

CRITICAL gambling studies



ISSN: 2563-190X. Available Open Access at <https://criticalgamblingstudies.com>

ORIGINAL RESEARCH ARTICLE

Gambling in an Australian First Nations Community in the COVID-19 Era: The Importance of Supporting Community Responses and Responsibilizing Industry and Governments for Gambling Harms

Sarah MacLean, Anastasia Kanjere, Tiffany Griffin, Jai Portelli, Gabriel Caluzzi, Michael Savic, Amy Pennay

APA Citation: MacLean, S., Kanjere, A., Griffin, T., Portelli, J., Caluzzi, G., Savic, M., & Pennay, A. (2025). Gambling in an Australian First Nations Community in the COVID-19 Era: The Importance of Supporting Community Responses and Responsibilizing Industry and Governments for Gambling Harms. *Critical Gambling Studies*, 5(2), 1-19. <https://doi.org/10.29173/cgs177>

Article History:

Received October 24, 2023

Accepted October 17, 2024

Published March 24, 2025

© 2025 The authors

This work is licensed under a [Creative Commons Attribution-Non-Commercial-No-Derivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/). Authors retain copyright of their work, with first publication rights granted to *Critical Gambling Studies*.





Gambling in an Australian First Nations Community in the COVID-19 Era: The Importance of Supporting Community Responses and Responsibilizing Industry and Governments for Gambling Harms

Sarah MacLean^{a,1}, Anastasia Kanjere^a, Tiffany Griffin^b, Jai Portelli^b,
Gabriel Caluzzi^a, Michael Savic^c and Amy Pennay^a

^a La Trobe University

^b Mallee District Aboriginal Services

^c Monash University

Abstract: We report on a collaborative qualitative study to identify gambling expenditure trajectories associated with COVID-19 restrictions on in-venue gambling for people in a regional First Nations Community in Victoria, Australia. Drawing from interviews with 20 First Nations people and seven workers, we use three people's stories to illustrate experiences associated with: reduced gambling expenditure; little change in gambling expenditure; and increased gambling expenditure. Across each trajectory, many participants took up or increased online gambling during restrictions. The largest proportion returned to pre-COVID-19 gambling expenditure once restrictions eased. Some took the opportunity of a forced break from in-venue gambling to reassess its role in their lives, and a further small proportion spent more money on gambling after the pandemic than prior to it. We highlight the importance of Community in participants' capacities to manage gambling during this period. Participants described the presence of Community members at in-venue gambling as limiting their spending, something that became unavailable when gambling online at home during lockdowns. Willpower was identified as most participants' preferred means of managing gambling. This worked for some, but others noted that the ubiquity of online gambling products and ongoing effects of trauma and disadvantage stymied their efforts. As some participants insisted, the gambling industry and governments that are its beneficiaries perpetuate colonization by extracting money from First Nations peoples, with gambling harm attributed to Indigeneity rather than poverty resulting from colonization and dispossession. Thus, First Nations Communities and individuals are held responsible for problems that are largely not of their making.

Keywords: Recovery, resilience, gambler, Aboriginal Australians

Article History: Received October 24, 2023; Accepted October 17, 2024; Published March 24, 2025

Available Open Access from <https://doi.org/10.29173/cgs177>

Introduction

Gambling in Australia is widespread, and Australians spend more per capita on gambling than people in any other nation (Armstrong et al., 2018). Furthermore, First Nations people in colonized countries such as Australia tend to gamble more frequently than their non-First Nations counterparts (Hing et al., 2014). In Australia, First Nations people are also more likely to experience problems from their gambling

(Hagen et al., 2013; Hare, 2015; Hing, Russell, et al., 2015)—something that may have been exacerbated by COVID-19 public health restrictions.

This study was developed through a partnership between Mallee District Aboriginal Service (MDAS) and La Trobe University staff. It investigates the effects of COVID-19 restrictions on the lives of people who gamble within the local First Nations (referred to here as 'Aboriginal')

¹ Corresponding author. Email: S.MacLean@latrobe.edu.au



© 2025 The authors

This work is licensed under a [Creative Commons Attribution-Non-Commercial-No-Derivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/). Authors retain copyright of their work, with first publication rights granted to *Critical Gambling Studies*.

Community in the Sunraysia region of Australia. MDAS is an Aboriginal Community-controlled health organization that provides health and well-being services to the Aboriginal population in the Sunraysia region, an inland region in the northwest of Victoria and southwest of New South Wales. This area has been inhabited by the Wadi Wadi, Latje Latje, Dadi Dadi, Mutti Mutti, and Wemba Wemba peoples since ancient times.

As part of a public-health response to COVID-19, intermittent restrictions or lockdowns were implemented during 2020 and 2021 in many countries. These measures included intermittent restrictions on the opening of venues such as casinos, clubs and pubs, gambling retail outlets, racetracks, and sports events. Gambling products that were unavailable included in-venue electronic gaming machines, keno, cards, and bingo. During this period, new groups of people started online gambling, and gambling patterns among existing online gamblers also changed (Håkansson & Widinghoff, 2021). The longest lockdown in the town of Mildura occurred in April and May of 2020, lasting 43 days. We know little about the impact of restrictions on in-venue gambling on the gambling practices of Victorian First Nations peoples, or how these have evolved since the restrictions were lifted.

In this article, we report on qualitative research to identify the experiences associated with three gambling trajectories for First Nations people living in the Sunraysia area from before restrictions were introduced to a period some months after they were lifted. These trajectories were: reduced expenditure; no significant change in gambling expenditure; and increased gambling expenditure. A case narrative approach to analysis (see Ravn, 2019; Törrönen et al., 2021) allowed us to identify three themes, which we then explored in relation to other participants' experiences. Study findings were shared with MDAS and other Aboriginal Community-controlled health services to inform their ongoing service provision.

