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**“90 per cent of the time when I have had a drink in my hand I'm on my phone as well”:  
A cross-national analysis of communications technologies and drinking practices among  
young people**

Gabriel Caluzzi<sup>1</sup>, Laura Fenton<sup>2</sup>, John Holmes<sup>2</sup>, Sarah MacLean<sup>1,3</sup>, Amy Pennay<sup>1</sup>, Hannah Fairbrother<sup>4</sup>, Jukka Törrönen<sup>5</sup>

<sup>1</sup>Centre for Alcohol Policy Research, La Trobe University, Australia

<sup>2</sup>School of Health and Related Research, University of Sheffield, UK

<sup>3</sup>School of Social Work and Social Policy, La Trobe University, Australia

<sup>4</sup>Health Sciences School, University of Sheffield, UK

<sup>5</sup>Department of Public Health Sciences, Centre for Social Research on Alcohol and Drugs, Stockholm University Stockholm, Sweden

**Corresponding author:** Gabriel Caluzzi, Centre for Alcohol Policy Research, Building NR1, La Trobe University, Melbourne, Australia; g.caluzzi@latrobe.edu.au

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None to declare.

## **Abstract**

Greater use of communication technologies among young people, including mobile phones, social media and communication apps, has coincided with declines in youth alcohol use in many high-income countries. However, little research has unpacked how drinking as a practice within interconnected routines and interactions may be changing alongside these technologies. Drawing on qualitative interviews about drinking with young people aged 16-23 across three similar studies in Australia, the UK and Sweden, we identify how communication technologies may afford reduced or increased drinking. They may reduce drinking by producing new online contexts, forms of intimacy and competing activities. They may increase drinking by re-organising drinking occasions, rituals and contexts. And they may increase or reduce drinking by enabling greater fluidity and interaction between diverse practices. These countervailing dynamics have likely contributed to shifting drinking patterns and practices for young people that may be obscured beneath the population level decline in youth drinking.

## **Key words**

Alcohol, communications technology, practice theory, affordances, young people

## Introduction

The rise of new technologies has coincided with international declines in drinking among young people over recent decades, including in Australia, North America, the UK and large parts of Europe (Vashishtha et al., 2021). Researchers have implicated digital technologies in this decline, largely through changes to leisure activities and the emergence of new forms of online socialising (Room et al., 2020; Bhattacharya, 2016). However, survey research, seemingly well-placed to examine associations between technology use and young people's declining drinking, has predominately identified relationships at the individual level. While some psychology studies have found group-level effects (e.g., Geusens and Beullens, 2021; Geusens et al., 2022), these have tended to focus on social media use within networks of heavier drinkers. In contrast, other studies show that screen time, gaming and electronic media communication are not associated with declines in drinking at a population level (de Looze et al., 2019; Halkjelsvik et al., 2021; Larm et al., 2019; Vashishtha et al., 2022). However, qualitative studies suggest there are important relationships between the ways young people use technologies and the ways they do or don't drink alcohol (Duffy and Chan, 2019; Luomanen and Alasuutari, 2022; Törrönen et al., 2020). Researchers have also questioned the ability of quantitative work to unpack these nuanced relationships between technologies and alcohol (Caluzzi et al., 2021a).

This may be, in part, because the ways that digital technologies are incorporated and embedded into young people's practices are complex, diverse and dynamic. For example, digital technologies have been linked to concerns around privacy and who might see images of a night out (which can discourage drinking) but have also allowed young people to form private networks where sharing of alcohol images is construed positively (which can enable drinking) (Törrönen et al., 2020). They also create new spaces for commercial and social marketing of practices that promote, disrupt, deter, compete with or otherwise affect alcohol consumption (Caluzzi et al., 2021a). However, within the context of declining drinking among young people, little research has unpacked how *drinking practices* (i.e., the different ways that people consume and engage with alcohol, as opposed to just the extent of drinking) may be changing with the increased uptake of technologies. By taking a practice approach guided by the concept of affordances, we examine how the incorporation of common communications technologies might influence drinking practices. To do so, we draw on qualitative data from three countries that have seen steep declines in youth drinking: Australia, Sweden and the UK – countries which have all seen shifts in young people's

drinking against a backdrop of increased use of communications technologies (Vashishtha et al., 2021; Vashishtha et al., 2022; ACMA 2020).

### **Communications Technologies and Alcohol**

We define communications technologies as contingent combinations of infrastructure (the internet), hardware (phones, computers), interfaces (e.g., apps) and media (e.g., text messages, videocall, social media) – all of which interconnect to form possibilities for peer-to-peer communication. Previous research on the relationship between communications technologies and drinking has painted a complex, often conflicting picture (Caluzzi et al., 2021a). While some hypotheses propose technologies might substitute in-person interactions (i.e., drinking with friends being displaced by online activities), research has also shown that online environments can facilitate drinking. For example, young people combine being online with drinking or drunkenness – either incidentally or deliberately (Moewaka Barnes et al., 2016) – and often use social media to share images, recount drinking events with peers and extend positive narratives of nights out with alcohol (Brown and Gregg, 2012; MacLean, 2016). Alongside this user-generated content, digital platforms expose young people to a wide range of advertising. This includes advertising for alcohol, but also for other commodities or activities that can dilute alcohol marketing messages (Monk and Heim, 2017). Alcohol researchers have focused more on pro-alcohol messaging, including advertising and subtle industry engagement strategies, such as paid promotions of online ‘influencers’ (Carah and Brodmerkel, 2021). Consequently, it has been suggested this increasing entanglement of social networking and youth drinking cultures has contributed to the normalisation of alcohol use in digital spaces (Moewaka Barnes et al., 2016; Lyons et al., 2017). This may help explain the empirical evidence showing more time spent on social media is associated with more frequent drinking in countries such as Australia (Miller et al., 2014), Sweden (Larm et al., 2019) and the UK (Ng Fat et al., 2021).

