheme was partiality for the effects of marijuana compared with those of alcohol ($n = 462$; 40%).

Of the few tweets that preferred alcohol over marijuana ($n = 102$), 47% ($n = 48$) explicitly expressed liking the effects of alcohol more than marijuana. Among the tweets that discouraged use of both substances ($n = 365$), 39% ($n = 141$) expressed not liking people who used the substances, and 38% ($n = 139$) focused on the adverse health effects or other negative consequences of using the substances.

Overall, 9% ($n=460$) of tweets came from a marijuana- and/or alcohol-focused handle, identified by whether an alcohol- or marijuana-related term is in the handle name. Less than 1% ($n = 17$) of tweets came from someone with a handle associated with a health or government organization/health professional. The large majority of tweets (90%; $n = 4433$) came from some other type of handle that does not fall into the above categories.

CONCLUSION

Our content analysis of influential tweets about both marijuana and alcohol found that more than half of the tweets in our sample (54%) normalized the use of both of substances. These tweets also had the greatest potential reach, or sum of all followers. Although the volume of tweets that mention both marijuana and alcohol (about 200,000 tweets per month) is far less

than tweets that mention marijuana (more than 7.5 million tweets per month) or alcohol (12 million tweets per month),^{24,25} our findings do corroborate such studies that have found peer-to-peer promotion of substance use behaviors on social media.^{11–16} Social media messages that normalize polysubstance use encourage risk behaviors that are already common among young people and are associated with increased likelihood of substance use disorders, negative social outcomes, depression, and unsafe driving.^{26–31}

Nearly a quarter of the tweets in our sample reflected a preference for marijuana use over drinking alcohol. Common subthemes of these tweets included the idea that marijuana-related highs have no hangover effects (vs. getting drunk). Tweeters mentioned that “stoners” feel relaxed and happy after smoking marijuana vs. “drunks,” who often exhibit violent or aggressive behavior. Furthermore, tweeters believed that recreational marijuana use is safer than binge drinking. These social media messages may shed light on why national surveys are observing a liberalizing of marijuana use attitudes, especially among young people. The belief that marijuana is safer than alcohol appears to be a popular opinion on Twitter. In fact, some expert opinions do suggest that marijuana may be less harmful than alcohol,³² and tweets referring to President Obama’s 2014 quote, “I don’t think it (weed) is more dangerous than alcohol” were relatively popular. The scientific community has recognized that more population-based research on outcomes of marijuana involvement is a public health priority. In the meantime, the spread of tweets that normalize marijuana use could further encourage increases in marijuana use and perhaps a substitution of marijuana for alcohol. Thus, it is important for online and offline prevention programs to discuss the known short-term and long-term risks that *are* associated with marijuana use, especially among adolescents, so that they are not ignored.³³

A fair amount of tweets encouraged other health-risk behaviors in conjunction with substance use. For example, individuals posted tweets about “getting high and/or drunk” to enhance and facilitate romantic relationships. Because substance use risk behaviors have been associated with deleterious sexual health consequences,^{34–39} it is concerning that we found numerous tweets that normalize substance abuse in the context of sexual and romantic situations. Prevention efforts that highlight the potential consequences of mixing substance use with sexual behaviors are needed to offset the potential influences of these troubling tweets.

Our study also highlights the ability to use social media data to improve our understanding of young people’s beliefs and risk perceptions about substance use, because most of the people who tweet about substance use are young.²⁴ Mining social media data has the potential to provide a quicker and richer understanding of young people’s attitudes than the use of self-reported questionnaires. This can allow researchers and public health advocates to develop new prevention programs (both offline and online) that can provide normative education and confront such prosubstance beliefs. On social media, public health organizations could purchase targeted ads and work to more effectively spread prevention messages to increase awareness of risks associated with polysubstance use and marijuana use.

