

# Tracking Exposure to Ads Amidst COVID-19: Development of a Public Google Ads Dataset

Reham Al Tamime, Ingmar Weber

Submitted to: JMIR Data on: July 12, 2020

**Disclaimer:** © **The authors. All rights reserved.** This is a privileged document currently under peer-review/community review. Authors have provided JMIR Publications with an exclusive license to publish this preprint on it's website for review purposes only. While the final peer-reviewed paper may be licensed under a CC BY license on publication, at this stage authors and publisher expressively prohibit redistribution of this draft paper other than for review purposes.

### Table of Contents

Original Manuscript	4
	6
	8
	9
Figure 3	
Figure 4	11
Figure 5	
Figure 8	15

## Tracking Exposure to Ads Amidst COVID-19: Development of a Public Google Ads Dataset

Reham Al Tamime<sup>1\*</sup> PhD; Ingmar Weber<sup>2\*</sup> PhD

#### **Corresponding Author:**

Reham Al Tamime PhD
The Web Science Institute
University of Southampton
Building 32, Highfield Campus
University Road
Southampton
GB

#### Abstract

**Background:** The spread of the COVID-19 has created a substantial impact on economies, governments, businesses, and most importantly, on people's health. In order to bring the spread of the COVID-19 under control, strict lockdowns measures have been implemented across the globe. These lockdown measures have prompted a spate of panic buying and increase in demand for hygiene products and other grocery items.

**Objective:** In this paper, we describe a panic buying Google Ads data set that we are making available to the research community via our COVID-19 GitHub repository.

**Methods:** We started this ongoing data collection on March 28, 2020, leveraging developer tools' network requests to retrieve Google Ads' data. We have identified a list of items related and unrelated to panic buying. Then, we have captured these items as targeting criteria under what people are actively researching or planning on Google Ads. Google Ads' data has been filtered by additional targeting criteria such as countries, gender, and parental status.

**Results:** Since the inception of our collection, we have actively maintained and updated our GitHub repository on a monthly basis. In total, we have published over 1,827 data points. This paper also presents basic statistics that reveals variations in Google Ads data across countries, gender, and parental status.

**Conclusions:** We hope that this Google Ads data set can contribute to study changes in behaviors and attitudes during the Coronavirus outbreak. Moreover, we hope that this data set can help in understanding public fear and panic during this unprecedented time.

(JMIR Preprints 12/07/2020:22446)

DOI: https://doi.org/10.2196/preprints.22446

#### **Preprint Settings**

- 1) Would you like to publish your submitted manuscript as preprint?
- ✓ Please make my preprint PDF available to anyone at any time (recommended).

Please make my preprint PDF available only to logged-in users; I understand that my title and abstract will remain visible to all users. Only make the preprint title and abstract visible.

No, I do not wish to publish my submitted manuscript as a preprint.

- 2) If accepted for publication in a JMIR journal, would you like the PDF to be visible to the public?
- ✓ Yes, please make my accepted manuscript PDF available to anyone at any time (Recommended).

Yes, but please make my accepted manuscript PDF available only to logged-in users; I understand that the title and abstract will remain v Yes, but only make the title and abstract visible (see Important note, above). I understand that if I later pay to participate in <a href="http

<sup>&</sup>lt;sup>1</sup>The Web Science Institute University of Southampton Southampton GB

<sup>&</sup>lt;sup>2</sup>Qatar Computing Research Institute Hamad Bin Khalifa University Doha QA

<sup>\*</sup>these authors contributed equally

## **Original Manuscript**

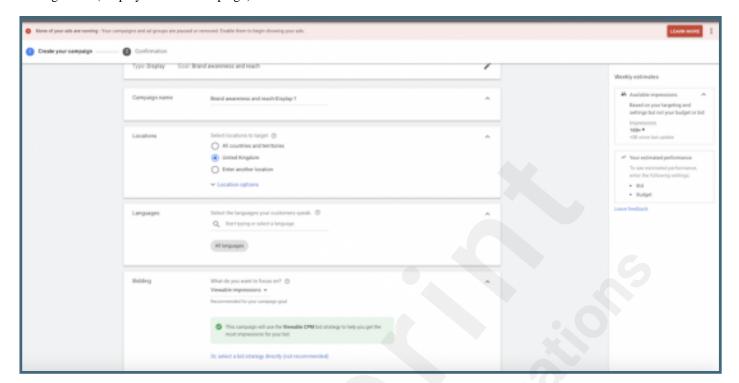
Given that the file is large to upload, please find the revised manuscript attached to this link

