2019

Automated Content Analysis to Quantify Valence, Themes, and Norms Mentioned in Tobacco and E-cigarette Coverage across Two Social Media Sources (expanded version)

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Disciplines
Communication | Social and Behavioral Sciences

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Automated Content Analysis to Quantify Valence, Themes, and Norms Mentioned in Tobacco and E-cigarette Coverage across Two Social Media Sources

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Please note: The social media examples in this document were randomly selected and their content may be offensive, explicit and/or not safe for work.

This research was supported by the National Cancer Institute (NCI) of the National Institutes of Health (NIH) and FDA Center for Tobacco Products (CTP) under Award Number P50CA179546 (the University of Pennsylvania Tobacco Center of Regulatory Science (UPenn TCORS). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or the Food and Drug Administration (FDA).

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Automated Content Analysis to Quantify Valence, Themes, and Norms Mentioned in Tobacco and E-cigarette Coverage across Two Social Media Sources

In this study, we used supervised machine learning and dictionary coding to measure the coverage of valence, tobacco control themes, and individual norms in content related to (1) tobacco and e-cigarette products in (2) social media sources (Twitter and YouTube). Tweets were collected from May 18, 2014 – December 31, 2017; videos were collected from June 30, 2014 – June 30, 2017. The following example tweets/videos were pulled from the 75,322,911 tweets and 12,262 videos collected through June 30, 2017.

Corpus

We first searched the GNIP and YouTube databases for tweets/videos with a list of hundreds of keywords and search rules that included specific product types (e.g., tobacco, hookah, nicotine, e-cigarette, e-juice), names and brands (e.g., Newport, Skoal, Njoy), behaviors (e.g., vape, vaping), and public health/policy terms (e.g., Quitlines, CDC tips, TruthOrange). This was a broad search meant to capture the majority of tobacco-related content. We then used automated coding methods with validation to clean the database more precisely to tobacco-related content. Tweets/videos came from:

1. Twitter
   n=75.3 million tweets, 32% e-cigarettes

2. YouTube
   n=12,262 videos, 75% e-cigarettes
   Videos were limited to those with at least 10,000 views in the first 180 days after they were posted. The titles, descriptions, tags and captions of popular YouTube videos were used in the classification process.

Tobacco (no ecig) versus E-cigarettes (ecig)

We define e-cigarettes as electronic devices typically meant for nicotine delivery though they can be used with or without nicotine. These are relatively new products relative to other tobacco products. Any tweets/videos which contain a mention of e-cigarettes are coded as “ecig”. Our definition of “tobacco (no ecig)” products includes cigarettes, cigars, cigarillos, little cigars, smokeless tobacco, and hookah – all non-ecig products used without marijuana. It is possible that there are some mentions of these other tobacco products in the tweets/videos which contain e-cigarette mentions. We decided to count both tweets/videos that are only about e-cigarettes and tweets/videos that are about e-cigarettes and other products as “ecig”.

Valence, Themes, and Norms coded

We used supervised machine learning and dictionary coding to measure the coverage of valence, tobacco control themes, and norms in this corpus of tweets/videos. Experts coded samples of ~2,000 tweets/videos which were split into training and test sets for developing automatic algorithms. Reliability was >.80 for themes, >.79 for norms, and >.73 for valence.

Valence was coded separately for e-cigarettes and other tobacco products. Tweets/videos that on the whole were mostly supportive of using the product or the industry making the product were coded “Pro”, while tweets/videos that were mostly against the use of the product or the industry making the product were coded “Anti”. For Twitter, precision varied .69 to .92, and recall varied .53 to .94. For YouTube tobacco valence, precision was .60 for anti and .96 for pro; recall was .93 for both.
Since the vast majority of manually labeled videos (97%) were pro-ecig, an ecig valence classifier was not built.

Four tobacco control themes were chosen a priori based on prior tobacco content analyses. We expected these themes would likely have an impact on the general public’s beliefs about tobacco products. (1) “Health”: effects of product use on the user’s physical health (specifically excluding health effects of use for non-users (e.g., secondhand smoke)), (2) “Policy”: mandatory policy/law/regulation by a government, company, or institution, (3) “Addiction”: explicit references to products being addictive or users being addicted, and (4) “Youth”: use, access, or purchase of products by anyone up to 21 years old. For Twitter, all four themes had precision and recall >.73. For YouTube, precision varied .59 to .82 and recall varied .33 to .55.

Like valence, normative information was also coded separately for e-cigarettes and other tobacco products. Normative information was divided into two types: “Population” and “Individual”. Population-level summary information (“population norms”) conveys behavior prevalence in an explicit and straightforward way by providing numbers, percentages or trends from census data, survey results, reports, or educational campaigns. None of these sources had enough population norm information to develop reliable classifiers for Twitter and YouTube, so these datasets were not coded for that. Individual-level behavior cues (“individual norms”), on the other hand, facilitate formation of descriptive norm perceptions more subtly by providing knowledge about and exposure to instances of others’ performing (or not performing) the behavior. Individual norms were coded for whether or not they described ecig or tobacco “use” (as opposed to a reduction in use, or non-use). There were not enough examples in our hand-coded samples to build classifiers for non-use, so the database was not coded for that either. For Twitter, precision was .52 for both ecig and tobacco, and recall was .74 for ecig and .71 for tobacco. For YouTube, precision was .82 for ecig and .88 for tobacco, and recall was .94 for ecig and .97 for tobacco.

**Current Set of Examples**

In all there are 10 different codes. In order to have some illustrative examples of the items that were coded, we pulled 15 examples for each valence, theme, and norm from Twitter and YouTube. These sets were pulled separately for tobacco (no ecig)/ecig items if they existed for that code. Also, in each set of 15, we chose 10 examples from Twitter and 5 examples from YouTube. In all there are 200 examples included here. Individual items were randomly selected from all items matching those criteria.

Hand-coding of the examples does not perfectly match the machine coding. This is expected because the test set precision and recall were not perfect (see above). Also, some sets don’t match for themes because the validity was tested across products (e.g., ecig addiction has several mistakes because the theme refers to a different product than the one indicated). **Rather than the definitions of each code, the examples provided here are meant to give the reader a sense of the actual tweets/videos included for each code.** We have included the team’s hand-coding of whether or not these examples match the code (Yes or No) before each example. Effects analyses aggregate the data to at least the day-level ensuring that the amount of valence, theme, and norm coverage is estimated from many individual tweets/videos, thus we are less concerned about individual tweets/videos being misclassified.
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How to use these examples

This document uses Word’s heading styles to make the examples easier to navigate. Each heading style can be opened or closed to reveal content lower down. All examples are closed by default when opening the document. No matter which examples you open, they will be closed the next time you open Word. Instructions for expanding all headings are available here: https://support.office.com/en-us/article/collapse-or-expand-parts-of-a-document-701786e0-95e2-40bf-bfe5-f0233cd3520c

To open an example:

- Hover your cursor over the blue labels and an open triangle will appear to the left of each label.

