



The Australian Prevention
Partnership Centre

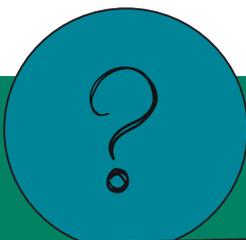


**CITIZEN SCIENCE
CASE STUDY**
OCTOBER 2022

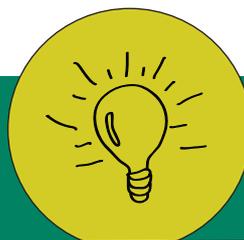
Reflections on using citizen science to monitor unhealthy industry digital marketing to young people

Overview

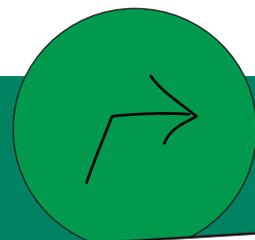
- This research project used a citizen science approach to generate insights into the tactics unhealthy industries are employing through targeted advertising to young people on social media, and young people's understanding and attitudes towards these advertisements and their regulation.
- Young Victorians (204 individuals aged 16-25 years) were engaged as citizen scientists to collect, share, and reflect on examples of unhealthy advertising from their social media feeds. This included advertisements from alcohol, gambling and unhealthy food or fast food and sugary drink industries.
- Successful recruitment and engagement of citizen scientists was attributed to appropriate recognition of their contributions in the form of a \$100 gift card, having a young adult as a peer provide instructions to young citizen scientists in onboarding videos and maintaining communication with citizen scientists throughout the data collection period.
- A phased recruitment approach supported the inclusion of a diverse sample, allowed for data collection processes to be refined and ensured sufficient support for and engagement with participating citizen scientists.
- Project findings will be used to increase public support for change, and to engage research and policy partners in a coordinated approach to influence the reform of the current regulatory environment for digital marketing of unhealthy products.



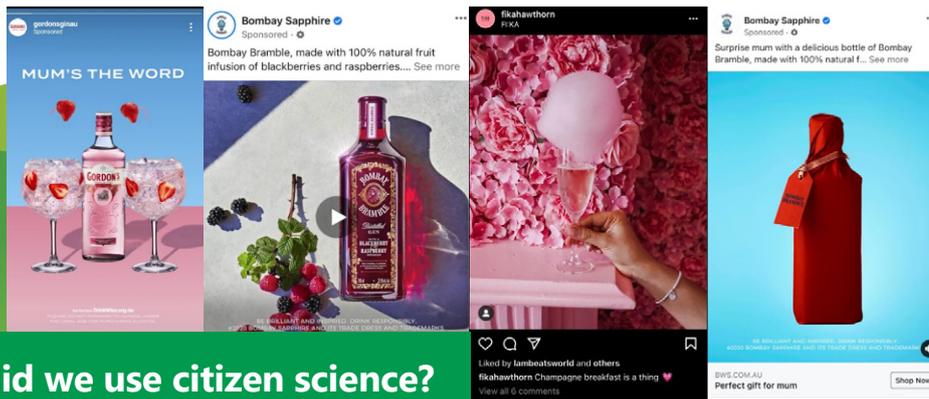
HOW DID WE USE
CITIZEN SCIENCE?



WHAT DID WE LEARN



WHAT'S NEXT



How did we use citizen science?

This project used a citizen science approach to gain insights into how alcohol, gambling, and unhealthy food or fast food and sugary drink industries are marketing to young people (aged 16-25 years) on social media; young people's understanding of and impacts from the tactics of these unhealthy industries; and the appetite of young people to be involved in identifying and advocating for solutions that influence policy change.

This project was a partnership between VicHealth and researchers at Monash University and the University of Queensland. The research team conducted a series of recruitment campaigns through Instagram and Facebook to capture citizen scientists attention and interest. Those recruited were then grouped into one of four waves of the study, and after consenting to participate, provided with onboarding training videos.

Citizen scientists were asked to collect and share a series of screenshots of digital marketing from their social media feeds over 7-10 days. They also clarified and reflected on the effect of this digital marketing on their perceptions, attitudes, and behaviours toward unhealthy products through SMS chat.

Before and after the collection of screenshots citizen scientists completed a survey on their views and perceptions of unhealthy marketing on social media. Citizen scientists were also invited to download and share their Facebook advertising preferences data and to take part in an online week-long group discussion forum to reflect on their advertising exposure, explore their concerns about data privacy and targeted digital marketing, and identify actions to raise awareness of these issues.

Figure 1. Citizen scientist involvement in data collection for the project



Figure 2: Tools we used



What did we learn?

Key advantages of using a citizen science approach included the ability to:

- Gather rich examples of the types of digital marketing young people are being exposed to and the tactics used by unhealthy industries, which may otherwise be invisible to researchers
- Increase young people's awareness of and ability to identify ads from unhealthy industries in their social media feeds
- Increase young people's awareness, understanding and concern about how their personal data are being used by unhealthy industries to target advertising toward them.