Literature Review

As noted above, alongside gambling more often on average, First Nations people are also more likely to experience harm from gambling than non-First Nations people (Hagen et al., 2013; Hare, 2015; Hing, Russell, et al., 2015). Some studies suggest that First Nations Victorians experience around ten times more harm from gambling than non-First Nations Victorians (Delfabbro, 2012; Hare, 2015). However, gambling is also a valued social activity for many and some gambling products that are collectively played (i.e., bingo) have a lower harm profile than others done privately (i.e., electronic gaming machines or 'pokies') (Maltzahn et al., 2020).

Research in the general population about the impacts of COVID-19 and associated restrictions on gambling patterns has produced inconsistent findings about frequency, intensity, and harm. It appears that online gambling increased substantially in the early months of the pandemic for some people. A survey of 2,019 Australians who gambled prior to COVID-19 showed that almost one-third of participants signed up for new online betting accounts and 1 in 20 started gambling online during COVID-19 (Jenkinson et al., 2020). Participants in this study gambled more often during this time, with the proportion who gambled four times a week or more increasing from 23% to 32% during the first few months of COVID-19 restrictions (Jenkinson et al., 2020). A different study showed that 11% of Australian adults gambled online in the first six months of 2021, up from 8% in 2020 (Australian Communications and Media Authority, 2022, p. 3).

A later study conducted in the UK (Fluharty et al., 2022) provides information about pandemic-related gambling trajectories. This study entailed surveying almost 20,000 participants about their gambling before, during, and after pandemic-related lockdowns. Just under 80% reported that their gambling remained the same during and after lockdowns, with the remainder split almost

evenly between increasing and decreasing their gambling (9.2% and 11.4%, respectively).

Changes in gambling trajectories did not happen consistently across the population. An international review by Brodeur et al. (2021) found that individuals who increased gambling during the pandemic were generally those already experiencing problems resulting from gambling, although this was not conclusive. Fluharty et al. (2022) found that factors associated with increased gambling during lockdowns in the UK included pre-existing anxiety and / or depression, self-reported boredom, frequent alcohol use, and employment. Men and smokers were less likely to increase their gambling during lockdowns. After restrictions eased, smokers, people from ethnic minority backgrounds, and people with lower education levels were more likely to maintain increased gambling or increase their gambling still further.

Only one study specifically considers Australian First Nations peoples' gambling trajectories over recent years. Interviews with 29 urban First Nations people from the Northern Territory indicated that pandemic-related venue closures led to some people taking up online gambling; some reducing gambling; and, for others, spending more time with family or increasing alcohol use (Gupta et al., 2021). Understanding the varied nature of these trajectories for First Nations Australians is important for informing service provision, Community action, and policy.

We are mindful that First Nations Communities in Australia are collectivist rather than individualist in nature. Much of the pleasure and benefit that First Nations people in Australia report from gambling concerns the opportunities it provides to spend time with family and other Community members (MacLean et al., 2019; McMillen & Donnelly, 2008). First Nations peoples also regard Community and culture as resources to heal from social problems such as substance use and gambling. Where Western approaches tend to conceptualize resilience as a quality that exists within individuals, First Nations

people often regard it as far more holistic; produced through engagement with family, Community, Country, and the wider societies in which we all live (Gale & Bolzan, 2013; Gee et al., 2023). A scoping review of Indigenous resilience found, for example, that resilience emerges in people's connection to culture, Community ancestry, and land (Usher et al., 2021). A qualitative review of gambling interventions among Indigenous populations by Saunders and Doyle (2021) found that, while there was a dearth of empirical evidence, culturally centred approaches that drew on Indigenous knowledge and strengthened capacities within communities were integral. Gambling-harm programs can reduce harm, but they can also reinforce paternalistic, colonizing approaches that individualize responsibility for gambling (MacLean et al., 2019).

Method

This study follows guidelines advising on ethical conduct in research involving First Nations peoples (National Health and Medical Research Council, 2018). As a collaborative research project (Pyett, 2002), the study design, project aims, publication, and data ownership were managed through a written agreement between MDAS and La Trobe University. MDAS staff members TG and JP, both of whom are First Nations, provided guidance throughout the research process, including in the design, data collection, and analysis phases. MDAS staff were trained in research interviewing skills, and a feedback session was held with staff members to share findings with the organization at the conclusion of the project. Ethical approval for the study was obtained from La Trobe University.

A qualitative approach to the study design was deemed by MDAS staff to be most likely to successfully engage research participants. A total of 20 interviews were conducted with Community members (Table 1). Participants reflected an almost equal gender spread, ranged in age from late teens to over 50, and included several Elders.

The sample included several who had sought help from gambling services. A quarter primarily spoke with us about a relative’s gambling rather than their own. Interviews were conducted 6–11 months after the end of the last lockdown in regional Victoria. Recruitment was done via MDAS’s Facebook page, signs posted outside the service’s buildings, and by workers asking people within their networks whether they were prepared to participate. During this period MDAS staff and the Community were still impacted heavily by COVID-19 outbreaks and hence recruitment to the study was challenging.

Table 1: Community interview participants

		Number
Gender	Woman	11
	Man	9
Elder status	Yes	9
	No	11
Age range	18–25	4
	26–33	4
	34–41	4
	42–49	0
	50+	8
Engaged with gambling services	Yes*	2
	No**	18
Speaking about own gambling experience or that of a family member	Own experience	15
	Family member	5

* is currently or has been engaged with a gambling service in the last five years

** has not been engaged with a gambling service within the past five years

To check our findings against the perceptions of people who work in gambling services across the state, we held an online interview with seven expert gambling service workers employed in four Aboriginal Community-controlled health

services across Victoria. This was held approximately a year after restrictions ceased in Mildura. Of these seven workers, two were First Nations, three were female, and four were male. Workers were recruited with support from the Victorian Responsible Gambling Foundation, which funds their programs.

The interviews were conducted by one or two of TG, JP, GC, and SM. Most were conducted face-to-face, while two, including the expert worker focus group, were held online. Participants were reimbursed with vouchers valued at \$50. The interviews were conducted in a flexible and informal manner. Interviewers were guided by schedules that allowed for general discussion around key topics concerning participants’ experiences before, during, and after COVID-19 lockdowns.