- Click the open triangle to open the tweet/video.

To close an example:

- Hover your cursor over the blue labels again and a closed triangle will appear to the left of each label. Click the closed triangle to close the example. You can also close entire sections using the same method.
Tobacco (no ecig) Pro
Note: For analysts of the dataset, the code for Tobacco (no ecig) Pro within the database for Twitter is “twtpro”. The YouTube code is “pro_tob”. 

Tobacco (no ecig) tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_tpro”.

Tobacco (no ecig) Pro – Twitter 1
Hand-coded: No
ArticleID: 57336604
Tweet: "https://t.co/UU2mCXgzXk Nike Air Jordan 8 Retro Cigar Confetti Black Gold Size 9. 832821-004 OVO 1 2 3"

Tobacco (no ecig) Pro – Twitter 2
Hand-coded: Yes
ArticleID: 85678581
Tweet: "@VindiTweets i liked hangover, sex 7 ciggies, and the think about me joint"

Tobacco (no ecig) Pro – Twitter 3
Hand-coded: No
ArticleID: 45940184
Tweet: "RT @catsrangels2: CIGAR – A1098562 https://t.co/4dXSAbLOd9"

Tobacco (no ecig) Pro – Twitter 4
Hand-coded: Yes
ArticleID: 84116982
Tweet: "RT @lovemyhubbysart: Christmas Present! Huge Art for your home! Cuban Cigar Lady Original Art Painting DAN BYL Fine by danbyl https://t.co..."

Tobacco (no ecig) Pro – Twitter 5
Hand-coded: No
ArticleID: 43764775
Tweet: "How it went down yesterday at JKUAT swimming pool... #TeamMickey @ Persia Resto Pub-shesha lounge https://t.co/rlxwdGo83E"

Tobacco (no ecig) Pro – Twitter 6
Hand-coded: Yes
ArticleID: 22254042
Tweet: "I wanna smoke a cigarette but then I have to put pants back on and that can wait till morning time"
Tobacco (no ecig) Pro – Twitter 7
Hand-coded: No
ArticleID: 64704225
Tweet: "@HEELZiggler @WWEChampions Been doing @HotYoungBriley @MogyApp workout? That's def not the push up & cigarette look I'm used to"

Tobacco (no ecig) Pro – Twitter 8
Hand-coded: Yes
ArticleID: 15588263
Tweet: "*takes a cig and blows some smoke rings in the air, watching @NL_Heechul sleep peacefully*"

Tobacco (no ecig) Pro – Twitter 9
Hand-coded: No
ArticleID: 79122225
Tweet: "Coffee and Cigarettes: Seahawks links for Tuesday https://t.co/zLDOJfPX4f"

Tobacco (no ecig) Pro – Twitter 10
Hand-coded: Yes
ArticleID: 45368395
Tweet: "TONIGHT @SLloungeNYC OPEN BAR FRIDAYS w/ @DjAshNYC | FREE HOOKAH + $99 BOTTLES + OPEN BAR FOR GIRLS B4 12 https://t.co/71LJbWFvXP"

Tobacco (no ecig) Pro – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/df7dj6lzM4

Tobacco (no ecig) Pro – YouTube 2
Hand-coded: Yes
Embeddable Link: https://youtu.be/OfG27GGNSJM

Tobacco (no ecig) Pro – YouTube 3
Hand-coded: Yes
Embeddable Link: https://youtu.be/uMsmFMN8sYc

Tobacco (no ecig) Pro – YouTube 4
Hand-coded: No
Embeddable Link: https://youtu.be/x5uhUV5KXBQ

Tobacco (no ecig) Pro – YouTube 5
Hand-coded: Yes
Embeddable Link: https://youtu.be/xunFOaHyp4A
Tobacco (no ecig) Anti
Note: For analysts of the dataset, the code for Tobacco (no ecig) Anti within the database for Twitter is “twtanti”. The YouTube code is “anti_tob”.

Tobacco (no ecig) tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_tanti”.

Tobacco (no ecig) Anti – Twitter 1
Hand-coded: No
ArticleID: 44036493
Tweet: "@cheeeseboiger https://t.co/rp7v0n6lYr a tobacco company wants to reduce its tax bill so it can sell more booze. Do you think this matters?"

Tobacco (no ecig) Anti – Twitter 2
Hand-coded: No
ArticleID: 56646922
Tweet: "RT @NonWhiteHat: Meanwhile Dems are running ads essentially saying Romney killed a man with cancer. Crickets. And let’s talk about this cyc..."

Tobacco (no ecig) Anti – Twitter 3
Hand-coded: Yes
ArticleID: 27382730
Tweet: "@EsotericIy: Fame is the thirst of youth  http://t.co/Tii7HKc4l4” I’m not about cigarettes and pills but I’ll take the broccoli and flour"

Tobacco (no ecig) Anti – Twitter 4
Hand-coded: Yes
ArticleID: 74031128
Tweet: "Marijuana is much safer than alcohol or tobacco, according to a new study - http://t.co/TimeOPDs6"

Tobacco (no ecig) Anti – Twitter 5
Hand-coded: No
ArticleID: 77470433
Tweet: "ratking: me, smoking 12 cigarettes at once: have u heard of quentin tarantino http://t.co/wJfzu6KyNw"

Tobacco (no ecig) Anti – Twitter 6
Hand-coded: Yes
ArticleID: 67665945
Tweet: "RT @Fact: One cigarette contains enough toxic ingredients to kill a person if those ingredients were directly injected into the bloodstream."

