

E-Cigarettes and Twitter

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HUMAN DYNAMICS
IN THE MOBILE AGE

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- Ming-Hsiang Tsou, Ph.D.

SOCIAL MEDIA

- Sentiments about range of health topics (Alvaro et al., 2015; Krauss et al., 2015)
- E-cigarettes and positive sentiment on Twitter (Godea et al., 2015; Myslin et al., 2013)

SOCIAL MEDIA

- Awareness and use of e-cigarettes rising (CDC, 2015)
- Carcinogens?
- Gateway?
- Renormalization?

SOCIAL MEDIA

- Content analyses in prior research (e.g., Godea et al., 2015; Myslin et al., 2013; Colditz et al., 2017)
- Geocoded tweets?
- Potential robot accounts?

RESEARCH QUESTIONS

RQ1: What are the a) current sentiments and b) information around e-cigarette use discussed by Twitter users?

RQ2: What are the source characteristics of Twitter users who are discussing e-cigarettes?

RQ3: Are Twitter users discussing respiratory health effects associated with e-cigarette use?

METHODS

- SMART Dashboard (Tsou et al., 2015)
- 193,051 geocoded tweets within the U.S. boundary collected between October 28, 2015 and February 6, 2016 that mentioned e-cigarettes
- Random sample of 1,000 tweets
 - 27 removed
 - Final analytical sample of 973 tweets
- Keywords: Vaping, Vape, Vaper, Vapers, Vapin, Vaped, Evape, Vaporizing, e-cig*, ecig*, e-pen, epen, e-juice, ejuice, e-liquid, or eliquid (Cole-Lewis et al., 2015; Huang et al., 2014)

METHODS

- Development of codebook
 - Knowledge and sentiment (Cole-Lewis et al., 2015; Coleman et al., 2015)
 - Public health variables (Buhi et al., 2016; Madden et al., 2012; Briones et al., 2012; Quintero et al., 2011)
 - Potential robot accounts

RESULTS/DISCUSSION

- Positive sentiment prevalent (Godea et al., 2015; Myslin et al., 2013; Colditz et al., 2017)
 - Sizeable portion of tweets neutral
 - Opportunity for intervention
- Public health voice needed
- Potential robot accounts
 - Cautionary tale

LIMITATIONS

- Only geocoded tweets
- Information made available by users
- Background characteristics not included

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