Interviews with Community members were transcribed and grouped as three trajectories before and after COVID-19 restrictions, according to whether they identified spending less, more, or a similar amount of money on gambling after restrictions than before they were implemented. Spending more money on gambling usually equated to engaging in it for more hours per week and was linked in participants’ accounts with exacerbated harm due to running out of money and being unavailable to be with family or friends (albeit the extent to which this was possible was limited during lockdowns). It was not possible to categorize trajectories for four Elders interviewed, as these interviews entailed discussion on gambling trajectories for multiple people. Neither did we attempt this with the worker interviews. Interviews with family members were grouped according to the expenditure trajectory of the main person discussed. Numbers in each category are not provided here, as the study involved a small non-representative sample, and our intention is to understand factors involved in broad gambling trajectories rather than to establish prevalence.

Interviews were analyzed thematically (Willis, 2013) using [NVivo 12](#) software. TG reviewed the

themes and coding to ensure the non-Indigenous coders understood the nuances in the data. We then identified three case stories that illustrate themes reported by participants in the broader study in each of the three gambling trajectories. Using case stories or narratives is a research approach that highlights how changes in practices such as gambling are embedded in the contexts of people's lives, and it offers a more nuanced picture of people's experiences than can be achieved with thematic analysis alone. Importantly, it also provides an opportunity to trace the changes in people's lives over time. In developing our method for this component, we followed other qualitative studies using case study approaches (see Ravn, 2019; Savic & Bathish, 2020; Törrönen et al., 2021). In the Discussion section, we expand on these three cases and draw on broader reflections from other interviewees participating in the study to discuss the three themes emerging from our analysis. These are: Community protection when gambling; disadvantage, trauma and colonization; and Community solutions for moving beyond individualized responses. False names are used in reporting quotes and experiences. A conclusion summarizes the implications for policy and practice.

Trajectory 1: Similar Gambling Expenditure Post-Lockdowns

After lockdowns ended, the majority of the interview participants for whom we could determine a trajectory resumed patterns of gambling that closely resembled their practices prior to COVID-19. Those who had gambled face-to-face prior to lockdowns generally returned to that. Those who had taken up or increased online gambling due to face-to-face restrictions often opted to phase out their online gambling in favour of previous habits. The case study of "Kirra," a young Aboriginal woman, portrays a trajectory in which gambling habits were relatively similar before and after the lockdowns.

Kirra

Kirra is employed as an administrative and technical officer on a full-time basis. Prior to the pandemic, she played on the pokies infrequently. This was *"more of a social thing; usually, we'd go watch Friday night footy and have a press at the same time."* Kirra estimates that she would visit the pokies roughly two to three times every two months, spending around \$200 to \$250 during sessions that lasted between 30 and 90 minutes. Before the pandemic, Kirra always gambled in the company of her family members. When she won, she would allocate the funds towards paying bills, clearing debts, or purchasing alcohol. She found gambling on the pokies boring after relatively short sessions and did not feel concerned that it seriously impacted her life prior to the lockdowns.

Kirra described significant struggles during the lockdowns as she was responsible for her children and their home schooling. Although she lived with family and had social contact at home, the absence of interaction with friends and other family took an emotional toll on her. Boredom was also a significant issue for Kirra during the lockdowns. Kirra came across online gambling advertisements and heard about online gambling platforms from her family members who used them. She noticed they helped her manage stress: *"I felt like, obviously when I discovered online gambling, it helped more. It was sort of the stress relief from the big day of having to sit with the kids all day inside."*

These circumstances led to a rapid increase in her online gambling and expenditure. She observed similar effects within her local Community, where diminished contact, reduced social and community connectedness, and a reluctance to ask for help resulted in people experiencing increased financial distress relating to online gambling.

During the lockdowns, Kirra reached a point where she would spend over \$550 per week on a combination of online pokies and TattsLotto (a weekly Australian lottery that is drawn and

broadcast on free-to-air television). Managing online gambling during the lockdowns was challenging, not only due to the emotional strain but also because family and Community members were not present, making it easier to overspend in the privacy of her online interactions. With numerous online gambling options readily available on her phone, it was hard to control: *"You can just access your card anytime you want."*

Although Kirra spent a significant amount on gambling during the lockdowns and found her gambling troubling during that period, she did not feel the need to seek support from services. Even at its peak, her gambling spending rarely caused difficulties in paying her bills. Since the lockdowns ended, her online pokies gambling decreased and returned to pre-pandemic levels, although her participation in TattsLotto remained consistent. As she resumed her work and social activities, the boredom and isolation that were the primary contributing factors to her online gambling diminished. She now considers her life to be *"back to normal."*

Trajectory 2: Reduced Gambling Expenditure Post-Lockdowns

A sizeable proportion (almost two-fifths) of participants for whom we could discern a trajectory emerged from COVID-19 lockdowns gambling less and spending less on gambling than they had prior to lockdowns. Those who reported decreased gambling or expenditure seemed to actively take the opportunity provided by COVID-19 lockdowns to re-evaluate their relationship to gambling. The story of "Troy," a young Aboriginal man, demonstrates a trajectory of reduced gambling expenditure after lockdowns.

Troy

For some years, Troy had placed the occasional bet on sports events online. Prior to COVID-19, this was restricted to betting on sports that he followed and enjoyed watching in a social

context, with friends present. Before 2020, he placed an average of one bet per month on a sporting event and spent an average of \$20. He reports using the pokies as part of a trip to a casino on rare occasions when he visited Melbourne, but in-venue gambling was not part of his usual routine.

During the COVID-related lockdowns, Troy's work shifted to his home, and his social life was drastically curtailed. He was bored and struggled with having less structure in his days. At the same time, he had an increased disposable income.

Troy started online betting regularly. This was facilitated by constant exposure to online gambling advertising and the ease of spending money on the apps. Troy also shifted from betting on sports he followed to placing bets on sports he knew little about, and games and teams he did not follow. He was able to place bets during the day because of his remote work and did not have friends or Community around him while he was gambling to hold his spending accountable. During lockdowns, his spending on online gambling increased to approximately \$400 per month.