*Tobacco (no ecig) Anti – Twitter 7*
Hand-coded: Yes
ArticleID: 61050933

Tweet: "RT @Brilliant_Ads: One of the best anti-smoking adverts https://t.co/jause9jK7g"

*Tobacco (no ecig) Anti – Twitter 8*
Hand-coded: No
ArticleID: 37838240

Tweet: "This Is How I Deal With My Hurt. Beer, Liquor & Cigarettes http://t.co/0tUoZvm5qP"

*Tobacco (no ecig) Anti – Twitter 9*
Hand-coded: Yes
ArticleID: 39386864

Tweet: "RT @larentsnews: Louis met a fan and her mum was smoking so he told her we really need to quit this, don't we? why is he so cute"

*Tobacco (no ecig) Anti – Twitter 10*
Hand-coded: No
ArticleID: 48496905

Tweet: "my mouth tastes like cigs cause of u"

*Tobacco (no ecig) Anti – YouTube 1*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/6D6vbXH-tAc](https://youtu.be/6D6vbXH-tAc)

*Tobacco (no ecig) Anti – YouTube 2*
Hand-coded: Yes

*Tobacco (no ecig) Anti – YouTube 3*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/P1NlgydBXcA](https://youtu.be/P1NlgydBXcA)

*Tobacco (no ecig) Anti – YouTube 4*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/QoCsPfm8U6s](https://youtu.be/QoCsPfm8U6s)

*Tobacco (no ecig) Anti – YouTube 5*
Hand-coded: Yes
Ecig Pro
Note: For analysts of the dataset, the code for Ecig Pro within the database for Twitter is “twepro”.

E-cigarette tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “ecig_tweet_eupro”.

Ecig Pro – Twitter 1
Hand-coded: Yes
ArticleID: 60323395
Tweet: "metal world cup design drip tips For Ecig Atomizer 510 series... http://t.co/hFdZKRcJuS"

Ecig Pro – Twitter 2
Hand-coded: Yes
ArticleID: 15132592
Tweet: "SUMMER SALE - Vapologue   https://t.co/mkWR9r1noO #ecig"

Ecig Pro – Twitter 3
Hand-coded: Yes
ArticleID: 23466476
Tweet: "Facts About Vaping That Shut Down The Haters http://t.co/pMVzTGBu0h"

Ecig Pro – Twitter 4
Hand-coded: No
ArticleID: 46434437
Tweet: "Whenever I see anyone vaping I'm reminded of babies with dummies/pacifiers 😩"

Ecig Pro – Twitter 5
Hand-coded: Yes
ArticleID: 71651572
Tweet: "#vapeOn #SmokingKills #EatSleepVapeRepeat #KeepCalmAndVapeHard #vapecommunity #Vape #Vapor... http://t.co/Ne0GWZGjXk"

Ecig Pro – Twitter 6
Hand-coded: No
ArticleID: 55120744
Tweet: "RT @aaaamhim: $VDRM .012 #BIOTECH LOOK @ THE HUGE BID! STRONG TROOPS! $VAPE $BETS $VPOR $VPOR $LTNC $MYEC $TALK $TPAC $IPRU $LEAS https://t..."

Ecig Pro – Twitter 7
Hand-coded: Yes
ArticleID: 5307046
Tweet: "@BeyondVape Be sure to list your vape business on the vape directory!!
http://t.co/glgmEKbJcm"

Ecig Pro – Twitter 8
Hand-coded: No
ArticleID: 34343410
Tweet: "boys who vape&gt; http://t.co/eCt42UsLSA"

Ecig Pro – Twitter 9
Hand-coded: Yes
ArticleID: 34947638
Tweet: "Your Favorites from @unclejunks @vape3one with repostapp. • • • #Repost @vape3one with... https://t.co/Zf5ZqzpZ1db"

Ecig Pro – Twitter 10
Hand-coded: Yes
ArticleID: 60354429
Tweet: "Premium Electronic #Vapor Cigarette USB Charger (Female) https://t.co/MAZSESKG0T"

Ecig Pro – YouTube
Because virtually all videos that had ecig content contained pro-ecig content, a classifier was not developed for ecig valence. If you are interested in seeing examples of pro-ecig videos, please refer to the YouTube examples in the Ecig Individual Norms section of this document. As the overwhelming majority of ecig videos (96%) contained ecig individual norms, the videos included in this section are essentially a random selection of all ecig videos.

Ecig Anti
Note: For analysts of the dataset, the code for Ecig Anti within the database for Twitter is “tweanti”.

E-cigarette tweets
Note: For analysts of the dataset, the variable name within the dataset is “ecig_tweet_eanti”.

Ecig Anti – Twitter 1
Hand-coded: No
ArticleID: 23115616
Tweet: "why are e-cigs only for adults now? more kids are gonna try and get one you know"

Ecig Anti – Twitter 2
Hand-coded: Yes
ArticleID: 16553246
Tweet: "Cause of #indyref fire alarm in Dundee believed to be an e-cigarette
http://t.co/D1h8mYQe0m"

Ecig Anti – Twitter 3
Hand-coded: Yes
ArticleID: 75970967
Tweet: "RT @StopVaping: The main ingredient in e-juice is depression."

Ecig Anti – Twitter 4
Hand-coded: Yes
ArticleID: 1340959
Tweet: "RT @RipsEcig: *rips ecig* bro if you dont calm down i may have to suggest that you lower your nic level"

Ecig Anti – Twitter 5
Hand-coded: Yes
ArticleID: 55810928
Tweet: "@malackovxz I'm not cool enough to vape"

Ecig Anti – Twitter 6
Hand-coded: Yes
ArticleID: 71643535
Tweet: "’@MrBozzedUp: Vapes be having my stomach hurting” --- hookah used to make me light headed til I started using gel instead of shisha"

Ecig Anti – Twitter 7
Hand-coded: No
ArticleID: 3672866
Tweet: "@katiewaisse24 Cigarettes aren't fashionable. That's why I'm using an ecig to try to quit."

Ecig Anti – Twitter 8
Hand-coded: No
ArticleID: 75943874
Tweet: "RT @HolmesStrong: Maybe I'll start a Monday routine. Tried @builttowinusa Vaper this morning. Feeling awesome. Also... https://t.co/Jyy6Ww3tUD"

Ecig Anti – Twitter 9
Hand-coded: No
ArticleID: 61025909
Tweet: "#MedicalStudy BMJ study reveals vaping up as more smokers quit: A study by the British Medical Jou... https://t.co/HArqJfVIWI #AfyaKenya"
Ecig Anti – Twitter 10
Hand-coded: Yes
ArticleID: 34081953
Tweet: "RT @TheRealTyBeezy: Vaping has taken over this young man's life. #StopVaping2015
http://t.co/kxT23tKnEz"

Health
Note: For analysts of the dataset, the code for Health within the database for Twitter is “twhea”. The YouTube code is “health_pred”.
Tobacco (no ecig) tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_hea”.