Several limitations should be considered when interpreting results from our study. We only examined messages on Twitter; thus, results cannot necessarily be generalized to other social media platforms. The tweets we examined included a specific list of marijuana- and alcohol-related terms that is not comprehensive and thus does not represent the full volume of marijuana- and alcohol-related tweets in the Twitter stream. We cannot verify that the messages contained in the tweets about substance use actually reflect real substance use behavior. Finally, we randomly sampled from those tweets with handles that had a high Klout score and number of followers, which may disproportionately sample extremely popular accounts and celebrities. However, in a sensitivity analysis we excluded those tweets with more than 20,000 followers and a Klout score of ≥ 60 , and results were similar to those reported.

Our study findings highlight the substance use messages on Twitter that normalize marijuana and alcohol use behaviors. Many tweets revealed a preference for marijuana use over binge drinking that is being fueled, at least in part, by opinions that marijuana use is safe and produces more relaxing and beneficial effects vs. alcohol use. Tweets also encouraged other risky health behaviors, including sex or romantic relationships in the context of substance use. Young people are highly influenced by their peers and are at a critical stage of development when substance use behaviors and attitudes are being shaped.^{40–42} Without an effective counterbalance that dissuades substance use, the preponderance of influential tweets that normalize substance use could certainly have a negative impact on the youth and young adults who are exposed to these messages. Our findings highlight the need for prevention efforts, both offline and online, to deliver messages about the risks associated with marijuana and alcohol abuse.

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SO WHAT? Implications for Health Promotion Practitioners and Researchers

What is already known on this topic?

Young people often post about experiences with substance use on social media. Given recent changes in risk perceptions about marijuana and alcohol, we examined posts about both substances on Twitter to glean insight into the sentiment about these substances when mentioned together.

What does this article add?

More than half of the tweets analyzed normalized the use of both substances, and nearly one-quarter expressed a preference for marijuana over alcohol. Among the latter, it was commonly thought that marijuana is safer or that marijuana's effects were better than those of alcohol.

What are the implications for health promotion practice or research?

Tweets that normalize substance use could negatively affect those exposed to such messages. There is a need for online and offline prevention efforts to deliver messages about the risks associated with marijuana and alcohol abuse, with additional focus on polysubstance use.