After some time doing this, Troy became concerned that he was not in control of the situation. He reached out to a gambling service worker from another regional centre—another young First Nations man—for support. It seems important to Troy that this support occurred *"off the books."* The age, Aboriginality, and gender of the service worker also contributed to the success of the supportive relationship. With the support of this professional, acting more as a friend than as a worker, he developed some strategies to manage his gambling. Troy found that online gaming worked for him as a reliable substitute for the entertainment that online betting provided.

Troy spoke of patterns of what he refers to as "addiction" in his life and the lives of others in his family and Community, whether substance use, gambling, fitness-related, or other practices. He attributes this to intergenerational trauma among First Nations peoples:

It's sort of trying to fill that void [...]. It's filling that sort of area that not a lot of people have actually had closure or any sort of thing like that. Like they haven't had that sort of love or care, and you know, they—your parents sometimes, because they're traumatized, they act in certain different ways which presents that trauma to the child. The next child.... Yeah, and it's sort of just a repetitive circle.

As he observed, these tendencies are not necessarily negative—in fact, they can be a significant positive force, such as when they are harnessed to work on fitness at the gym.

After lockdowns concluded, Troy resumed his social life. A busy and fulfilling job, a new romantic relationship, and an ongoing supportive friendship with the service worker also contributed to his gambling management. As a result, online gambling in the form of sports betting had less of a presence in his life after restrictions on venues finished than it did prior to the pandemic.

Trajectory 3: Increased Gambling Expenditure Post-Lockdowns

The third, and least common, trajectory among our participants was one in which gambling harm and expenditure increased from the period before to the period after lockdowns. In this trajectory, the participant took up or significantly increased their online gambling during lockdowns, and then as lockdowns ended, either continued their escalated online gambling or reintroduced face-to-face gambling along with online gambling, resulting in increased overall gambling expenditure. The case study of “Harry,” an older First Nations man, shows this gambling trajectory.

Harry

Harry is a musician living with a mental health condition and managing complex life challenges, including homelessness. In terms of gambling

before the pandemic, he primarily played pokie machines and keno, a lottery-like game.

Pandemic-related lockdowns made travel impossible, disrupting his pursuit of music. With the closure of venues, Harry shifted to online gambling, which became more convenient but also felt to him more habit-forming. Social media advertising for online gambling eroded his resistance and management strategies. In the quote below, he compares himself to a Community member who was not as familiar with social media as he was:

I was just talking to [Auntie ____], she's only just learning Facebook.... I'm one of the unlucky ones that knew all about it [...]. You get halfway through a couple of notifications, next thing you know is you've got a gambling thing there [...]. The temptation's overwhelming [...]. You can't miss it, like, you've got your TAB [gambling app] things on there as well and your Sportsbet [gambling app] and all that.

The constant availability of online gambling led to increased spending, loss of self-control, and financial hardships that impacted his capacity to pay for food and rent. Harry's gambling habit also intertwined with his substance use, highlighting the complex relationship between gambling and other habitual practices.

Unlike Kirra and Troy, Harry did not enjoy the social experience of gambling at venues, reporting frustration with Community scrutiny and the expectation of sharing winnings. He describes this as a disincentive to gamble in those spaces and a reason to prefer online gambling:

When you're sitting at home and you're playing on a machine at home, there's nobody there bludging, and nobody knows how much you've won. Where you can go into a club and there's somebody ringing you up and telling you how much you

won. Now that's private, it's none of your business.

Harry says that the "temptation's overwhelming" to gamble online. He has taken steps to disallow his credit card from linking to online gambling platforms. Instead, he recharges his credit using Neosurf (a pre-paid voucher that can be spent on online gambling platforms). He feels this allows him some extra control; but even so, his spending on gambling is still a very significant component of his income. The daily and weekly limits he used to set himself before the pandemic are "out the window." He still gambles at in-person venues, although his preference for online gambling means that he does so less often. Harry acknowledges frankly that if he spent less money on gambling, he would probably spend anything he saved on drugs.

Harry has never sought help for his gambling and states that it "wouldn't be genuine" to do so because he knows his desire to gamble is powerful, and that he will always be motivated to do so. His inviolable rule is not to borrow money for gambling, drinking, or drugs, and he has been able to stay true to that "line in the sand." Harry suggested that further restrictions on gambling access should be introduced, as exist to support responsible serving of alcohol: "I think the answer's got to be regulation: making it harder to access these sites.... It's like being in the pub—when you start staggering, you start slurring, they're not going to serve you another drink."

While much of what our participants told us could be true for any Victorian who gambled and lived through the restrictions of 2020 and 2021, some elements in the accounts of gambling trajectories we heard appear particularly salient for First Nations people, particularly those concerning the collectivist nature of First Nations communities. In what follows, we draw on data from other interviews conducted for the study to explore three themes: lack of Community protection when gambling online; disadvantage,

trauma, and colonization; and moving beyond individual to Community and policy responses.

Lack of Community Protection when Gambling Online

As signalled in all three case studies, the interpersonal and social aspect of face-to-face gambling is especially meaningful for Aboriginal gamblers who are likely to have strong Community links and ties of obligation. This impacted the experience of online gambling during the pandemic in both negative and positive ways. Many described face-to-face gambling in venues as an opportunity to meet up with others; for example, "Gambling is just for friendship and stuff like that, being around people" [Jana]. Online gambling was regarded as an isolating activity that did not enhance connections in the same way:

Because [when gambling online] you're really there by yourself. You're sitting there with a phone in your face. When you go to the pokies or something, you've got people come up: "Oh hello, I haven't seen you in a while." Then they'll sit down and yarn up and then you've got someone sitting there playing with you while they're playing theirs. [Helen]

I know a lot of community members, especially Elders, who go down because sometimes it's the only place where they can go sit for like bingo or pokies; they'll go down to face-to-face. Online, obviously you can isolate yourself a lot. Especially if you are having a good run on it, I think you could tend to isolate yourself more than is healthfully necessary. [Kirra]

As in studies involving primarily non-Indigenous people, participants in our research complained that the strategies they used to manage gambling in venues were less effective when gambling online (Hing, Cherney, et al., 2015; Hing et al., 2022; Livingstone & Adams, 2011).