 $\underline{https://drive.google.com/file/d/1Xy6BvfPRrGIQ9ptl6zSaamwBSb0MT80l/view?usp=sharing}$ 

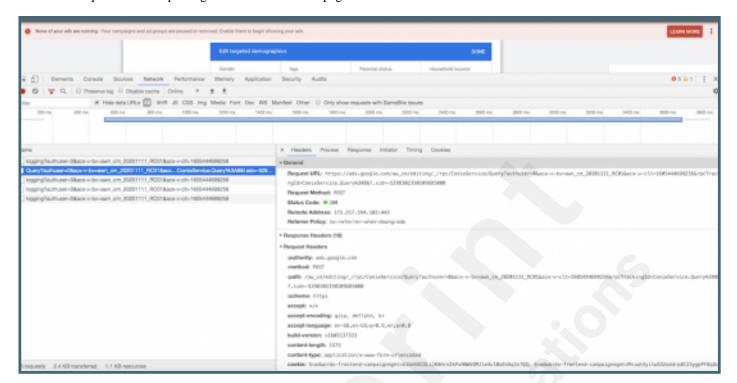
## **Supplementary Files**

### **Figures**

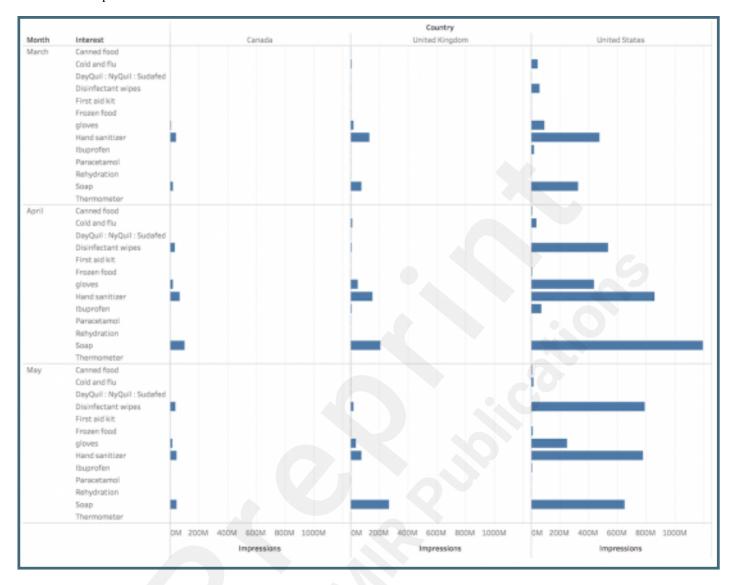
Google Ads (Display Network campaign).



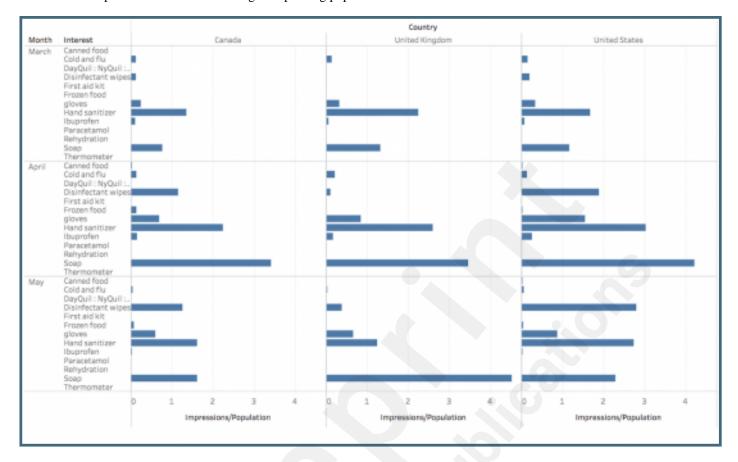
Network requests after inspecting elements on the web page.