However, the causal direction of these associations is unclear, and different platforms and ways of using social media have been linked to different ways of communicating about drinking and different drinking styles (Boyle et al., 2017; Savolainen et al., 2020; Törrönen et al., 2020) suggesting various pathways and possibilities. Moreover, it may be that the way technologies influence drinking is closely aligned with, not only how young people use technologies, but how they interact with different social networks and cultural norms. For example, communications technologies can reinforce cultural imperatives that encourage or

discourage certain behaviours and ways of displaying oneself with or while affected by alcohol (Goodwin et al., 2016) while also facilitating new forms of surveillance, such as parental monitoring of drinking situations (Törrönen et al., 2020). Other recent qualitative research has suggested communications technologies have altered the way young people interact and develop intimacies, meaning alcohol is less of a central feature of how young people socialise, connect and flirt (Luomanen and Alasuutari, 2022). A recent systematic review by Alhabash et al. (2022) showed that the majority of studies on social media and alcohol consumption have taken quantitative psychology approaches – most of which show a positive relationship between the two. In their review, they highlight limitations of this previous work, including how social media has been dealt with in a limited categorical way (i.e., measuring use without capturing the full extent of how platforms are used), the lack of qualitative and theory-driven research, and the emphasis on individual consumption rather than more socially-informed aspects of alcohol use. Given that technologies have become such an embedded feature in young people’s lives, the ways they facilitate, obstruct or otherwise transform drinking practices are likely to be complex and wrapped up in broader changes to young people’s everyday practices.

### **Practice Theory and Affordances**

In this paper, we draw on practice theory to better understand how communications technologies might be changing drinking among young people. Although there are multiple ways it has been operationalised, practice theory emphasises the role of practices themselves – routinised ways of doing things, using things, thinking and ‘know-how’ (Reckwitz, 2002; Warde, 2005). Rather than focusing on individual behaviours or broader social and cultural norms, practices represent complex, non-linear interactions between an individual and their social and material worlds (Magaudda, 2011; Nicolini, 2013; Reckwitz, 2002). All practices occur within broader fields of practices relating to the full range of human activity – a “nexus of interconnected human practices” (Schatzki et al., 2001, p.11). This means that changes to one practice can affect a wide range of other practices. In other words, changes in alcohol consumption practices may shape or be shaped by changes in practices from many domains, including those relating to communications technologies.

Practice theory is useful for understanding the evolution of individual actions within broader social structures; that is, why certain practices change or persist. Practices can change from the inside as people create new ways of doing things (e.g., combining technology and

drinking), and from the outside as changing practices influence each other (e.g., technology influencing the range of practices involved in a ‘night out’). These practices come together to form new routines and “normal” ways of doing things (Warde, 2005). Because drinking often intersects with various other practices such as eating, playing games and flirting (Room et al., 2020; Meier et al., 2018), it is important to look at the broader fields of practice of which drinking practices are part.

Materials are an embedded element in the formation of social processes and practices. For example, we can consider communications technologies such as smartphones as an important material force that can shape practices. Alcoholic drinks of different strengths or types and material contexts are similarly important. These material elements co-produce meanings around drinking, making it a more acceptable, accessible practice in some contexts and a more problematic, restricted practice in others. Indeed, the way material things come together can “authorize, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid” (Latour, 2005, p.72) a range of actions. Thus, a practice theory lens suggests attending to material elements (i.e., communications technologies, alcoholic drinks) may help explain how and why changes in other practices (i.e., drinking) occur.

To analyse how material forces such as communication technologies participate in and interact with drinking practices, we use the term ‘affordance’. First used by Gibson (1977) to describe how material environments encourage and discourage certain practices, affordances represent the practicalities and social functioning of things and their meanings. This includes the opportunities for action that material elements such as communication technologies encourage, concede, demand, close off or turn down when interacting with users in diverse environments (Hutchby, 2001). For example, streetlighting affords greater walkability at night, while a lack of lighting affords reduced accessibility – alongside networks of other elements such as contexts (e.g., night-time), relationships (e.g., companions) and meanings (e.g., safety). At the same time, practices themselves afford the possibility of effects, such as experiencing comfort or relaxation from drinking alcohol.

In digital sociology, affordances refer to the different paths of action that technologies invite users to take within the context of material, social and cultural circumstances (Davis and Chouinard, 2017). This might orient young people towards sharing certain images online or connecting with distinct networks of people through particular messaging apps. The “imagined surveillance” of social media also creates new affordances around self-monitoring

and censorship (Duffy and Chan, 2019). Thus, affordances can vary according to network size, platform features and intended types of use (Alhabash et al., 2022).