Each person selected as a case here discussed the ease of spending money via online gambling apps where bank account details are preloaded into apps, meaning spending can be done with ease and absolute privacy (Hing et al., 2022).

In addition to promoting connection with others, the social nature of in-person gambling helped people to curb gambling expenditure. Both Kirra and Troy spoke of the protective effect of Community presence while gambling in venues. Like other participants, Beth found knowing that people were looking after her welfare helped her limit her spending: *"So, I feel sometimes when people are standing behind you watching, well the intimidation is there. It's like: 'Okay, I'm not going to play that much. I'm going to pull this out. I'm going to walk away.'"*

In contrast, Harry, whose gambling expenditure remained higher after restrictions ended, was glad for the lack of scrutiny afforded by online gambling. He appreciated not having to share his winnings from online gambling as would usually be expected in the Community.

It seems that while opportunities to socialize drew people to in-venue gambling, the presence of Community protected them to some degree from excessive expenditure and harms. Regular use of social media, often used to keep in touch with other Community members, left some participants highly exposed to online gambling advertising.

Disadvantage, Trauma, and Colonization

Our interviewees spoke about some factors that they believed put their Communities at added risk for excessive gambling expenditures during lockdowns. The main appeal of gambling is the opportunity to win money. This operates for most players but may be especially appealing for some First Nations people, who have limited access to other means of making money due to historical and contemporary dispossession and discrimination. Brian said that gambling (online or in venue) offered him a chance to see himself as

successful in a way that was otherwise unavailable to him:

It's like a seed that grows, so the more that you keep going, the more you keep going, it lights it up and it's the chance of winning. Because in your average life [...] there's not much that you really win at and then that there makes you feel like you're winning. It's like winning at life, I think.

Culture or race are sometimes used as proxies for other causal factors in social problems. Our interviewee Nat observed that when First Nations people gamble too much, it is due to *"poverty rather than Indigeneity,"* which seems to be also relevant for Brian.

Research increasingly identifies trauma as a risk factor for gambling harm (Hodgins et al., 2011; Imperatori et al., 2017; Kausch et al., 2006). The trauma of multigenerational child removal renders First Nations people vulnerable to mental health challenges and poor well-being (Gee et al., 2023). As Troy observed in his life and among his family and friends, and as appeared to operate in Harry's life, trauma, discrimination, and the ongoing effects of harmful policies contribute to some First Nations people's risk of problems from alcohol, other drugs, and gambling.

In turn, relatively few Indigenous Australians approach gambling services (Jurisic, 2011). Research suggests that this is due to feelings of shame about gambling, worry about confidentiality, a lack of knowledge about services, or poor service availability (Aboriginal Health and Medical Research Council of New South Wales, 2008; Holdsworth et al., 2013).

Thomas, another interviewee who experienced problems related to his gambling expenditure during the pandemic and afterwards, provided a quite different explanation for refusing to approach services. Thomas was insistent that gambling was a problem of colonization and therefore not his job to fix by going to

counselling. Thomas was clear that blame should be apportioned to extractive gambling industries brought by white invaders to the country (see also Rintoul et al., 2013):

The Black people left the bush, left the mountain, valley, streams, to come to the city, and that's how we get addicted. It's not our fault. It's whoever created all this crap. It's nothing to do with Black fellas. The white man's system for everything.

Representing First Nations individuals as responsible for their gambling rather than attributing blame to an extractive gambling industry arguably contributes to an ongoing project of colonization. It obscures the role of the policies and extractive commercial entities that created the social problems (Gale & Bolzan, 2013). Rita also observed how her Community was pathologized: "COVID lockdowns affected everyone the same—Indig and not. But Indigenous people's problems are under the spotlight. I think it shows more if you're Indigenous because people are looking out for you to have a problem."

Community Solutions and Moving Beyond Individualized Responses to Gambling

Troy's story highlights a further issue for First Nations people: the need for culturally appropriate health care delivered in a non-clinical way by a person who can inspire trust, usually by being a Community member themselves (Finlay and Wenitong, 2020). Where people described beneficial therapeutic relationships with workers (as Troy did), they spoke of that relationship as a personal one that emerged from the site of formal support. Interviewees also reflected that Community members would be most likely to access gambling or other services where they could create connections and a feeling of safety, and they spoke about yarning circles as a way to achieve this collectively.

Aboriginal Community-controlled health services such as MDAS provide effective health

care for their communities, and this is enhanced by the employment of staff who are themselves First Nations (Campbell et al., 2018). Troy was able to seek and accept help with gambling from a young man with whom he felt an affinity based on shared age, Aboriginality, and gender. This underlines what is already known about the critical contribution that First Nations staff can make to service provision in their communities, including the importance of First Nations Community-led interventions such as yarning circles (Campbell et al., 2018).

Despite the political critique some participants made of the gambling industry, we observed among many participants a conviction that managing gambling was a private and personal responsibility, and that this should be achieved by willpower and without resorting to services or help from others. This neoliberal view about the importance of self-management is also widely held by non-Indigenous people (Nicoll, 2018). As an extension of this, participants commonly identified individual strategies as the main way to deal with gambling. Whether this was related to being a First Nations person was not clear, although Beth spoke of being proud to show her Community that she was able to control gambling through her own efforts, perhaps thus counteracting racist stereotypes of First Nations people as lacking capacity for self-management: "I do everything in moderation. I'm quite proud of that. I like being the example for my Community. My Aboriginal Community. I'm quite proud of that."

While individual willpower has a place in managing gambling, much of the harm that ensues from gambling is driven by structural factors outside the person, such as product availability and advertising (Rintoul et al., 2013; Strohäker & Becker, 2018). The pandemic dramatically curbed in-venue gambling. A worker spoke of an improvement in some First Nations people's relationships with gambling when venues closed:

It was sort of a really different shift we saw in Community, which was really amazing; space and capacity to focus on certain elements [...]. Parents and carers we've seen had some time to really focus on certain elements that were affecting their social and emotional health well-being, and sort of had the right supports in place.

