



**Selected Papers of #AoIR2024:
The 25th Annual Conference of the
Association of Internet Researchers**
Sheffield, UK / 30 Oct - 2 Nov 2024

ALGORITHMIC GOSSIP IN YOUNG PEOPLE'S ACCOUNTS OF 'UNHEALTHY' ADVERTISING ON SOCIAL MEDIA

Brady Robards
Monash University

Nicholas Carah
University of Queensland

Lauren Hayden
University of Queensland

Amy Dobson
Curtin University

Introduction and background

The opaque, algorithmic, and individualised nature of advertising on social media makes it difficult to study. Each social media user receives a different flow of advertising, targeted based on likes, interests, and connections. Facebook, Instagram, Snapchat, Twitter, and especially TikTok largely fail advertising transparency tests with some levels of transparency for political ads but very limited or no transparency for other kinds of advertising (Mehta & Erickson 2022). In order to understand what kinds of promotional messages social media users receive, researchers are increasingly turning to participatory methods by asking users to donate ads (Burgess et al. 2022) or collecting screenshots of ads themselves (Lara-Mejia 2022). In this paper we report on two studies where we worked with young people as 'citizen scientists' to collect screenshots of 'unhealthy' advertising they saw on social media.

Our focus on 'unhealthy' advertising - gambling, alcohol, fast food - was partly driven by our research partners in health promotion, but also out of our own commitments to social wellbeing. While we acknowledge the pleasures and connective capacities of 'unhealthy' practices (Brown & Gregg 2012), the algorithmic and dark advertising of unhealthy commodities on social media amplifies risks and harms. For instance, underage users seeing alcohol or gambling ads, or other users wanting to moderate their consumption being targeted. Thus, studying how these advertisements circulate on social media

Suggested Citation (APA): Robards, B., Carah, N., Hayden, L. & Dobson, A.. (2024, October). *Algorithmic gossip in young people's accounts of 'unhealthy' advertising on social media*. Paper presented at AoIR2024: The 25th Annual Conference of the Association of Internet Researchers. Sheffield, UK: AoIR. Retrieved from <http://spir.aoir.org>.

contributes to wider public health initiatives alongside movements to foster safer online environments and hold digital advertising to higher standards of observability and accountability.

Our studies

In this paper we draw on two studies undertaken with Australian health promotion organisations. In the first, we worked with 204 young Australians (aged 16-25, avg 19.5) to collect 5169 screenshots of 'unhealthy' marketing they saw on social media (gambling, alcohol, fast food and sugary drinks) over a one week period. Researchers and participants communicated through SMS chat (via a web-based platform called MessageMedia) where screenshots were reflected upon and discussed. In the second study, we are working with 30 young Australians (aged 18-25, avg 23.9) to collect screenshots of alcohol and nightlife marketing over a one month period. As Jaynes (2019) explains, screenshots operate as a form of 'evidence' in digital cultures. Participants in study 1 were also invited back for an online asynchronous focus group discussion forum (FocusGroupIt) to discuss our preliminary findings and add their interpretations and analyses to our own. Our 'citizen science' approach centres young people as knowledgeable and expert when it comes to their own social media use, digital media cultures, and their experiences of advertising (Thomas et al. 2022).

Algorithmic gossip

We are interested in better understanding both what kinds of 'unhealthy' promotional material young people see on social media and how they interpret that material: why they think they see it, what they think about it being on their social media feeds, and what impact (if any) it has on them. Participants consistently engage in what Bishop (2019: 2589) describes as 'algorithmic gossip', the 'communally and socially informed theories and strategies pertaining to recommender algorithms' on social media. While Bishop was focussed on how YouTubers engaged in algorithmic gossip to increase the visibility and thus the financial success of their videos, we extend this to include the way research participants theorise and discuss how algorithms work (or don't work) in surfacing content, in our case - ads, on their own social media feeds.

A number of themes emerge in our analysis of this gossip or vernacular theorisation of why our participants see certain ads. The first two clear themes are contradictory. On the one hand, our participants report that the algorithm knows them well - targeting ads successfully, based on their likes, interests, and likely purchasing practices. On the other hand, other participants report that the algorithm does not know them at all, missing the mark in the ads they saw: Christy (19, female) felt the algorithm 'is tailored to me... it knows me', and Nate (16, male) explained the ads he saw 'matched fairly well with my interests... no particular advertisement surprised me as they are a fair representation of what I see and like'. For others, the notion of the 'faulty algorithm' was common, for instance Fern (discussion forum) explained 'I noticed some of the ads were targeted while others missed their mark. This makes me think that the platforms had collected some data, but their predictions were off' and Erika (20, female) explained 'I actually find it funny that I get alcohol ads as I myself have never drank and don't plan on doing so either!'

