

Public Health Science Academy, summer 2023 research project
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Broad topic: Nicotine and Tobacco Misinformation on Social Media

Project title: Exploring Misinformation about Nicotine and Tobacco Products on YouTube

Background: Approximately 3 million youth report using nicotine and tobacco products (NTPs), with 1/3 of them using 2 or more products (Park-Lee, 2022). These products are heavily advertised on social media, both by tobacco companies and influencers (O'Brien et al., 2020; Vassey et al., 2022). Research has found that information about NTPs on social media often contain misinformation and could lead to youth being willing to try these products (Sidani et al., 2022). However, we need more in-depth examinations of misinformation on specific youth-oriented social media platforms.

Research question/Hypothesis (whichever is applicable): *What types of misinformation exist on YouTube about nicotine and tobacco products?*

Objective 1. Determine the appropriate search terms for finding YouTube videos about NTPs.

Rationale: Although some studies have examined NTP content on YouTube, this research is outdated and not informed by youth (Carroll et al., 2013). Our team has found that youth and adults use different terminology when discussing NTPs. Thus, the YouTube videos being analyzed by research teams may not be the most applicable to youth. To address this, we are working with a Youth Collaborative of young people ages 13-17 to serve as scientific partners, ensuring that their voices are included in our research.

Approach: With input from our Youth Collaborative, we will determine the best search terms (i.e., *vape, nic, elfbar*) to collect videos from YouTube. We will develop a search strategy to access and download YouTube full-length videos and short videos to be analyzed in Objective 2.

Objective 2. Determine to what extent the collected YouTube videos contain potential misinformation.

Rationale: Research indicates that there is substantial misinformation about a variety of health topics on social media, including NTPs. However, there is little research that specifically examines to what extent this pertains to misinformation about NTPs on YouTube.

Approach: We will develop a codebook that is informed by our previous work, the current literature, and a preliminary examination of the data. Potential coding categories will include sentiment (i.e., positive or negative views about nicotine and tobacco), identifying information that is potentially misinformation, and the techniques used to present misinformation (i.e., personal stories that cannot be verified, attacks on researchers or medical professionals). This codebook will be applied to the YouTube dataset collected in Objective 1 and themes will be identified.

References

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