Unlike Troy, who increased his gambling expenditure during lockdowns and then reduced it subsequently, some experienced a trajectory towards reduced gambling expenditure during restrictions. These people's in-venue gambling ceased abruptly when lockdowns started, and they did not commence online gambling afterward. The sudden absence of pokies in particular disrupted practices and allowed people space to learn what it was like not to gamble, giving them extra cash and space to consider what they could do to support their well-being and that of their families. The opportunity this afforded some people reflects a similar finding in another study involving First Nations people (Gupta et al., 2021).

Yet this did not last for everyone once restrictions were relaxed. The overall sense shared among the workers we spoke with was that *"people came back gambling better and harder."* The pandemic experience demonstrates that the most effective way to reduce excessive gambling expenditure is to restrict availability, rather than relying on individuals to exercise willpower.

Workers talked about wanting to share with Community members how gambling products are designed to override their willpower and ensnare them, and that this is done in particularly insidious ways through advertising online gambling products on social media (Hing, Cherney, et al., 2015; Hing et al., 2022; Livingstone & Adams, 2011). This may be a form of Community education that does not stigmatize individuals for social problems (see Keane, 2019).

Discussion

In this article, we consider stories exemplifying three gambling expenditure trajectories from before to after COVID-19 lockdowns reported by 20 First Nations people living in the Sunraysia regional area of Victoria, all of whom identify as Aboriginal.

The three case studies presented here highlight the diverse trajectories that individuals followed during and after restrictions associated with the COVID-19 pandemic. Following the pandemic restrictions, a majority of people interviewed returned to their regular levels of gambling, with the remainder split evenly between more and less gambling post-COVID restrictions. Our results are similar to those from a large population study conducted in the United Kingdom (Fluharty et al., 2022).

Regardless of their trajectory, most of our case-study participants showed a marked increase in online gambling during lockdowns when venues were closed, stresses were many, and there was little else to do to occupy their time. This move to take up or increase online gambling was evident in the Australian population more broadly during the early months of the pandemic (Jenkinson et al., 2020).

First Nations health research has rightly been derided for its tendency to report a litany of problems (Bryant et al., 2021). It is important to highlight that the majority of people in this study returned to their usual level of gambling expenditure after lockdowns eased, with some reporting that they spent less on gambling after the pandemic restrictions than they did before.

However, we should also bear in mind that a minority of people in our study reported increased expenditure and harm from gambling after lockdowns, particularly involving new modalities of online gambling. Discussions with workers that occurred as part of the study suggest that this pattern of increased overall gambling may be more widespread within the broader

Victorian First Nations Community than in our interview sample.

The literature suggests that factors such as pre-existing mental health and substance-use conditions, personal coping mechanisms, and disadvantage appear to play a role in shaping these trajectories (Fluharty et al., 2022). This may well be true for our participants; however, we also note that those who distanced themselves from Community scrutiny had only individual strategies to implement to manage their gambling. Future research might investigate Community connectedness as a protective factor for gambling harm. Evidently, a policy and service response involving Community at every step is required to meet the needs of those whose online gambling has remained more problematic since the conclusion of COVID-19 lockdowns.

Community played a significant role in all the trajectories described in this paper. Most participants spoke of the presence of Community members as supporting them to moderate gambling; something that was unavailable to those who gambled online at home during COVID-19 restrictions. Community was also used to ameliorate problems from excessive gambling expenditure, with some participants preferring to seek help from another First Nations person. This is consistent with literature that shows how resilience for First Nations peoples emerges through relationships between people, their Communities, and culture (Gale & Bolzan, 2013; Gee et al., 2023; Usher et al., 2021).

Contrary to this emphasis on Community as a source of resilience, individual willpower was identified by most participants as a preferred means of managing gambling. This worked for some, but participants also noted that the ongoing effects of trauma made it more difficult for First Nations people to manage gambling. Some participants were wary of problematizing First Nations people's gambling and drew attention to the responsibility of colonization and the gambling industry for causing these troubles. Thomas insisted that gambling was part of a

"white man's system" to oppress First Nations. Beth observed that her Community members were scrutinized for signs of problems from gambling in a way that non-Indigenous people were not. Nat pointed out that, when First Nations peoples experience problems from gambling, it is attributed to their Indigeneity rather than the poverty from colonization and dispossession. These participants echo arguments made in the academic literature that gambling is part of an ongoing project of colonization and oppression of First Nations people, and that it does this by producing racialized stigma and shame (Nicoll, 2018).

Exposure to online gambling, and related marketing, was a key factor in shifting or increasing gambling practices during COVID-19 lockdowns for many. Due to the particularly predatory nature of the marketing and availability of online gambling, people were clear that stronger regulation and advertising of these products is required. While gambling regulations must account for the need for self-determination among First Nations communities (Saunders & Doyle, 2021), the gambling industry (and related promotions) represent a commercial determinant of harm that individualizes and disproportionately oppresses First Nations communities. Reconciling these two competing priorities requires, first and foremost, policies and regulations that draw on the voices of First Nations people.

Conclusion

As a small qualitative study involving a convenience sample of interviewees, we cannot generalize our findings to make claims about the prevalence of the trajectories we identified. The voluntary recruitment process might have influenced our findings, as those struggling with gambling might have been less likely to participate. The study also has strengths; for example, it benefited greatly from Community co-researcher contributions. Further, following people's stories, as we have done here, has

enabled us to trace the evolution of gambling practices over time. It allows us to recognize something of the diversity and nuances of practice, such as gambling within individual lives, and the various factors that seem to shape how they form, persist, and dissipate.

This paper highlights a complex dilemma to be negotiated by those working in gambling response services for First Nations people. Services are funded to work with individuals and Communities in the knowledge that First Nations people are at higher risk of harm from gambling than the general population due to multigenerational dispossession, poverty, and trauma. An immediate response to individual and Community suffering from gambling is, of course, required. Yet excessive spending on gambling is encouraged by governments and industry—and these are the bodies that are able to bring in measures promoting the most effective change—as was evident during COVID-19-related restrictions on gambling venue opening. Encouraging people to change their gambling practices might be an easier option than addressing the contribution of the gambling industry to the ongoing colonization of First Nations peoples or achieving political action to reduce gambling product availability. But it also implicitly blames First Nations Communities and individuals for problems that are largely not of their making.