### **Practice Theory in Alcohol Research**

Several studies have used practice theory approaches to understand (predominantly heavy) drinking practices among young people. In their interviews with Australian undergraduate students, Supski et al. (2017) showed how university drinking was a distinct practice grouped with other practices that reinforced and normalised heavy drinking for students. Hennell et al. (2020) used practice theory to explore drinking on ‘a proper night out’ among young people in North-West England. Their study highlighted how a night out was made up of a sequential ‘bundle’ of practices, including planning, getting ready, pre-drinking, going out, getting home and storytelling. This highlighted the various interconnected elements that made up a drinking occasion. Further work showed that the embodied (yet imprecise) competence of drinking practices played into how young people managed risk and intoxication (Hennell et al., 2021) and that drinking practices overlapped with performative gender practices in meaningful ways (Hennell et al., 2022).

Drawing on practice theory and the concept of affordance, recent work by MacLean et al. (2022) highlighted how assemblages of emotions, settings, and meanings were important in shaping home drinking practices. Similarly, we suggest that communications technologies incorporate important tangible material elements (hardware, software, network linkages, data) that afford new meanings and ways of performing practices through drinking and non-drinking for young people. In turn, this may afford new configurations and bundles of practices.

### **Digital Technologies, Alcohol and Practices**

Using practice theory can help unpack how communications technologies afford opportunities and challenges that may shape drinking. For example, we know phones and the internet are central to how young people meet up and organise a ‘night out’ with alcohol (Hutton et al., 2021), but can also transform the meaning of drinking practices, creating new risks, restrictions, and ways of self-managing (Brown and Gregg, 2012; Caluzzi et al., 2021b; Törrönen et al., 2020). However, practice theory enables us to examine the embedded role of technologies, including how it influences the meanings and values associated with drinking, when and where drinking occurs, and how drinking becomes bundled within broader sequences of practices. This is especially true when we think about the increasing centrality



of digital technologies in young people's lives and how constant connectedness is part of continually evolving contemporary practices (Boyd, 2014). In what follows, we analyse how communications technologies facilitate or challenge young people's drinking practices in complex ways through the affordances they bring to the interaction. In particular, we unpack how these technologies offer affordances to young people in ways that may reduce or increase their drinking.

## **Method**

### **Data Collection**

This paper draws on data from three similar projects examining declines in young people's drinking using qualitative interviews (see also Pennay et al., 2022). The data comes from young people participating in projects run in Melbourne in Australia (n=50 in 2018, n=40 in 2020), Sheffield and nearby rural areas in the UK (n=72 in 2018-2019) and Stockholm in Sweden (n=56 in 2018, n=39 in 2019, n=33 in 2021). Although the methods, samples and interview guides differed, the three projects were part of an international collaboration where each project was informed by the others, and the research teams were in communication throughout their projects. This allowed us to pool comparable cross-national data and suited the goal of the present study, which was not to compare cultural or geographic differences but to theorise particularities (i.e., practices) across the broader sample.

The Australian and Swedish projects were longitudinal, interviewing the same young people over time, while the Sheffield study was cross-sectional. The Australian data were focused on young people (aged 16-19 at wave 1) who abstained or drank moderately (although by wave 2 many had begun drinking more heavily). The UK and Swedish data come from larger studies involving cohorts of different ages, and included heavy drinkers alongside abstainers and moderate drinkers. The UK data also included several friendship group interviews. In this paper, we focus only on data from young people aged 16 to 23 years old across the three countries (which included multiple waves from the longitudinal studies). These age groupings enabled us to explore the practices of those who were both under and over the minimum legal purchase age for alcohol, which was 18 in all three countries. Ethics approval for cross-national comparative analyses was provided by La Trobe University (HEC19479).

All studies were anchored around research questions aiming to understand recent declines in youth drinking in the respective countries. All three projects entailed semi-structured interview guides, with a focus on alcohol and how drinking fitted into young people's social

worlds. While some explicit questions were asked about digital technology (predominantly social media), relevant data largely arose from discussions around how young people communicated and organised their social lives. Technologies are therefore presented as embedded, often implicit, components in young people's social practices. This is unsurprising, given technologies tend to act as 'black boxes', unobtrusive and unnoticed but nevertheless transformative in young people's lives (Latour, 2005). Understanding this black box of practices required the researchers to first look at explicit references to technology use in the data, then return to the dataset with an eye to how different practices played out, facilitated by digital technologies. While the excerpts in the findings represent the most explicit accounts of communications technologies to ensure clear and succinct examples for readers, most of the data on which the findings are based did not include such explicit references (although they do point towards similar conclusions).

### **Coding**

After defining the focus area of the study (i.e., communications technologies and drinking) and the theoretical framework (practice theory), researchers from each country who were familiar with the data developed a coding framework. We began by looking closely at the data on communications technologies, drinking and other relevant practices (such as socialising). Authors from each country familiar with the data (GC, LF, JT) then inductively identified themes and ideas that recurred across the datasets. To manage the large dataset and attend to the various transformative effects of communications technology on drinking, multiple iterations of the coding framework were reduced to a simple deductive matrix informed by the concept of affordances and the overarching interest of the projects in the decline in youth drinking:

- Where communications technologies afforded *reduced* drinking
- Where communications technologies afforded *increased* drinking
- Where communications technologies afforded both *reduced* and *increased* drinking

Using this three-category matrix, the researchers (GC, LF, JT) added data excerpts and notes to each category.