Health – Tobacco (no ecig) – Twitter 1
Hand-coded: Yes
ArticleID: 48660641
Tweet: "Like cigarettes, do sin taxes cut into the sales of unhealthy sugary beverages?
https://t.co/Lpk12U3bxM"

Health – Tobacco (no ecig) – Twitter 2
Hand-coded: Yes
ArticleID: 86788963
Tweet: "RT @Fact: Study after study has found that marijuana is less harmful than alcohol and tobacco."

Health – Tobacco (no ecig) – Twitter 3
Hand-coded: Yes
ArticleID: 37632384
Tweet: "RT @Fact: Marijuana is illegal but has never caused any deaths from usage, Cigarettes kills millions and they are legal and can be purchase..."

Health – Tobacco (no ecig) – Twitter 4
Hand-coded: Yes
ArticleID: 79500248
Tweet: "How to Quit Smoking for a Healthier You? | Random Reflections &amp; Thoughts Blog
https://t.co/9qJ9xk14KE @connect2hcb"

Health – Tobacco (no ecig) – Twitter 5
Hand-coded: Yes
ArticleID: 3927623
Tweet: "RT @bhogleharsha: no tobacco day today? good day to quit smoking and get a life. only thing in the world i know that only harms and does no..."
Health – Tobacco (no ecig) – Twitter 6
Hand-coded: Yes
ArticleID: 57183605
Tweet: "RT @OMGFacts: Smoking isn't as bad for you as you might think. https://t.co/tPkiTrPAB"

Health – Tobacco (no ecig) – Twitter 7
Hand-coded: Yes
ArticleID: 48002959
Tweet: "RT @unbelievables91: Marijuana is illegal but has never caused any deaths from usage, Cigarettes kills millions and they are legal and can..."

Health – Tobacco (no ecig) – Twitter 8
Hand-coded: No
ArticleID: 20474874
Tweet: "Carelessly discarded cigarette causes porch fire in Jersey City: A carelessly discarded cigarette is to blame for... http://t.co/2LwFW9h7Ey"

Health – Tobacco (no ecig) – Twitter 9
Hand-coded: No
ArticleID: 35750307
Tweet: "Just backwoods & back strokes 😁"

Health – Tobacco (no ecig) – Twitter 10
Hand-coded: Yes
ArticleID: 64015512
Tweet: "Smokeless #tobacco is anything but harmless. Drop the dip -- drop the risk. https://t.co/AGxu5Jz8Xc ≠ #DropTheDip... https://t.co/idpcOp3J3i"

Health – Tobacco (no ecig) – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/59PILONo8FI

Health – Tobacco (no ecig) – YouTube 2
Hand-coded: No
Embeddable Link: https://youtu.be/IgTPadEEn8U

Health – Tobacco (no ecig) – YouTube 3
Hand-coded: Yes
Embeddable Link: https://youtu.be/I3d_bHT7Sbc
Health – Tobacco (no ecig) – YouTube 4
Hand-coded: No
Embeddable Link: https://youtu.be/Y8ISix8rcHw

Health – Tobacco (no ecig) – YouTube 5
Hand-coded: Yes
Embeddable Link: https://youtu.be/zFTV7pf7AKQ

E-cigarette tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “ecig_SOURCE_hea”.

Health – Ecig – Twitter 1
Hand-coded: Yes
ArticleID: 51822354
Tweet: "Young adults using e-cigarettes because they believe they're 'healthier' than traditional cigarettes:... https://t.co/B7xE3O2li6 #esafety"

Health – Ecig – Twitter 2
Hand-coded: Yes
ArticleID: 16629174
Tweet: "RT @NEJM: Chemical analysis of e-cigs' vapor show high levels of formaldehyde. Authors project higher cancer risk than smoking. http://t.co..."

Health – Ecig – Twitter 3
Hand-coded: Yes
ArticleID: 84575803
Tweet: "hanban_nyan Cigarettes is healthier than vape, I know because I'm a doctor https://t.co/VCrF7po19v #ecigvapeshop #vape #ecig"

Health – Ecig – Twitter 4
Hand-coded: Yes
ArticleID: 75929928
Tweet: "RT @emilykenway: Article in Evening Standard: the full dangers of vaping are still not known. Let's be honest, the main danger is looking..."

Health – Ecig – Twitter 5
Hand-coded: Yes
ArticleID: 49076792
Tweet: "Absolutely loving this. Just realised its a 6mg. Bit of coughing but flavour still there 👌🏻 @demonvaper https://t.co/XsbQko9sEe"
Health – Ecig – Twitter 6
Hand-coded: Yes
ArticleID: 60117902
Tweet: "The vehement opposition to #vaping from #TobaccoConTrol terrorists is evidence enough that #ecigs are #harmless & e... https://t.co/OkDM22CPg2"

Health – Ecig – Twitter 7
Hand-coded: Yes
ArticleID: 53466186
Tweet: "#vape American Thoracic Society Lies to Public, Claiming that Smoking is No More Hazardous t... https://t.co/2WyU0RR3pU #ecigarette #ecig"

Health – Ecig – Twitter 8
Hand-coded: No
ArticleID: 47637867
Tweet: "@SimoneHameister @saramayspary on behalf of people with asthma sharing that air, I can honestly say vaping is so much worse than cigs."

Health – Ecig – Twitter 9
Hand-coded: Yes
ArticleID: 34091072
Tweet: "@Jonathan__Leake @F3zzer @Clive_Bates @sarahknapton I don't know any vapers who don't support other forms of harm reduction."

Health – Ecig – Twitter 10
Hand-coded: Yes
ArticleID: 45576724
Tweet: "UK doctors say vaping saves lives https://t.co/ayZnlETVKL"

Health – Ecig – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/0UP_px89EKE

Health – Ecig – YouTube 2
Hand-coded: Yes
Embeddable Link: https://youtu.be/g3572G_JNoE

Health – Ecig – YouTube 3
Hand-coded: Yes
Embeddable Link: https://youtu.be/H54SU0piSoE
Health – Ecig – YouTube 4
Hand-coded: Yes
Embeddable Link: https://youtu.be/haqi4xvjvKo

Health – Ecig – YouTube 5
Hand-coded: Yes
Embeddable Link: https://youtu.be/YP_YbYdh758

Policy
Note: For analysts of the dataset, the code for Policy within the database for Twitter is “twpol”. The YouTube code is “policy_pred”.

Tobacco (no ecig) tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_pol”.