References

- Aboriginal Health and Medical Research Council of New South Wales (AH&MRC). (2008, May). *Pressing problems: Gambling issues and responses for NSW Aboriginal communities* [Community report]. AH&MRC. <http://esvc000239.bne001tu.server-web.com/Downloads/Publication/AHMRC%20Pressing%20Problems%20Community%20Reportcolor.pdf>
- Armstrong, A. R., Thomas, A., & Abbott, M. (2018). Gambling participation, expenditure and risk of harm in Australia, 1997–1998 and 2010–2011. *Journal of Gambling Studies*, 34(1), 255–274. <https://doi.org/10.1007/s10899-017-9708-0>
- Australian Communications and Media Authority. (2022, February). *Online gambling in Australia: Findings from the 2021 ACMA annual consumer survey*. Commonwealth of Australia. <https://www.acma.gov.au/sites/default/files/2022-02/Online%20gambling%20in%20Australia.pdf>
- Brodeur, M., Audette-Chapdelaine, S., Savard, A.-C., & Kairouz, S. (2021). Gambling and the COVID-19 pandemic: A scoping review. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 111, 110389. <https://doi.org/10.1016/j.pnpb.2021.110389>
- Bryant, J., Bolt, R., Botfield, J. R., Martin, K., Doyle, M., Murphy, D., Graham, S., Newman, C. E., Bell, S., Treloar, C., Browne, A. J., & Aggleton, P. (2021). Beyond deficit: 'Strengths-based approaches' in Indigenous health research. *Sociology of Health & Illness*, 43(6), 1405–1421. <https://doi.org/10.1111/1467-9566.13311>
- Campbell, M. A., Hunt, J., Scrimgeour, D. J., Davey, M., & Jones, V. (2018). Contribution of Aboriginal community-controlled health services to improving Aboriginal health: An evidence review. *Australian Health Review*, 42(2), 218–226. <https://doi.org/10.1071/ah16149>
- Delfabbro, P. H. (2012). *Australasian gambling review (June 2011)* (5th ed., covering 1992–2011). Independent Gambling Authority of Australia. <https://www.cbs.sa.gov.au/documents/australasian-gambling-review-5th-edn-web5810.pdf>
- Finlay, S., & Wenitong, M. (2020). Aboriginal community controlled health organisations are taking a leading role in COVID-19 health communication. *Australian and New Zealand Journal of Public Health*, 44(4), 251–252. <https://doi.org/10.1111/1753-6405.13010>
- Fluharty, M., Paul, E., & Fancourt, D. (2022). Predictors and patterns of gambling behaviour across the COVID-19 lockdown: Findings from a UK cohort study. *Journal of Affective Disorders*, 298(Part A), 1–8. <https://doi.org/10.1016/j.jad.2021.10.117>
- Gale, F., & Bolzan, N. (2013). Social resilience: Challenging neo-colonial thinking and practices around "risk." *Journal of Youth Studies*, 16(2), 257–271. <https://doi.org/10.1080/13676261.2012.704985>
- Gee, G., Hulbert, C., Kennedy, H., & Paradies, Y. (2023). Cultural determinants and resilience and recovery factors associated with trauma among Aboriginal help-seeking clients from an Aboriginal community-controlled counselling service. *BMC Psychiatry*, 23(1), 155. <https://doi.org/10.1186/s12888-023-04567-5>