### **Sampling of Data**

One key challenge for cross-national qualitative research is to balance rich and complex data with the need to produce transferable, generalisable and theoretically informed findings

(Wendt, 2020). However, the large datasets allowed us to sample the data that most explicitly concerned relevant ideas and concepts. Thus, as opposed to an in-depth analysis of the full dataset from all three countries, we chose to theoretically sample from our datasets passages where the participants discussed communication technologies in the context of drinking or in relation to drinking-related practices. This involved keyword searches using terms such as “phone”, “text”, “app” “message”, “group chat”, “online”, “social media”, “Facebook”, “Instagram” and “Snapchat”, as well as looking closely at specific questions where interviewers asked about technology use. Theoretical sampling utilises cases most relevant to the phenomena of interest to build, test and refine appropriate theoretical concepts (Palinkas et al., 2015); in this case, understanding the role of communications technologies in directing drinking and other tangential practices (e.g., going out to bars and parties). Theoretical sampling allowed us to manage the large datasets while also considering how demographic markers (such as gender) might come into play. This sampling led to roughly stratified sets of data according to gender and across countries.

## **Analysis**

During the coding phase, the matrix facilitated discussions, allowing the three researchers managing their country’s data (GC – Australia, LF – UK, JT – Sweden) to share relevant excerpts and note how they might align with or challenge other data. Interpretation of the broader dataset required continuous discussions between the authors. We subsequently identified relevant passages and returned to the data to recode excerpts as we clarified our areas of focus.

Material affordances arose in ways that could transform drinking, as well as the bundling and sequencing of practices around drinking. While some of these clearly reduced drinking or increased drinking, others were contingent on other interconnected practices, resulting in affordances that could both reduce and increase drinking. We use these different affordances as a basis for our findings below.

## **Results**

### **How Technologies Afforded Reduced Drinking**

The use of communications technologies afforded young people ways of expressing and maintaining intimacy without drinking alcohol with friends, but also provided affordances for parental monitoring and disruption of drinking practices. Young people’s technology use was

pervasive and constant (“I spend 99.99 per cent of my time online” – Cherry, 19, woman, Australia). Participants described being able to catch up ‘virtually’ with friends through games, messaging or video call apps like Facetime, as well as making new friends online. This created an online infrastructure that supported young people interacting, connecting, and socialising in environments less oriented towards drinking alcohol collectively. Young people described being able to have fun together and enact a form of intimacy that may have once taken place in physical spaces.

*I think it's a lot easier to spend time with your friends without having to be with them and get drunk now. Like 90% of my time is spent on Facetime or I'm on my X-Box or I'm Facetime to someone else and that's easier to...like, rather than having to be with someone and, like, I don't drink that much with my friends, like, we do it if we want but it's like we really spend that much time, it's easier to talk to them without being with them, you don't need to anymore. (Liam, 18, man, UK)*

As social environments shift online, so too do the meanings and practices involved change. Catching up online is unlike other practices where drinking might be involved, such as dining together or going to a party. The practices involved with communicating and gaming online, as identified above, afforded young people a sense of friendship and comfort. This meant less perceived pressure or expectation that drinking would be bundled together with spending time online with friends. This virtualisation of networks and practices allowed gaming online to be a meaningful social pursuit for young people, predominantly young men. In contrast, gaming with friends in person was more likely to be accompanied by drinking (mostly for participants over 18).

As well as intimacy with friends, young people were also able to build romantic intimacies online:

*I don't know how to explain it, I talk to the guy now all the time on Facetime, because that's all we can do. I don't need a drop of alcohol, but at a party...I don't know. Before we got comfortable on that level, it was just...I'd really only seen him a bit at school, and at a party you'd go and your friends know you like him, and his friends know he likes you. So, they're all waiting there for you to kiss, and it'd give me anxiety that they were watching for it. So yeah, I'd go have a few drinks and dance, and try and build up the confidence and then go for it. (Angelica, 18, woman, Australia)*

Affordances of online comfort and in-person anxiety were central to communication practices with romantic interests. Here, technology enabled modes of communicating unbundled from other practices, expectations, and subsequent anxieties of in-person socialising – i.e., going to a party, flirting and drinking. The sentiment that it could be “easier to talk online” with both friends and romantic interests highlighted how technologies not only allowed young people direct communication practices removed from material environments that encouraged drinking, but also provided meaningful ways of connection, enacting friendship and intimacy that might previously have been mediated by alcohol consumption (e.g., MacLean, 2016).

Some participants, particularly those under 18 years old, also noted how parents might monitor and/or communicate with them on a night out through phones and social media.

*For my mother it is very important that I keep contact with her when, for example, I am at a party. Then I send her some text messages. (Sophie, 19, woman, Sweden)*

*I'm letting [mum] know [by text], like, where I am, who with and what time I'm going to be back home so she knows everything's OK. (Agnes, 16, woman, UK)*

Although there was little explicit discussion of whether this reduced drinking, the presence of parents, as materialised through phones and text messages, highlighted how technology created new ways for parents to monitor and communicate with young people. Rather than being distinct and separate, these parenting practices became interconnected with ‘nights out’. As we interpreted it, this allowed new possibilities for disruption and reshaping the event to incorporate parents more closely.