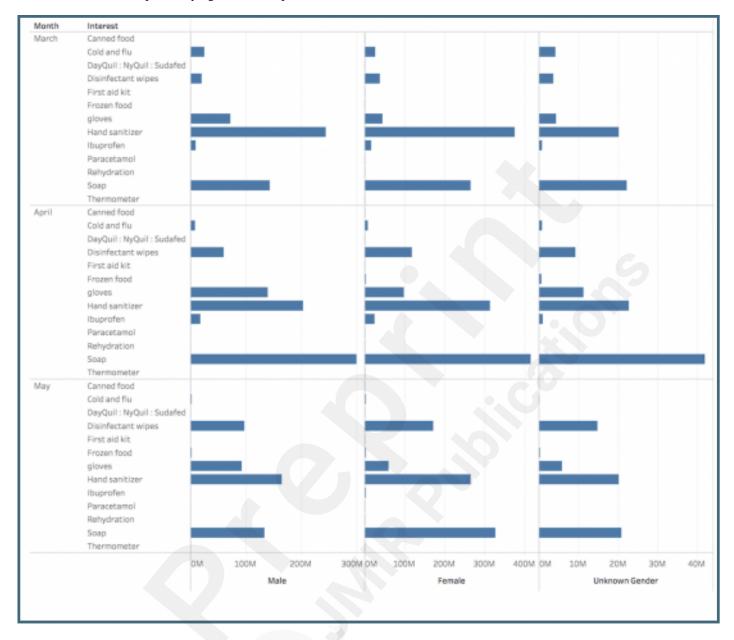
Number of impressions over time and across different countries.



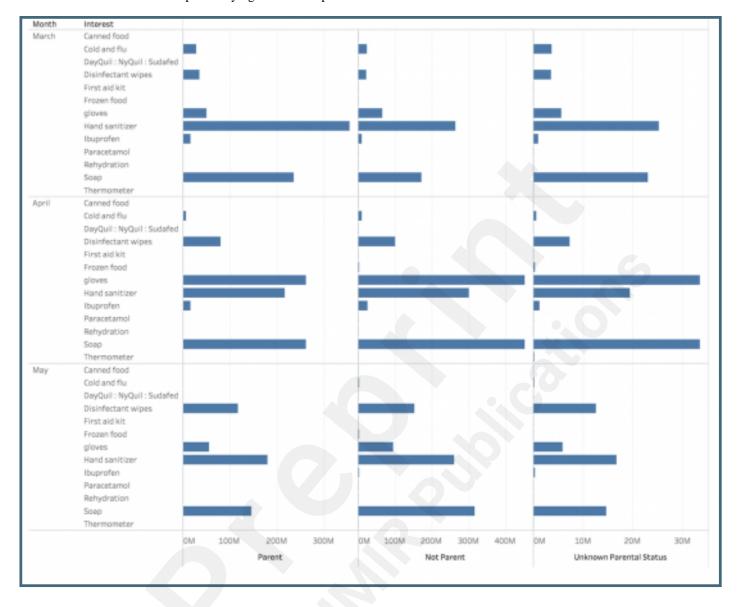
Number of impressions relative to the English-speaking population.



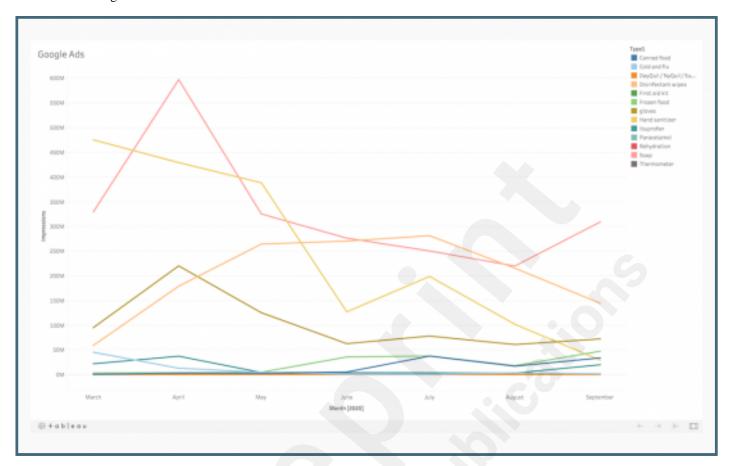
Gender differences in panic buying's related impressions over time.



Parental status differences in panic buying's related impressions over time.



Patterns on Google Ads.



#### Patterns on Google Trends.