Policy – Tobacco (no ecig) – Twitter 1
Hand-coded: Yes
ArticleID: 77200198
Tweet: "RT @kfvsnews: The FDA banned sales of four cigarette brands. http://t.co/ibEPPrRjpC http://t.co/UshdtPKweA"

Policy – Tobacco (no ecig) – Twitter 2
Hand-coded: Yes
ArticleID: 38442590
Tweet: "Shopkeeper secretly filmed selling alcohol and tobacco to underage girl | Bristol Post http://t.co/hbRPyJvo0I via @BristolPost"

Policy – Tobacco (no ecig) – Twitter 3
Hand-coded: Yes
ArticleID: 99011115
Tweet: "RT @RovinNation: Police: Why do you have cigarettes? You’re underage. Boy: It's a metaphor. See, you put the killing th- Police : CB GIVE..."

Policy – Tobacco (no ecig) – Twitter 4
Hand-coded: Yes
ArticleID: 63220471
Tweet: "RT @gulf_news: VAT in UAE: Gold jewellery, tobacco to be taxed https://t.co/uWgsf9lrN4"

Policy – Tobacco (no ecig) – Twitter 5
Hand-coded: Yes
ArticleID: 85807661
Tweet: "RT @AManInTheSun: You live in a country where a black man was choked to death in the street for selling untaxed cigarettes. Take mult..."

*Policy – Tobacco (no ecig) – Twitter 6*
Hand-coded: Yes
ArticleID: 59342512

Tweet: "Obama eases restrictions on Cuba, lifts limits on rum and cigars  https://t.co/QuVAGZlC1a"

*Policy – Tobacco (no ecig) – Twitter 7*
Hand-coded: Yes
ArticleID: 83198475

Tweet: "RT @psychological: Marijuana is illegal but has never caused any deaths from usage, Cigarettes kills millions and they are legal and can be..."

*Policy – Tobacco (no ecig) – Twitter 8*
Hand-coded: Yes
ArticleID: 43278727

Tweet: "Big loss for big tobacco - Australia wins legal battle with Philip Morris over plain packaging  https://t.co/BZGr1dpS0"

*Policy – Tobacco (no ecig) – Twitter 9*
Hand-coded: Yes
ArticleID: 86654038

Tweet: "interstate plaza, 42 - underage tobacco violation"

*Policy – Tobacco (no ecig) – Twitter 10*
Hand-coded: Yes
ArticleID: 43860850

Tweet: "RT @California24x7: Tom Steyer donates $1 million to California initiative to raise tobacco tax - Los Angeles Times https://t.co/NaVcMgg2Cx"

*Policy – Tobacco (no ecig) – YouTube 1*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/2ZC8MhVcv1Y](https://youtu.be/2ZC8MhVcv1Y)

*Policy – Tobacco (no ecig) – YouTube 2*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/68af6eUWNlk](https://youtu.be/68af6eUWNlk)

*Policy – Tobacco (no ecig) – YouTube 3*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/xkyGf1dHdh8](https://youtu.be/xkyGf1dHdh8)

### Policy – Tobacco (no ecig) – YouTube 4
Hand-coded: Yes

Embeddable Link: [https://youtu.be/yQUZGfEOQHo](https://youtu.be/yQUZGfEOQHo)

### Policy – Tobacco (no ecig) – YouTube 5
Hand-coded: Yes

Embeddable Link: [https://youtu.be/zSq9iqal2cA](https://youtu.be/zSq9iqal2cA)

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**E-cigarette tweets/videos**

Note: For analysts of the dataset, the variable name within the dataset is “ecig_SOURCE_pol”.

### Policy – Ecig – Twitter 1
Hand-coded: Yes

ArticleID: 41357376

Tweet: "Vape’s regulations shouldn’t be stricter than cigarettes” - Rakyat Post [https://t.co/oX4giEVocT](https://t.co/oX4giEVocT) | @drwanazizah perlu fahami tobacco control"

### Policy – Ecig – Twitter 2
Hand-coded: Yes

ArticleID: 21468106

Tweet: "Pennsylvania’s High Vaping Tax Needs to Go [https://t.co/SoV3z6gr9f](https://t.co/SoV3z6gr9f) #vapers #vape #vapelife #vaping"

### Policy – Ecig – Twitter 3
Hand-coded: No

ArticleID: 54874531

Tweet: "RT @mihotep:. @fox25news #publichealth hero that driver using #harmless #vaping! See it as a free PSA helping kids avoid #smoking [https://t.co/...](https://t.co/...)

### Policy – Ecig – Twitter 4
Hand-coded: Yes

ArticleID: 34588201

Tweet: "RT @DrippinDuchess: National Call to Action: Tell the White House to urge FDA to re-work the deeming regulations so that [https://t.co/OeofO...](https://t.co/OeofO...)

### Policy – Ecig – Twitter 5
Hand-coded: No

ArticleID: 78010783

Tweet: "RT @NovaScotiaLive: And to think that I trusted & respected #PublicHealth before I quit smoking with #ecigs. Silly me."
Policy – Ecig – Twitter 6
Hand-coded: Yes
ArticleID: 74884047
Tweet: "RT @ArtByLisabelle: .CASAA: FDA Call to Action: Submit Comments on FDA’s Propo...
https://t.co/qT5Ya3eCFM #notblowingsmoke #tagsup #vape #ec..."

Policy – Ecig – Twitter 7
Hand-coded: Yes
ArticleID: 74771412
Tweet: "RT @philgambaccini: California initiative would introduce tax on e-cigarettes and raise current
#taxes on regular cigarettes https://t.co/2...

Policy – Ecig – Twitter 8
Hand-coded: Yes
ArticleID: 73703441
Tweet: "RT @vapemestroopid: This makes my blood boil were #notblowingsmoke &amp; this is tax
dollars hiring KIDS to vape. http://t.co/7l0PHxam37 #stillb...

Policy – Ecig – Twitter 9
Hand-coded: Yes
ArticleID: 44818160
Tweet: "@VapingAlliance @MaungakiekieSAM @jcolemanmp common sense #vaping law, a great credit
to those involved. Strategic thinking against tobacco."

Policy – Ecig – Twitter 10
Hand-coded: Yes
ArticleID: 47077679
Tweet: "Massachusetts State Senator Takes Aim At Vaping https://t.co/KPVZdkLit0 #vape"

Policy – Ecig – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/nQfy4DSeT_Q

Policy – Ecig – YouTube 2
Hand-coded: No
Embeddable Link: https://youtu.be/0d5ML-wxYnl

Policy – Ecig – YouTube 3
Hand-coded: Yes
Embeddable Link: https://youtu.be/wCovEH7cnmc
Policy – Ecig – YouTube 4
Hand-coded: Yes
Embeddable Link: https://youtu.be/yKKx0aqBL2A

Policy – Ecig – YouTube 5
Hand-coded: No
Embeddable Link: https://youtu.be/yXl6qAoM5tw

Addiction
Note: For analysts of the dataset, the code for Addiction within the database for Twitter is “twadd”. The YouTube code is “addiction_pred”.