Young people’s wider use of communications technologies was also integrated into these nights out, for example through regularly checking phones. This led to bundles of practices where young people could fluidly move between drinking and using technology. Some suggested technologies seamlessly accompanied drinking in these practices:

*90 per cent of the time when I have had a drink in my hand I'm on my phone as well. (Greg, 19, man Australia)*

*...me and my friends sometimes sit in pub and we're sat on our phones, like looking through social media. So I don't think that really takes the time [away from drinking]. (Sophie, 21, woman, UK)*

Others described more explicitly how the act of checking phones provided a time out or break from drinking:

*Sometimes during the evening it's nice to just get away from the group a bit, sit down and check Instagram. Go to the toilet and sit down and check Facebook if something has happened. (Sam, 19, man, Sweden)*

Using phones and social media as an accompanying activity in drinking contexts provided opportunities for entertainment and respite, as well as moments to connect and socialise online, which are less conducive to drinking. Even though technologies were described as integrated into the broader practices that drinking was a part of, such as going to the pub or being at a party, young people's capacity to fluidly move between using technologies and drinking disguised how technologies acted to coproduce drinking, and drinking less, in subtle ways. In effect, communications technologies provided affordances that could decentralise drinking (via providing an alternative focal point to alcohol), and at times disrupt drinking (via taking breaks to look at phones).

### **How Technologies Afforded Increased Drinking**

Technologies also facilitated the organisation of drinking occasions and online drinking contexts (where social drinking would have otherwise been impossible). Some young people suggested online platforms allowed them to drink with friends through online games and video-calling, particularly during COVID-19 lockdowns. This tended to reflect networks of affordances that both restricted movement and encouraged connecting through virtual drinking practices.

*I always was like I'm going to have my first shot when I'm 18, that was my version of being good. I'll start doing shots at 18, and then I was in the house quarantined for my eighteenth and just doing shots over Facetime with my friends. But I haven't really had the opportunity to feel I can go full out [drinking heavily] yet. I'm sure as soon as quarantine's lifted, I'll be running [to bars]. (Angelica, 18, woman, Australia)*

Although technologies afforded new drinking contexts, drinking online was uncommon outside of COVID-19 restrictions. It also tended to afford lighter forms of drinking as it reduced opportunities to communicate and socialise fluidly, as highlighted by Sophie.

*...it was a little awkward when it was like, "oh, it's kind of like a pub but there's really 40 people sitting in a Zoom room." It becomes difficult for someone to have a conversation at all (Sophie, 22, woman, Sweden)*

Thus, while communications technologies created opportunities for social drinking where it may have otherwise not been possible (e.g., COVID-19 restrictions), they also did not seem to encourage heavy drinking among young people. This contrasts with other practices requiring physical proximity with friends such as parties, which can afford heavier drinking through comfort, excitement and social expectations (e.g., MacLean, 2016; MacLean et al., 2022).

More commonly, communication technologies provided young people ways of connecting and meeting up in person, at times with very little notice or pre-organisation. Participants could message groups of friends through messaging apps and create opportunities for meeting up. They also were able to maintain networks of friends from different contexts (e.g., school, work, university), which afforded greater opportunities for socialising. Although drinking was not necessarily the sole or explicit purpose of socialising, the act of physically meeting up, sometimes spontaneously, provided more opportunities to drink together with friends. For example, some young people talked about co-ordinating social practices online, such as taking advantage of 'free houses' (when parents were away), weekends or holidays – times and locations which were more likely to be the sites of drinking practices. For example, Henry, who lived at university away from his hometown, describes being able to meet old friends:

*I've got a group of friends at home [...] There's like seven of us and six of us are at uni so like over Easter we saw each other like four or [five] times and kept in touch, but we don't really message until there's like a big holiday coming and we say 'oh, we need to do stuff'. [...] That would be mostly Snapchat and Facebook [...] when I see most of them we usually end up either going out or we're at someone's house, drinking. (Henry, 19, man, UK)*

Other participants also noted how communications technologies increased access to drinking places, which may have otherwise been inaccessible:

*There are probably more raves now than earlier [before COVID-19]. Secret raves that should not exist. You get a notice during the night around 2am that "here now, in this forest", so I take a bus to the forest [...] I know many who have gone to raves*

*because the clubs have been closed and everything. And also people who did rarely go to raves [...] go to raves now, so there is a whole new target group there now [...] on Instagram I see new faces taking part on raves I did not see before. (Oliver, 23, man, Sweden)*

Online platforms were central to how young people organised in-person events, ranging from casual meetups to birthdays to larger events. Some participants also talked about events held by university groups, which were advertised online and promoted drink specials. Thus, virtual event invitations and calendars on social media platforms afforded young people ways to connect in a particular place and time, while also setting expectations around drinking. These bundled ‘nights out’ practices in ways that encouraged young people to organise themselves, their friends and other aspects of an event (such as alcohol if it would be involved) ahead of time.

*...if there’s an event – like a party, they [my friends] will just be like, “oh are you going to drink tonight?” or, “what drinks do you want me to buy?” (Calem, 20, man, Australia)*

Here, communications technologies afforded ways of signalling drinking as a central practice of an event which, by extension, encouraged pre-planning for drinking events and facilitated collective drinking.