The following insights emerged from the project team's use of a citizen science approach:



Importance of tailoring recruitment and engagement strategies: The research team avoided the term 'citizen science' to prevent any misunderstanding that this project was only for people interested in science. They also felt framing the project as collaborative research where citizen scientists were part of the research team, recognising their contributions with a \$100 gift card, and using a peer in the onboarding videos all enhanced engagement.



Value of conducting citizen science research in waves: This allowed the team to pilot and refine their processes before recruiting more citizen scientists, engage and support smaller groups of citizen scientists during data collection, and recruit a diverse cohort. Employing a 'refer a friend' method to the final wave of recruitment also helped to boost numbers.



Citizen scientists were motivated to engage with the project: Citizen scientists confirmed in follow up interviews that the financial incentive and having an interest in the topic encouraged engagement – submitting on average 26 screenshots each. Low uptake of the final online group discussion suggests that citizen scientists were less motivated to take part in sensemaking of data, for which their time was not reimbursed.



Importance of communication with citizen scientists: Interaction with citizen scientists during data collection was key to maintaining engagement and produced richer data. The use of SMS proved effective for sharing and discussing screenshots. This also helped make sense of the data with citizen scientists, as the online group discussion did not uncover much new information.



Focus groups are recommended for data sensemaking: The research team reflected on the difficulty in balancing opportunity for all 204 citizen scientists to participate in sensemaking of the data whilst ensuring that they could each meaningfully engage with this exercise. Whilst this project did not have sufficient resources to do this, running smaller online focus groups may be more useful than online discussion forums.



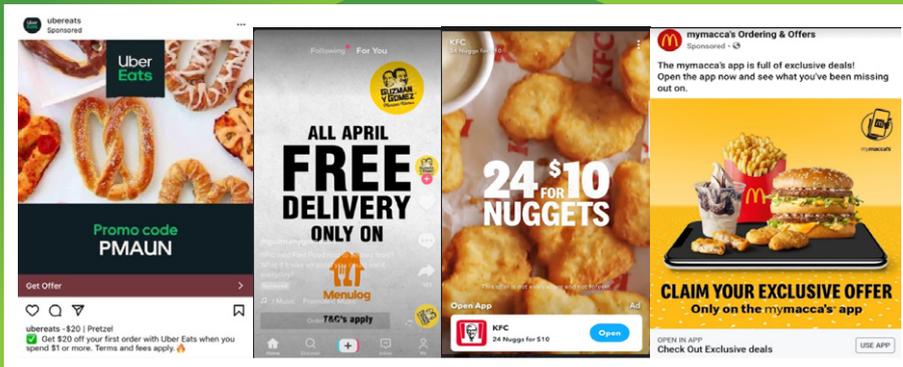
The amount of data generated by citizen scientists can be unpredictable: The larger than anticipated number of screenshots and SMS chat engagement from citizen scientists increased the resourcing needs for data analysis.



Ethical considerations for the public release of citizen scientist data: To ensure anonymity when publishing screenshots the team needed to blur out any identifying information such as faces, names and location stamps, which was a time-consuming process.



Consider citizen scientist engagement across project phases from the outset: This project did not engage citizen scientists in the research design or have a plan for engaging them in advocacy efforts. However, doing so could ensure research questions reflect what is important to young people and increase research impact on policy. Future projects could consider engaging citizen scientists as project leaders or research officers and identifying individuals interested in advocacy during recruitment.



“There’s something really special about this citizen science project and the types of impact it’s having, a small percentage change, or a small change in drinking behaviour if applied to a broader population would actually be really significant, so it’s not just about citizen science as a process that can draw out certain results but a process that may be able to draw out behaviour change or attitudinal change.”

What’s next for this project?

This project has established a considerable body of evidence of the types of harmful industry activity on digital platforms, co-analysed with young people. VicHealth aims to use this research to increase public support for change, and to engage research and policy partners and allies in a coordinated approach to influence the reform of the current regulatory environment for digital marketing of unhealthy products.

Future work needs to continue to build these relationships with young people to monitor and understand harmful industry marketing and explore ways to leverage their support for change. Some of the suggested reforms from citizen scientists included sliding scales where harmful industries pay more for advertising, better protections for young people and ensuring advertisements acknowledge the negative impacts of products like product warning labels on cigarette packets.

VicHealth are looking to set up a monitoring hub to capture real time information on what harmful industries are doing in the digital marketing space, noting that this citizen science approach could be transferable to other unhealthy industries such as e-cigarettes.

Interested in finding out more?

To find out more about the social media and unhealthy marketing project, please visit the VicHealth website or contact Emma Saleeba, VicHealth, esaleeba@vichealth.vic.gov.au

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