Tobacco (no ecig) tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_add”.

Addiction – Tobacco (no ecig) – Twitter 1
Hand-coded: Yes
ArticleID: 61931485
Tweet: "RT @MiraFaiza: Bertudung/tak. Laki/perempuan. Smoking is not good and everyone should quit this habit already. https://t.co/20SgNeJeWu"

Addiction – Tobacco (no ecig) – Twitter 2
Hand-coded: Yes
ArticleID: 36224689
Tweet: "Are you a Cigarette? Coz I keep craving for you.... 😊 cheyyy FUCK YOU...

Addiction – Tobacco (no ecig) – Twitter 3
Hand-coded: Yes
ArticleID: 65260842
Tweet: "S.O.S #fwa2017 I need cigarettes or else I'll be a massive cunt and no one wants that. Or they do. Who wants a massive cunt?"

Addiction – Tobacco (no ecig) – Twitter 4
Hand-coded: Yes
ArticleID: 61424429
Tweet: "@ManteyDS Where are the never smoking nicotine addicts? You still haven't shown me it's happening on even a small scale."

Addiction – Tobacco (no ecig) – Twitter 5
Hand-coded: Yes
ArticleID: 24975530
Tweet: "My wife cigarette addiction is embarrassing me ከሉወ ከአው በማስቀመጡ እንወት ከወጣ የወጣ በተመራ እየተረም ከሚስተ ከም- http://t.co/sveQaEDb2x"

*Addiction – Tobacco (no ecig) – Twitter 6*
Hand-coded: Yes
ArticleID: 14568192

Tweet: "RT @Wdekanter: Report Details How Tobacco Companies Have Made Cigarettes More Addictive,More Attractive to Kid @VNONCW @JudithKatz http:/...

*Addiction – Tobacco (no ecig) – Twitter 7*
Hand-coded: No
ArticleID: 26920887

Tweet: "RT @Scott__Cooper: These You Can Quit smoking commercials are brutal 😷"

*Addiction – Tobacco (no ecig) – Twitter 8*
Hand-coded: Yes
ArticleID: 62977789

Tweet: "RT @billmaher: The tycoons of social media have to admit they’re just tobacco farmers in t-shirts, selling an addictive product to..."

*Addiction – Tobacco (no ecig) – Twitter 9*
Hand-coded: Yes
ArticleID: 61196538

Tweet: "your lips were like cigarettes and I got addicted. But the ashes burned out, like I had predicted."

*Addiction – Tobacco (no ecig) – Twitter 10*
Hand-coded: Yes
ArticleID: 57900637

Tweet: "Quit Smoking in 1hr 95% success. D&amp;A addictions|Stress|Insomnia|Depression|Anxiety|Weight loss $30 off any pkg. https://t.co/LGivSj9Ov0"

*Addiction – Tobacco (no ecig) – YouTube 1*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/CX9vpjA3BWg](https://youtu.be/CX9vpjA3BWg)

*Addiction – Tobacco (no ecig) – YouTube 2*
Hand-coded: Yes
Embeddable Link: [https://youtu.be/KAFA7nSHTj4](https://youtu.be/KAFA7nSHTj4)

*Addiction – Tobacco (no ecig) – YouTube 3*
Hand-coded: Yes

*Addiction – Tobacco (no ecig) – YouTube 4*
Hand-coded: Yes

Embeddable Link: [https://youtu.be/QoCsPfm8U6s](https://youtu.be/QoCsPfm8U6s)

*Addiction – Tobacco (no ecig) – YouTube 5*
Hand-coded: Yes

Embeddable Link: [https://youtu.be/wxuFYxyey9XY](https://youtu.be/wxuFYxyey9XY)

**E-cigarette tweets/videos**

Note: For analysts of the dataset, the variable name within the dataset is “ecig_SOURCE_add”.

*Addiction – Ecig – Twitter 1*
Hand-coded: No

ArticleID: 23889126
Tweet: "Gotta give a big thank you and shout out to my boys at vaperkingsindy for hooking me up with my new... http://t.co/VGcI6uilY6"

*Addiction – Ecig – Twitter 2*
Hand-coded: No

ArticleID: 4601913
Tweet: "RT @KirkoBangz: Big thanks to @VapeWorld for hooking it up! Check out http://t.co/XElTiXtwlEy for some cool stuff and watch my FB page for a..."

*Addiction – Ecig – Twitter 3*
Hand-coded: No

ArticleID: 69650811
Tweet: "Healthy way to kick the cigarette habit. #vaping #ecigs #eliquid #healthyAlternative * http://t.co/SetxmS0TtM"

*Addiction – Ecig – Twitter 4*
Hand-coded: Yes

ArticleID: 84502876
Tweet: "Nicotine in E-Cigs Can Trigger Lifelong Addiction in Kids: Docs #health https://t.co/OVMPqoUqWe"

*Addiction – Ecig – Twitter 5*
Hand-coded: Yes

ArticleID: 65176077
Tweet: "RT @landry_gonwick: took my friends vape because it is addictive and unhealthy. now he's acting like he can't breathe because i won't g... "
Addiction – Ecig – Twitter 6
Hand-coded: Yes
ArticleID: 48831309
Tweet: "Need a new dessert blend to satisfy your vape cravings? Adelie is what you need in your life! Get a hold of this... https://t.co/AixCJY4iRN"

Addiction – Ecig – Twitter 7
Hand-coded: Yes
ArticleID: 102787805
Tweet: "RT @BuckyIsotope: *exhales vapor* *crushes another eCig in the ashtray* Man this habit is expensive"

Addiction – Ecig – Twitter 8
Hand-coded: Yes
ArticleID: 35226924
Tweet: "RT @TweetGameLazy: How much wood could a woodchuck chuck if a woodchuck wasnt addicted to smoking vape pens"

Addiction – Ecig – Twitter 9
Hand-coded: Yes
ArticleID: 29248654
Tweet: "@badgerH531 Still use..addicted. E-cigs."

Addiction – Ecig – Twitter 10
Hand-coded: Yes
ArticleID: 79964607
Tweet: "RT @StopVaping: How many vape addicts does it take to screw in a light bulb? Zero because there's no lights in hell."