### **How Technologies Afforded both Increased and Reduced Drinking**

Communications technologies could afford both increased *or* decreased drinking by enabling greater fluidity to move between practices (e.g., entering and exiting a ‘night out’), as well as greater interconnection between multiple practices and contexts (e.g., practices associated with family, friends and professional life). The extent to which these affordances facilitated increased or decreased drinking was also contingent on the ways the technologies were incorporated into practices, rather than being an inherent property of them. For example, young people talked about messaging apps as a tool for moving between contexts of people, times and spaces. Technologies acted as a fluid link between social groups, the times people met up, and the spaces that mediated their drinking practices (i.e., bars, parties, home). Thus, communications technologies were implicated in the way young people accessed, exited and moved between these different contexts.



*If I am at a party and another friend is at another party then you can send a message “ah, come here” or just “ah, I’ll come to you”... or if you are at different bars you can ask, “well, where are you?” or someone asks “where is everyone and where are you going next?”, and so on. (Sam, 19, man, Sweden)*

*We always make sure to message people if they went out of the group, like if someone was like “okay, we’re moving to this club” and then they’re like “oh, I want to stay here” or whatever. Or sometimes my friends would go back with someone they’ve met or whatever. Or I would do that, and we’d make sure to message, to be like are you safe sort of thing and whatever, how did you get home, all that sort of stuff. (Garth, 18, man, Australia)*

Although drinking remains a central feature of the night out, technologies co-constitute fluid networks of friends and places, which young people could comfortably navigate or break off from. Young people also described texting or calling their friends on a night out to check on them, as well as the assurance of knowing that they could call on friends or family during a night out (complemented by their parents checking up on them). These afforded a sense of safety that did not necessarily increase or decrease drinking but shaped other practices, such as staying in touch with friends, that could potentially influence the direction of a night.

Young people also talked about using ridesharing apps to attend drinking events and return home, influencing the timing of events and how late young people went or stayed out – “Sometimes we get an Uber (...) because the trains don’t run all night” (Daria, 19, woman, Australia). This allowed young people to extend a ‘night out’ with alcohol or return home when they wanted. Hutton et al. (2021) also note that removing the requirement of a designated driver increases opportunities for collective drinking – i.e., having “a good night out” together. However, ridesharing services were also a collective way to save money or enact care – “if someone [drunk] needs to get home you would call like an Uber or a taxi or something and then take them off” (Bea, 19, woman, UK). Thus, they provided an accessible way for young people to return home, or to assist intoxicated friends returning home, thus ending a drinking event.

Narratives highlighted how communications technologies also afforded greater interconnection between practices by materialising ‘evidence’ of practices on social media, which had various impacts on drinking. Social media linked drinking practices and wider social practices associated with family, friends and professional life in ways that young

people had to negotiate. This created new links between practices that were previously disconnected. For example, evaluations of selves and others around ‘looking good’ in social situations influenced how young people used or avoided alcohol, particularly in terms of intoxication. However, how young people managed this in practice varied:

*I do not want to drink with people I do not know very well, because there is a greater risk that they would do it [take a picture and share it online] (Sophie, 18, woman, Sweden)*

*I wouldn't want to post a video of me drinking and doing something really dumb, but if it's a funny video and we're dancing or something like that, or just a nice photo with my mates, we've just had a few and we've just got a drink in our hand and we're just taking a nice photo or something, I'm fine with it. But I wouldn't want to post anything too idiotic and associated with alcohol. (Dean, 19, man, Australia)*

*...some people are still drinking while on social media, like, you see it on Snapchat and stuff where people are like videoing themselves dancing at parties, like, really drunk. So I don't think being on social media stops them, I think it kind of enables them. (Florence, 18, woman, UK)*

New intersections between practices highlight how changes within the fields of practice can influence the wider configuration of other practices – including drinking. The importance of impression management in the accounts above suggests increased interconnections and consequences of practices like socialising with alcohol and using social media. This led to new ways of thinking about, evaluating and ‘doing’ drinking.

We also note the distinction between public versus intimate networks, and how participants leveraged the control they had over private networks. Young people talked about having multiple accounts on different social media platforms to manage possible interconnection in networks of people and practices. Different platforms afforded drinking in different ways through network reach, privacy and permanence.

*[You don't share drinking pictures] on Facebook, for there you have your parents, but maybe when you have an Instagram that is private, where everyone is not allowed to follow, there you can share pictures, absolutely. It's funny. You do not post on your regular Instagram or on Facebook at all. But on Snapchat, guaranteed and often. You*

*know, Snapchat stories are up for 24 hours, you can check them as much you want for 24 hours and then they disappear. (Sam, 19, man, Sweden)*

Because digital environments enabled young people to configure different social networks, this led to interconnected practices as young people engaged with multiple social media platforms (or contexts) while drinking, simultaneously creating different affordances that could encourage or discourage drinking depending on the platform. This also created a range of contradictory meanings and challenges around how young people drank alcohol. For example, while sharing imagery of drinking and intoxication with close networks of friends was largely described as acceptable, young people talked about peers who regularly posted images of themselves intoxicated as “bragging” or “cringeworthy”. For some younger participants in particular, peers who were not seen to display competent drinking online could be especially judged and associated with “doing bad things” such as illicit drugs. This highlighted the affordances created by interconnected networks of practices for self-presentation, leading to complex interpretations of the appropriateness of certain practices.

