Electronic Cigarettes and Twitter: Sentiments, Categorization, and Hedonometrics
Eric M. Clark,2,4,5, Chris Jones5,8,9, Diann Gaalena,7,8, Ryan Redner6,8, Thomas J. White6,8, Allison Kurb6,8, Andrew Schneider,4, Marion Couch,3,9, Peter Dodds1,2,3,4, and Chris Danforth1,2,3,4

Abstract

Blindly evaluating a or is it a hotly debated debate, in addicion to the traditional tobacco products are. The advantages include the potential to hold a safe alternative to smoking, with various types of users (e.g., smokers, users of alternative nicotine delivery systems) emerging in the US and globally. This is despite the warnings for the health benefits. The health risks, marketing regulations, and the potential of these devices as a form of tobacco replacement therapy are largely unmet in some countries. Currently, there is limited evidence regarding safety. A systematic review of evidence regarding safety found increased odds of respiratory symptoms and exacerbations of asthma. A trend toward increased cardiovascular risk has also been observed. The evidence for the health-related outcomes is limited, and further research is needed.

Hedonometrics: Measuring the Happiness of a Text

US Geo-tagged Ecig Tweets: March-August 2014

Categorical Word-Shifts: Sentiments over Time

Categorical Time Series Correlations: Sentiments and Counts

Spearman Monthly Frequency Correlations

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3.2013 Daily Resolution: Political Responses to Ecig Regulation

Each categorical time series exhibits a severe negative trend occurring in 2013. Observing tweets at the daily resolution for organic users, a spike in the frequency distribution occurred in December 2013. There is some relationship between the average happiness daily scores during the two key periods. This span was during the time that the EU issued a decision on the so-called ‘triple ban’, which banned the drug nicotine, which is an ingredient in Ecigs.

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References

For a complete list of references, please see the online version of this paper.

Footnotes

1. USGeo-Tweets is a high-dimensional distribution of the 2014 United States Tweet users. The authors used a geo-tagging solution to extract a set of tweets from each state, with varying degrees of success. The overall goal was to have an equal number of tweets from each state, with at least 100 tweets per state.

2. The Emotional Space was created by the Computational Story Lab, which is a collaboration between the University of Vermont and the University of California, Berkeley.

3. The Ecig Categorical Tweet Happiness Distributions were created by the Computational Story Lab, which is a collaboration between the University of Vermont and the University of California, Berkeley.

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