Addiction – Ecig – YouTube 1
Hand-coded: No
Embeddable Link: https://youtu.be/-UrdhD2msaA

Addiction – Ecig – YouTube 2
Hand-coded: No
Embeddable Link: https://youtu.be/aQckjBjxCls

Addiction – Ecig – YouTube 3
Hand-coded: Yes
Embeddable Link: https://youtu.be/iVVXiQiZVWA
**Addiction – Ecig – YouTube 4**
Hand-coded: No
Embeddable Link: [https://youtu.be/V6aWYybAvYw](https://youtu.be/V6aWYybAvYw)

**Addiction – Ecig – YouTube 5**
Hand-coded: No
Embeddable Link: [https://youtu.be/weOSmEP7xaE](https://youtu.be/weOSmEP7xaE)

**Youth**
Note: For analysts of the dataset, the code for Youth within the database for Twitter is “twyou”. The YouTube code is “youth_pred”.

**Tobacco (no ecig) tweets/videos**
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_you”.

**Youth – Tobacco (no ecig) – Twitter 1**
Hand-coded: No
ArticleID: 3885943
Tweet: "@LessisMORgan yo how much does your boy sell Cuban Cohibas for again?"

**Youth – Tobacco (no ecig) – Twitter 2**
Hand-coded: Yes
ArticleID: 62750658
Tweet: "Video: "5 things to know about youth tobacco use, according to the CDC”
https://t.co/sT7ArfWyQT"

**Youth – Tobacco (no ecig) – Twitter 3**
Hand-coded: Yes
ArticleID: 64696271
Tweet: "@zoe_austen No more cigarette buts littered all over campus..."

**Youth – Tobacco (no ecig) – Twitter 4**
Hand-coded: Yes
ArticleID: 43150261
Tweet: "RT @WHO: Films showing smoking scenes should be rated to protect children from tobacco addiction https://t.co/s9nnrO4Jx7 https://t.co/6MfLF..."

**Youth – Tobacco (no ecig) – Twitter 5**
Hand-coded: No
ArticleID: 8543682
Tweet: "Technicians  (£16,500-£18,500 pro rata depending on experience.): Tobacco Factory Theatres is looking for two ...
http://t.co/87s66jUf5G"
Youth – Tobacco (no ecig) – Twitter 6
Hand-coded: Yes
ArticleID: 52518185
Tweet: "@cnnphilippines President @rrd_davao shd completely ban alcohol and cigarette advertisements and ads targeting young people."

Youth – Tobacco (no ecig) – Twitter 7
Hand-coded: Yes
ArticleID: 78994521
Tweet: "RT @moeswaidan: I'm 18 years old and I haven't smoked a single cigarette in my life. But now I regret it because Manchester United gave me c..."

Youth – Tobacco (no ecig) – Twitter 8
Hand-coded: No
ArticleID: 17556142
Tweet: "Kids work on Tennessee's tobacco farms with few protections - Like his big brother before him, Gabino Luna crossed... http://t.co/lq8k9AB0YP"

Youth – Tobacco (no ecig) – Twitter 9
Hand-coded: Yes
ArticleID: 24290259
Tweet: "RT @PublicHealth: Study: Hookah & snus use may lead youth to take up cigarette smoking: http://t.co/Dlc5a0pafP"

Youth – Tobacco (no ecig) – Twitter 10
Hand-coded: Yes
ArticleID: 64611215
Tweet: "RT @PaperWash: 18: can I smoke this joint? USA: no, it's not healthy 18: what about cigarettes? USA: as much as you want as long as you..."

Youth – Tobacco (no ecig) – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/GlEi-u77kwM

Youth – Tobacco (no ecig) – YouTube 2
Hand-coded: No
Embeddable Link: https://youtu.be/ImlG7Q0dJOk

Youth – Tobacco (no ecig) – YouTube 3
Hand-coded: No
E-cigarette tweets/videos

Note: For analysts of the dataset, the variable name within the dataset is “ecig_SOURCE_you”.

Youth – Ecig – Twitter 1
Hand-coded: Yes
ArticleID: 84715092
Tweet: "RT @Twigolet: A nice graphic on youth use of ecigs.. #ecigsymmit https://t.co/trSR5tYwG6"

Youth – Ecig – Twitter 2
Hand-coded: No
ArticleID: 53831710
Tweet: "@VeryGummy @Clive_Bates @allchildrens Kids don't belong in the discussion of ecigs &amp; Vaping. Only exception, save the parents lives for kids"

Youth – Ecig – Twitter 3
Hand-coded: No
ArticleID: 41715276
Tweet: "Vape life boy😊"

Youth – Ecig – Twitter 4
Hand-coded: No
ArticleID: 65160465
Tweet: "RT @mellohorn21: People who vape at parties are the kids who would flip their eyelids in elementary school"

Youth – Ecig – Twitter 5
Hand-coded: Yes
ArticleID: 54322280
Tweet: ".@AAPCC: #ecigs exposure to kids concerning. Normal taste of cigs deter kids but #ecigs flvrs (ex. apple&amp;grape) dont https://t.co/t03n74aZ0k"

Youth – Ecig – Twitter 6
Hand-coded: Yes
ArticleID: 16482035
Tweet: "RT @ASH_LDN: Press release: New survey finds regular use of electronic cigarettes by children still rare  http://t.co/I5kKsDxrvB #ecigs"

Youth – Ecig – Twitter 7
Hand-coded: No

ArticleID: 82758528
Tweet: "@hugegrl it's gross. &amp;&amp; yeah bc most kids get their tobacco from cigs so it's nicotine. I don't get the hype around it TBH"

Youth – Ecig – Twitter 8
Hand-coded: Yes

ArticleID: 84493317
Tweet: "Liberals to regulate e-cigarettes to help shield young people from addiction https://t.co/b4I5MTFcpp https://t.co/0UvfXVi4SW"

Youth – Ecig – Twitter 9
Hand-coded: No

ArticleID: 19727986
Tweet: "Vicks Warm Steam Vaporizer 1.5 Gallon 18-24 Hours Of Operation Brand New http://t.co/RH9djdrBpi #vape #vaporizer #vapejuice"

Youth – Ecig – Twitter 10
Hand-coded: Yes

ArticleID: 79188118
Tweet: "*raises hand in class* Can i use my vape pen to write?"