## **Discussion**

Young people’s worlds are technologically networked and digitised, affecting how they express themselves, interact and inhabit spaces in complex ways (Tilleczek and Srigley, 2017). Within the context of declining drinking among young people, the goal of this study was to examine how communications technologies might influence drinking practices. Other approaches to understanding drinking and online technologies have tended to focus on identities, social relationships and power, or have examined broader structural forces such as industry marketing (e.g., Lyons et al., 2017; Carah and Brodmerkel, 2021). While these concepts and understandings are relevant to our analysis, our practice theory approach focused on how technologies might alter how drinking practices ‘play out’. Indeed, communications technologies are not just neutral *intermediaries* of practices, they are *mediators* of practices that actively transformed meanings (Latour, 2005). These technologies are integrated into fields of practices, affecting the timing, sequencing, meanings and interconnection of various practices, fundamentally altering the way young people organise their social lives and navigate a ‘night out’ with alcohol. Here, their use created new sets of practices, generating affordances and guiding young people’s drinking in different directions. We identified how technologies afford reduced drinking, increased drinking, and a combination of both contingent on context and networks. In many ways, communications

technologies made drinking simultaneously more accessible, less important and more complicated. In many cases, these technologies did the same for non-drinking.

Communications technology permit the creation of new practices and the removal of alcohol consumption and alcohol-related environments from other practices. Namely, online modes of communicating and connecting provide contexts for digitally mediated intimacies, allowing young people to express themselves and enact friendship or affection. Digital intimacies can give young people valued sources of trust and personal connection (Chambers, 2013) – often achieved via shared drinking practices (e.g., MacLean, 2016). In other words, it may be that young people can achieve the same connection and intimacy through different (non-drinking) contexts and practices. Recent research from Finland similarly suggests the shift towards virtual contexts for social and romantic relationships might help explain declines in young people’s drinking (Luomanen and Alasuutari, 2022). While the practice of communicating and connecting online enables young people ways of non-drinking, alcohol is not always absent from these online environments as highlighted by young people who drank with friends online during COVID-19 restrictions. However, interactions online also provided a distinct set of affordances that did not encourage or enable heavy drinking in the same way as physically shared drinking spaces.

Conversely, these technologies also act as infrastructure for organising and ordering social practices. Phones and apps were central to how young people planned social events, mobilised themselves and their networks, and engaged in a range of social practices (including drinking). Indeed, as others have noted, phones have become a central feature of a ‘night out’, from organisation (pre-event) to drinking (event) to story-telling afterwards (post-event) (Hennell et al., 2020; Hutton et al., 2021). Here, they allowed young people to designate drinking as a central practice in events and made some drinking events more accessible. Because these technologies enable young people to maintain contact with multiple networks of friends (e.g., school friends or university friends), they also offered more points of contact through which young people could meet up and drink. Thus, technologies acted as operational links, connecting people with material contexts that could enable drinking.

Affordances of social, temporal and geographic fluidity also enable young people opportunities to fluidly move between contexts, mediating the drinking activities that accompany them. Locations and temporalities represent important constitutive elements of drinking (Meier et al., 2018) and communications technologies afford new ways of

sequencing practices in time and space (Shove et al., 2012). Here, the ability to organise social lives synchronously and asynchronously, and to fluidly move in and out of different contexts, played a central role in shaping young people's drinking practices. For example, young people could co-ordinate their drinking with friends, could enter and exit venues to sync up with different peers, and could order rideshares when they decided they wanted to leave an event. As Costa (2018) notes, while digital architectures contribute to interactions and communication, "users actively appropriate and adapt digital technologies to better reflect their own goals and lives" (p.3649). Because these affordances facilitate increased or decreased drinking, they were often contingent on how technologies were used, not only an inherent property of them.

Earlier work drawing on some of the same Swedish data showed how particular online platforms became distinct actants based on the intimacy and privacy of the networks they were associated with (e.g., Facebook as more public, Snapchat as more intimate) (Törrönen et al., 2020). This resonated with data from other countries in this study, where drinking was negotiated according to an array of online platforms. These platforms widened the 'nexus of interconnected practices' (Schatzki et al., 2001) around young people's personal, social, family and professional lives, generating heterogenous affordances that could both encourage and discourage drinking depending on the platform and the associated network. Whether this resulted in abstention or controlled drinking, or carnivalesque intoxication, reflected how young people negotiated their digital privacy and networks. We also know that young people have to navigate these interconnected practices in ways that reflect notions of appropriate 'femininity' and 'masculinity' (Goodwin et al., 2016). While unpacking this gendering of practices was not in the scope of this study, previous analyses of some of our datasets have highlighted how online norms and expectations continue to afford gendered drinking practices (Pennay et al., 2022; Törrönen et al., 2020).