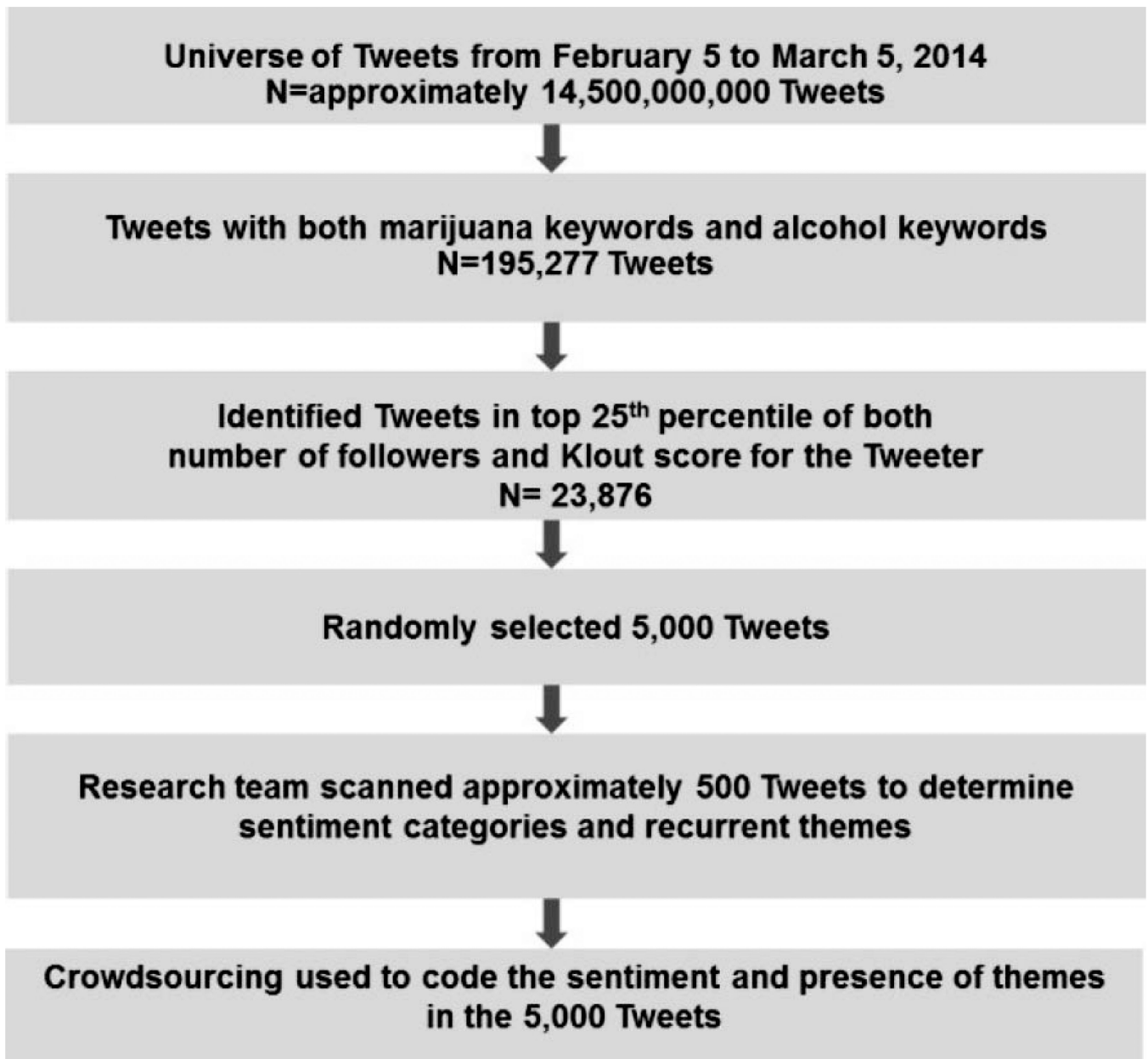


Figure 1.
Flow of Study Methodology


Sentiment	Number of Tweets (%)	Potential reach ^a	Example Tweets
Normalizes both substances (does not prefer one over the other)	2,648 (54%)	16,225,472	<i>Bong rippin and liquor sippin tonight</i> <i>I'm finna get fucked up tonight... they need to hide the liquor and weed</i> <i>So now we eating wings, smoking weed and drinking cheap liquor ... Pretty much the perfect Wednesday night</i>
Prefers marijuana over alcohol	1,166 (24%)	13,848,127	<i>I'm on the good regular weed and no alcohol</i> <i>I haven't gotten drunk in like 4 weeks all I do is smoke weed</i> Weed vs Alcohol #StonerNation 
Prefers alcohol over marijuana	102 (2%)	771,378	<i>Ion like weed noma, I just want the liquor</i> <i>Ima alcoholic fuck allat weed shit you can't fake this influence</i> <i>#AnnCoulter says "#Cannabis causes #cancer, #alcohol is safer than #marijuana, #potheads are useless</i>
Discourages both substances	365 (7%)	2,518,592	<i>I dont think i'll ever smoke weed or drink alcohol...not my style</i> <i>Weed, drugs, alcohol, clothes and "SWAG" doesn't make you a boss. Diplomas, degrees, and jobs do!</i> <i>Stoned drivers 2X more likely to be in an accident. Drunk driver 20X. Yes, NYTimes, big gap, but both increase the risk.</i>
Unknown	629 (13%)	13,045,852	<i>I thought someone had wrote a tweet, stoned or drunk. Clicked their profile & they were actually tweeting in a different language.</i> <i>I find the most random shit in the cars here when I clean them out...condoms, pennies, kids toys, shoes, old beer, weed bags.</i> <i>Gum or u sniffed suckaway "@slimmytychus: I am high. Nd its not of alcohol nor weed."</i>

Figure 2.
Sentiment and Reach of Tweets That Mention Both Marijuana and Alcohol (N = 4910)