Youth – Ecig – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/0_2g5rPY9Yo

Youth – Ecig – YouTube 2
Hand-coded: No
Embeddable Link: https://youtu.be/duLBC3izLzg

Youth – Ecig – YouTube 3
Hand-coded: No
Embeddable Link: https://youtu.be/ECINvSs2-yE

Youth – Ecig – YouTube 4
Hand-coded: Yes
Youth – Ecig – YouTube 5
Hand-coded: Yes

Embeddable Link: https://youtu.be/grUGZrdSIAk

Youth – Ecig – YouTube 5
Hand-coded: Yes

Embeddable Link: https://youtu.be/T9odC8TeJuQ

Tobacco (no ecig) Individual Norms
Note: For analysts of the dataset, the code for Tobacco (no ecig) Individual Norms within the database for Twitter is “twtindnorm”. The YouTube code is “tob_pu”.

Tobacco (no ecig) tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “tobnoecig_SOURCE_tindnorm”.

Tobacco (no ecig) Individual Norms – Twitter 1
Hand-coded: No

ArticleID: 55777259
Tweet: "It ain't like midnight and cigarette smoke"

Tobacco (no ecig) Individual Norms – Twitter 2
Hand-coded: No

ArticleID: 85802980
Tweet: "i feel Cig would have slaughtered"

Tobacco (no ecig) Individual Norms – Twitter 3
Hand-coded: Yes

ArticleID: 7682070
Tweet: "Here smoking fine cigars and drinking shitty cigars."

Tobacco (no ecig) Individual Norms – Twitter 4
Hand-coded: Yes

ArticleID: 22245650
Tweet: "@TatuajeCigars one of my favorites. Real cigar lover's cigar. Keep up the great work!"

Tobacco (no ecig) Individual Norms – Twitter 5
Hand-coded: Yes

ArticleID: 82332114
Tweet: "@King_Jahleel sumn like hooka?"

Tobacco (no ecig) Individual Norms – Twitter 6
Hand-coded: Yes

ArticleID: 74450295
Tweet: "Dakota is my savior right now for giving me a cig 😍💯"
Tobacco (no ecig) Individual Norms – Twitter 7
Hand-coded: Yes
ArticleID: 19792619
Tweet: "Bab pass me the hookah"

Tobacco (no ecig) Individual Norms – Twitter 8
Hand-coded: No
ArticleID: 83565893
Tweet: "RT @geotaha: Cigarette is a pinch of tobacco rolled in a piece of paper with fire on one end and a fool on the other end... Robert Mugabe"

Tobacco (no ecig) Individual Norms – Twitter 9
Hand-coded: Yes
ArticleID: 7656890
Tweet: "RT @ChrissyD0610: when he smokes black n milds , cigs pops perks , eats chicken boxes , half washes with zest , doesn't shave n wants... “

Tobacco (no ecig) Individual Norms – Twitter 10
Hand-coded: No
ArticleID: 86913136
Tweet: "Pass em like a cig , short em up"

Tobacco (no ecig) Individual Norms – YouTube 1
Hand-coded: Yes
Embeddable Link: https://youtu.be/-C0ky1C6ylg

Tobacco (no ecig) Individual Norms – YouTube 2
Hand-coded: Yes
Embeddable Link: https://youtu.be/gRDp_kAkJIM

Tobacco (no ecig) Individual Norms – YouTube 3
Hand-coded: Yes
Embeddable Link: https://youtu.be/q-Vmqz0IUi0

Tobacco (no ecig) Individual Norms – YouTube 4
Hand-coded: Yes
Embeddable Link: https://youtu.be/RwtLL-ctLwo

Tobacco (no ecig) Individual Norms – YouTube 5
Hand-coded: Yes
Embeddable Link: https://youtu.be/u1DhwxgZNUE
E cigarette tweets/videos
Note: For analysts of the dataset, the variable name within the dataset is “ecig_SOURCE_eindnorm”.

E cigarette tweets/videos
Note: For analysts of the dataset, the code for Ecig Individual Norms within the database for Twitter is “tweindnorm”. The YouTube code is “ecig_pu”.

Ecig Individual Norms - Twitter 1
Hand-coded: Yes
ArticleID: 26012925
Tweet: "@WorldStarComedy: doctor: do you smoke at all? me: no but i vape doctor: oh okay *doctor writes fuckin loser on clipboard* lmaoooo"

Ecig Individual Norms - Twitter 2
Hand-coded: No
ArticleID: 46943743
Tweet: "Revised opinion on vaping in public buildings - casinos are one place I wouldn't mind. Smoke so stinky. 🙄"

Ecig Individual Norms - Twitter 3
Hand-coded: Yes
ArticleID: 4334969
Tweet: "Blowin kush and hittin vape pens"

Ecig Individual Norms - Twitter 4
Hand-coded: Yes
ArticleID: 44910618
Tweet: "I cannot wait to get my vape fixed"

Ecig Individual Norms - Twitter 5
Hand-coded: Yes
ArticleID: 60320234
Tweet: "RT @webgemvapors: Rt if you wish you were vaping right now"

Ecig Individual Norms - Twitter 6
Hand-coded: No
ArticleID: 10881656
Tweet: "@JBezpa: ""@Things4WhitePpl: Vaping""@Epierson3 @DeejayYOF @jeffsosteezy @derajl"

Ecig Individual Norms - Twitter 7
Hand-coded: No
ArticleID: 54577297
Tweet: "DEMO DAY! June 9th Thursday 4PM-7PM Temple Extracts vape cartridges will be at CAC to talk about their product! Don't miss out!"

*Ecig Individual Norms – Twitter 8*
Hand-coded: Yes
ArticleID: 11040262
Tweet: "@Mr_Carterr You and vape are cute"

*Ecig Individual Norms – Twitter 9*
Hand-coded: Yes
ArticleID: 46820104
Tweet: "If I get cut off by one more douchebag vaping in his Honda Civic I'm going to lose my mind"

*Ecig Individual Norms – Twitter 10*
Hand-coded: No
ArticleID: 16739651
Tweet: "RT @JoyetechUK: Joyetech UK are pleased to announce a sponsorship with @VapourtrailsTV Tune in tonight at 9pm to catch up on the latest in ..."

*Ecig Individual Norms – YouTube 1*
Hand-coded: Yes
Embeddable Link: https://youtu.be/8zRkA_nDfrE

*Ecig Individual Norms – YouTube 2*
Hand-coded: Yes
Embeddable Link: https://youtu.be/cebbAm8UTCU

*Ecig Individual Norms – YouTube 3*
Hand-coded: Yes
Embeddable Link: https://youtu.be/k5BTWuvXveU

*Ecig Individual Norms – YouTube 4*
Hand-coded: Yes
Embeddable Link: https://youtu.be/pEviyefB0W8

*Ecig Individual Norms – YouTube 5*
Hand-coded: Yes
Embeddable Link: https://youtu.be/rtszHE_gOmw