**Dataset 1: Canada COVID-19 Game 2020**

**Objectives**:

(1) identify distinct clusters from this dataset based on **ad design**, **audience target settings**, **demographics**, and/or **responses to questions**;

(2) identifying optimal content that is associated with an increased likelihood of healthy behavioral intentions and attitudes, including **policy support**, **sharing**,and **vaccine intent**, **for each cluster**.

**Variables**

Potential independent variables:

* [ad design](https://docs.google.com/presentation/d/1Ip9U2AEtuYs7S_WJiCnQlmtzkyyIWRXn/edit?usp=sharing&ouid=109207340936010533943&rtpof=true&sd=true) (various different designs we assumed appealed to different demographics)
* [audience targeting](https://docs.google.com/presentation/d/1Ip9U2AEtuYs7S_WJiCnQlmtzkyyIWRXn/edit?usp=sharing&ouid=109207340936010533943&rtpof=true&sd=true) (Facebook setting that determines who sees an ad)
* [responses to knowledge questions](https://docs.google.com/spreadsheets/d/14AC-HDsHk_7V3mzPeYu-4UT64eO8U6bI/edit?usp=sharing&ouid=109207340936010533943&rtpof=true&sd=true) (true/false game trivia questions; proxy for prior knowledge)
  + After every response, participants receive educational feedback, which could influence subsequent actions.

[Potential dependent/outcome variables:](https://docs.google.com/spreadsheets/d/14AC-HDsHk_7V3mzPeYu-4UT64eO8U6bI/edit?usp=sharing&ouid=109207340936010533943&rtpof=true&sd=true)

* Policy support questions (support or opposition to public health policies on a 1-5 scale)
* Emotional reactions (multiple choice responses between happy/angry/anxious/skeptical)
* Vaccine intent (willingness to receive a vaccine on a 1-5 scale)
* Sharing intent (willingness to share information learned in the game on a 1-5 scale)
* Actual sharing behavior (did the participant click “Share” button)

**Research Questions**:

1. Is there any relationship between ad design and/or audience target settings on the one hand, and self-reported demographics on the other?
2. Can interpretable clusters be formed on ad designs, audience targets, and demographics?

* If so, do clusters differ on responses to any key variables:
  + Knowledge questions
  + Repeated question
  + Policy support questions
  + Emotional reactions
  + Vaccine intent
  + Sharing intent
  + Actual sharing behavior

3. Can interpretable clusters be formed based on responses to knowledge questions?

* If so, do clusters differ on responses to any key variables:
  + Repeated question
  + Policy support questions
  + Emotional reactions
  + Vaccine intent
  + Sharing intent
  + Actual sharing behavior

4. Optimal content – Given that knowledge questions were also presented with educational feedback that might influence subsequent actions, are there specific knowledge questions/feedback or sets of questions/feedback that are associated with higher-than-expected positive outcomes across the full sample and/or for specific clusters, including:

* + Stronger policy support responses
  + More positive and less negative emotional reactions
  + Higher vaccine intent
  + Higher sharing intent
  + More actual sharing behaviors