Themes	Number of Tweets (%)	Example Tweets
Using the substances with friends	461 (17%)	<i>Location: Sorted...Just need alcohol, weed & company But am I less holy Cause I chose to puff a blunt and drink a beer with my homies and i was going to hang out with my friends this weekend and get drunk and smoke weed but nope im grounded</i>
Mentions sex/romance	369 (14%)	<i>lets smoke weed and drink vodka and make out and then fuck i love drunk/stoned texts.. i love knowing i'm the one you think of even when you're not thinking straight</i>
		 <p><i>Fuck flowers and candy, came through with a Vday blunt and vodka</i></p>
Mentions tobacco or other drugs	336 (13%)	<i>For Better Life You Need To Have weed, vodka, drugs If I were in Riverside I'd be smoking a ciggy on a balcony in between sips of craft beer and bong rips Ima smoke this weed, ima chew these xannies, and ima drink this liquor</i>
Mentions famous people, the entertainment industry, or music	224 (8%)	<i>i hope justin does it up for his 20th and has a huge party with tons of alcohol and weed and takes pictures with whores and really lets go ...SEE WHAT Barack Obama Said About Weed & Alcohol Johnny cash while drunk as fuck & Stoned as fuck omg <3</i>
Using marijuana to treat a hangover	49 (2%)	<i>Smoking weed to get rid of your hangover #partyproblems good thing weed helps hangovers Bong rips early in the morning to cure your hangover</i>

Figure 3.
Subthemes of Tweets That Normalized Marijuana and Alcohol Use (N = 2648)



Themes	Number of Tweets (%)	Example Tweets
Marijuana is safer than alcohol or supports the legalization of marijuana	532 (46%)	<p><i>I will never understand why the use of marijuana is looked down upon when it's safer than alcohol.</i></p> <p><i>alcohol is legal...weed is illegal...cuz america makes so much sense</i></p> 
Like the effects of marijuana more than the effects of alcohol	462 (40%)	<p><i>Weed: No hangovers. No violence. No regrets.</i></p> <p><i>Alcohol brings out a different side of you while weed brings out the real you.</i></p> <p><i>When you smoke weed, you forget about your problems... But when you drink alcohol you create new ones.</i></p>
Prefers marijuana smokers over alcohol drinkers	192 (16%)	<p><i>Stoner chicks are way better than drunk chicks</i></p> <p><i>My grandma always kept it real with me, she always told me she would rather me be a pothead than an alcoholic. #BlowingKushForGramma</i></p> <p><i>Being a hot stoner chick > being a drunk sloppy bitch</i></p>
Mentions sex/romance	110 (9%)	<p><i>Drunk sex leads to pregnancy not high sex so smoke that blunt dont take those shots</i></p> <p><i>I would date a weed smoker over a drunk anyday</i></p> 
Mentions tobacco or other drugs	81 (7%)	<p><i>If you smoke cigarettes or drink alcohol. You are not in a position to criticize weed smokers.</i></p> <p><i>Smoking weed is inspirational... Much beta dan drinkin alcohol or smoking a cigarette</i></p> <p><i>I hate liquor. Weed n pills get me good</i></p>
Mentions famous people, the entertainment industry, or music	47 (4%)	<p><i>Obama's deputy drug czar admits marijuana is less dangerous than alcohol</i></p> <p><i>Whoa, I wonder if Mary Jane will be legal soon now that Obama says it's not so bad.</i></p> <p><i>A blunt in hand is worth a crate of beer in the fridge - Bob Marley 1979</i></p>
Using marijuana with friends	24 (2%)	<p><i>Alcohol makes friends, but weed keeps them.</i></p> <p><i>...Weed just makes them happy and they can also smoke weed with friends and have fun...</i></p> <p><i>Some kush. ...Movies. No partying, no alcohol. Sounds good? Me & you?</i></p>

Figure 4. Subthemes of Tweets That Expressed a Preference for Marijuana Over Alcohol (N = 1166)