Beyond their perceptions of how well algorithms 'know them', our participants often have complex theories about how algorithms work. One of the dominant inputs according to our participants was search history. Sybil (24, female) for instance said 'I'd say the ads are generated mainly from my Google/Facebook searches' and Sebastian (17, male) agreed saying 'I wasn't really surprised by the ads that come up for me cause they are basically what I search online'. The friends of our participants were also theorised to play an important role: Shawn (19, male) suggested 'I think [these ads are] getting recommended to me because... friends on Facebook have liked the page' and Meghan (18, female) said 'I see a lot of my Facebook friends interested in those events too which is why they might be advertised a lot to me'. We would suggest the theorisation of the role of friends in algorithmic surfacing is especially pronounced on Facebook because of the way friends are leveraged on that platform.

Other theories explored in these algorithmic gossip exchanges included connections to work ('I'm not a major alcohol drinker... I do work in hospitality as one of my jobs and often find myself on the Dan Murphy's [Australian alcohol retailer] website to look at prices... so the ads could be attributed to that' (Tilly, 21, female)), to algorithms learning over time ('I thought the reason I got this ad may have been because it was on Twitter, which I started using more recently and hence has not been catered directly towards me yet' (Cassie, 19, female)) and to specific times of year or events ('I saw more alcohol stores and night club-like ads more. I think because it's my birthday month' (Irene, 20, female)). Notably, many participants also commented on how being part of the study and taking screenshots of certain ads changed their algorithm: 'I noticed that the more I screenshotted the alcohol ads in particular the more I got them' (Samantha, 19, female) and 'as a result of interacting with these ad pop ups by screenshotting, I believe the algorithm changed to show me more ads associated with that product' (Gracie, 19, female).

Conclusion

When prompted, young people in our studies engage in extensive 'algorithmic gossip' around what they see on social media and why they see it. Our 'citizen scientists' produce a range of theories around why they see some ads - search histories, friendship networks, interests, time of day/week/year, location, age, gender, sexuality, and more. In this way, engaging in screenshot collection and 'algorithmic gossip' (Bishop 2019) with our participants allowed us to get at these vernacular theories, and lead into discussions on whether they thought this kind of targeting in advertising was acceptable. Our participants express strong views around regulation and wanting to see less of some forms of promotional content, especially when it came to gambling advertisements. While some of our participants occasionally see ads as helpful or creative, many reflected on the algorithmic targeting of unhealthy products as manipulative, creepy, and annoying, opening the opportunity for further discussions about platform accountability that centre young people's expertise and knowledge.

References

Bishop, S. (2019). Managing visibility on YouTube through algorithmic gossip. *New media & society*, 21(11-12), 2589-2606.

- Brown, R., & Gregg, M. (2012). The pedagogy of regret: Facebook, binge drinking and young women. *Continuum*, 26(3), 357-369.
- Burgess, J., Andrejevic, M., Angus, D., & Obeid, A. K. (2022). Australian Ad Observatory: Background paper [Report]. ARC Centre of Excellence for Automated Decision-Making and Society. <https://apo.org.au/node/318616>
- Lara-Mejía, V., Franco-Lares, B., Lozada-Tequeanes, A. L., Villanueva-Vázquez, C., & Hernández-Cordero, S. (2022). Methodologies for monitoring the digital marketing of foods and beverages aimed at infants, children, and adolescents (ica): a scoping review. *International Journal of Environmental Research and Public Health*, 19(15).
- Mehta, S., & Erickson, K. (2022). Can online political targeting be rendered transparent? Prospects for campaign oversight using the Facebook Ad Library. *Internet Policy Review*, 11(1), 1-31. doi:10.14763/2022.1.1648
- Thomas, J. A., Trigg, J., Morris, J., Miller, E., & Ward, P. R. (2022). Exploring the potential of citizen science for public health through an alcohol advertising case study. *Health promotion international*, 37(2), daab139.