Practices are open to contestation, tension and change (Nicolini, 2013), and changes in one practice can indirectly affect another by the way practices are configured around each other (Meier et al., 2018; Schatzki et al., 2001). As communications technologies like smartphones provide the prerequisite materials for both drinking and a host of other practices, so too can they disrupt and change established ways of doing things. Indeed, theories of practice focus on routine and rhythm as central to creating established practices (Reckwitz, 2002; Shove et al., 2012); it is through routinisation of actions that configurations of practices persist in the way that they do. While there may not be a clear quantitative association between

technologies and declines in young people's drinking, at the micro-level it seems that communications technologies have an important role in configuring drinking and other related practices. For example, communicating with friends and parents, or scrolling through social media on a 'night out' can create opportunities and disruptions drinking practices. In the broader context of how young people organise their social lives, technologies enable increasingly fluid social relationships, networks and interactions. While this offers possibilities for both increased and reduced drinking (often in contradictory ways), affordances of fluidity may similarly present a possible challenge to the routinisation of regular drinking practices for young people.

Indeed, while communications technologies enabled opportunities for drinking, few technological affordances solely encouraged increased drinking. Given the consistent positive association between technology use and drinking at the individual level in epidemiology studies (e.g., de Looze et al., 2019; Larm et al., 2019; Vashishtha et al., 2022) we might have expected to see much more evidence of technology playing a prominent role in supporting increased drinking. Affordances reflect multiple elements, including materials, as well as relationships, contexts and meanings. This complicates the causal dose-response relationship between technology use and drinking suggested by quantitative studies. For example, it may be that communications technologies are embedded in the social networks of young people in different ways, affecting the affordances of drinking or non-drinking at the network level. This may help make sense of why population-level effects of technology on drinking have so far not been associated with overall declines in youth drinking.

There are several limitations to this study. Balancing the quantity of data across all three projects meant analysing ideas and practices in breadth, leading to the possibility of missing intricacies and local variation in young people's practices. While this permitted purposive sampling across the datasets, it stopped us exploring potential intersections between culture and gender. A closer analysis of these might be fruitful for future research exploring important cross-cultural differences (e.g., Pennay et al., 2022). We also note that there were discrepancies between the methods, samples, and depth of focus on technologies in the interview schedules. However, the different approaches across the datasets allowed us to identify consistencies in practices across four countries.

## **Conclusion**

Given the ubiquity of communications technologies among young people, it is valuable to understand how such technologies mediate drinking and other related practices. In this article, we examined how communications technologies influenced drinking practices by drawing on data from three countries that have seen steep declines in young people's drinking. We identified that these technologies afford new opportunities for digitally mediated intimacies and disruptions that can reduce drinking, new material contexts and ways of organising and accessing practices that can increase drinking, and greater fluidity between practices and interconnection between fields of practice that provide contingencies for both increased and decreased drinking. Indeed, communications technologies are implicated in changing social dynamics and rhythms that created complexities, opportunities for disruptions, and challenges to the routinisation of drinking. These various effects may not be detectable through quantitative measures of technology use and alcohol consumption. However, in the context of declines in young people's drinking, it may be that all these added intricacies that communications technologies add to young people's configurations of practices can, to some degree, contribute to shifting population-level drinking patterns and practices.

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## **Author Affiliations and Details**

**Gabriel Caluzzi**, Centre for Alcohol Policy Research, Building NR1, La Trobe University, Melbourne, Australia; [g.caluzzi@latrobe.edu.au](mailto:g.caluzzi@latrobe.edu.au)

Gabriel's research draws on the sociology of youth and the sociology of health, primarily exploring shifting patterns, practices and attitudes towards alcohol use.

**Laura Fenton**, School of Health and Related Research, University of Sheffield, UK; [l.m.fenton@sheffield.ac.uk](mailto:l.m.fenton@sheffield.ac.uk)

Laura's research interests include alcohol, youth, gender, the life course, social change, and creative biographical methods.

**John Holmes**, School of Health and Related Research, University of Sheffield, UK; [john.holmes@sheffield.ac.uk](mailto:john.holmes@sheffield.ac.uk)

John's research focuses on trends, risks and policies related to alcohol use from a public health perspective.

**Sarah MacLean**, School of Allied Health, Human Services and Sport, Room 320, HS1, La Trobe University, Melbourne, Australia; [s.maclean@latrobe.edu.au](mailto:s.maclean@latrobe.edu.au)

Sarah MacLean is a sociologist who has written extensively on people's experiences of alcohol consumption, inhalant use and gambling.

**Amy Pennay**, Centre for Alcohol Policy Research, Building NR1, La Trobe University, Melbourne, Australia; [a.pennay@latrobe.edu.au](mailto:a.pennay@latrobe.edu.au)

Amy is a sociologist and alcohol researcher with a particular interest in youth drinking practices and drinking cultures.

**Hannah Fairbrother**, Health Sciences School, Barber House, Clarkehouse Road, Sheffield S10 2LA, University of Sheffield, UK.; [h.fairbrother@sheffield.ac.uk](mailto:h.fairbrother@sheffield.ac.uk)

Hannah has a broad interest in the health and wellbeing of children, young people and families with a particular focus on equity and environmental, social and political influences on health.

**Jukka Törrönen**, Department of Public Health Sciences, Centre for Social Research on Alcohol and Drugs, Stockholm University Stockholm, Sweden; [jukka.torronen@su.se](mailto:jukka.torronen@su.se)

Jukka's research focuses on substance use cultures, practices and trajectories from a sociological and interdisciplinary perspective