- Gupta, H., Tari-Keresztes, N., Aanundsen, D., & Stevens, M. (2021, August). *A qualitative investigation of Aboriginal gambling behaviour, consequences, risk factors, and help-seeking in the Northern Territory*. Menzies School of Health Research, Charles Darwin University. https://dth.nt.gov.au/_data/assets/pdf_file/0003/1137648/a-qualitative-investigation-of-Aboriginal-gambling-behaviour-consequences-risk-factors-and-help-seeking-ntp.pdf
- Hagen, B., Kalishuk, R. G., Currie, C., Solowoniuk, J., & Nixon, G. (2013). A big hole with the wind blowing through it: Aboriginal women's experiences of trauma and problem gambling. *International Gambling Studies*, 13(3), 356–370. <https://doi.org/10.1080/14459795.2013.819934>
- Håkansson, A., & Widinghoff, C. (2021). Changes of gambling patterns during COVID-19 in Sweden, and potential for preventive policy changes. A second look nine months into the pandemic. *International Journal of Environmental Research and Public Health*, 18(5), 2342. <https://doi.org/10.3390/ijerph18052342>
- Hare, S. (2015, November). *Study of gambling and health in Victoria: Findings from the Victorian Prevalence Study 2014*. The Victorian Responsible Gambling Foundation and Victorian Department of Justice and Regulation. <https://responsiblegambling.vic.gov.au/resources/publications/study-of-gambling-and-health-in-victoria-findings-from-the-victorian-prevalence-study-2014-72>
- Hing, N., Breen, H., Gordon, A., & Russell, A. (2014). The gambling behavior of Indigenous Australians. *Journal of Gambling Studies*, 30(2), 369–386. <https://doi.org/10.1007/s10899-013-9358-9>
- Hing, N., Cherney, L., Gainsbury, S. M., Lubman, D. I., Wood, R. T., & Blaszczynski, A. (2015). Maintaining and losing control during internet gambling: A qualitative study of gamblers' experiences. *New Media & Society*, 17(7), 1075–1095. <https://doi.org/10.1177/1461444814521140>
- Hing, N., Russell, A. M. T., Gainsbury, S. M., & Blaszczynski, A. (2015). Characteristics and help-seeking behaviors of Internet gamblers based on most problematic mode of gambling. *Journal of Medical Internet Research*, 17(1), e13. <https://doi.org/10.2196/jmir.3781>
- Hing, N., Smith, M., Rockloff, M., Thorne, H., Russell, A. M. T., Dowling, N. A., & Breen, H. (2022). How structural changes in online gambling are shaping the contemporary experiences and behaviours of online gamblers: An interview study. *BMC Public Health*, 22, 1620. <https://doi.org/10.1186/s12889-022-14019-6>
- Hodgins, D. C., Stea, J. N., & Grant, J. E. (2011). Gambling disorders. *The Lancet*, 378(9806), 1874–1884. [https://doi.org/10.1016/S0140-6736\(10\)62185-X](https://doi.org/10.1016/S0140-6736(10)62185-X)
- Holdsworth, L., Breen, H., Hing, N., & Gordon, A. (2013). One size doesn't fit all: Experiences of family members of Indigenous gamblers. *Australian Aboriginal Studies*, 1, 73–84. <https://search.informit.org/doi/10.3316/informit.423194599231114>
- Imperatori, C., Innamorati, M., Bersani, F. S., Imbimbo, F., Pompili, M., Contardi, A., & Farina, B. (2017). The association among childhood trauma, pathological dissociation and gambling severity in casino gamblers. *Clinical Psychology & Psychotherapy*, 24(1), 203–211. <https://doi.org/10.1002/cpp.1997>
- Jenkinson, R., Sakata, K., Khokhar, T., Tajin, R., & Jatkar, U. (2020, October). *Gambling in Australia during COVID-19* [Research summary]. Australian Gambling Research Centre, Commonwealth of Australia. https://aifs.gov.au/sites/default/files/publication-documents/2009_gambling_in_australia_during_covid-19_0.pdf
- Juriscic, N. (2011, July 1). *Development of culturally appropriate problem gambling services for Indigenous communities* [Occasional paper no. 40]. Cultural & Indigenous Research Centre Australia, Department of Families, Housing, Community Services and Indigenous Affairs. <http://dx.doi.org/10.2139/ssrn.2125556>
- Kausch, O., Ruge, L., & Rowland, D. Y. (2006). Lifetime histories of trauma among pathological gamblers. *The American Journal on Addictions*, 15(1), 35–43. <https://psycnet.apa.org/doi/10.1080/10550490500419045>
- Keane, H. (2019). Rethinking stigma and gambling. *Critical Gambling Studies Blog*. <https://doi.org/10.29173/cgs13>
- Livingstone, C., & Adams, P. (2011). Observations on the symbiosis between government and private industries for the development of highly accessible gambling markets [Comment / Reply]. *Addiction*, 106(1), 13–14. <https://doi.org/10.1111/j.1360-0443.2010.03315.x>
- MacLean, S., Maltzahn, K., Thomas, D., Atkinson, A., & Whiteside, M. (2019). Gambling in two regional Australian Aboriginal communities: A social practice analysis. *Journal of Gambling Studies*, 35(4), 1331–1345. <https://doi.org/10.1007/s10899-019-09858-9>
- Maltzahn, K., Whiteside, M., Thompson, A., Kirirura, J., Cox, J., Lee, H., & MacLean, S. (2020, April). *Lucky for some: Bingo in Victoria* [Research report]. Victorian Responsible Gambling Foundation. <https://responsiblegambling.vic.gov.au/resources/publications/lucky-for-some-bingo-in-victoria-975>
- McMillen, J., & Donnelly, K. (2008). Gambling in Australian Indigenous communities: The state of play. *Australian Journal of Social Issues*, 43(3), 397–426. <https://doi.org/10.1002/j.1839-4655.2008.tb00110.x>

National Health and Medical Research Council. (2018, August). *Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and Communities: Guidelines for researchers and stakeholders*. Commonwealth of Australia <https://www.nhmrc.gov.au/about-us/resources/ethical-conduct-research-aboriginal-and-torres-strait-islander-peoples-and-communities>

Nicoll, F. (2018). Beyond the figure of the problem gambler: Locating race and sovereignty struggles in everyday cultural spaces of gambling. *Journal of Law and Social Policy*, 30, 127–149. <https://doi.org/10.60082/0829-3929.1325>

Pyett, P. (2002). Working together to reduce health inequalities: Reflections on a collaborative participatory approach to health research. *Australian and New Zealand Journal of Public Health*, 26(4), 332–336. <https://doi.org/10.1111/j.1467-842X.2002.tb00180.x>

Ravn, S. (2019). Imagining futures, imagining selves: A narrative approach to 'risk' in young men's lives. *Current Sociology*, 67(7), 1039–1055. <https://doi.org/10.1177/0011392119857453>

Rintoul, A. C., Livingstone, C., Mellor, A. P., & Jolley, D. (2013). Modelling vulnerability to gambling related harm: How disadvantage predicts gambling losses. *Addiction Research & Theory*, 21(4), 329–338. <https://doi.org/10.3109/16066359.2012.727507>

Saunders, P., & Doyle, K. (2021). Gambling interventions in Indigenous communities, from theory to practice: A rapid qualitative review of the literature. *Journal of Gambling Studies*, 37(3), 947–982. <https://doi.org/10.1007/s10899-021-10019-0>

Savic, M., & Bathish, R. (2020). Rethinking agency, strengths, and change in desistance and recovery: An actor-network approach. In D. Best & C. Colman (Eds.), *Strengths-based approaches to crime and substance use: From drugs and crime to desistance and recovery* (pp. 105–122). Routledge.

Strohäker, T., & Becker, T. (2018). The relationship between exclusions from gambling arcades and accessibility: Evidence from a newly introduced exclusion program in Hesse, Germany. *Journal of Gambling Studies*, 34(3), 1033–1047. <https://doi.org/10.1007/s10899-018-9762-2>

Törrönen, J., Samuelsson, E., Roumeliotis, F., & Månsson, J. (2021). Negotiating emerging adulthood with master and counter narratives: Alcohol-related identity trajectories among emerging adults in performance-oriented neoliberal society. *Journal of Adolescent Research*, 39(3), 796–821. <https://doi.org/10.1177/07435584211052986>

Usher, K., Jackson, D., Walker, R., Durkin, J., Smallwood, R., Robinson, M., Sampson, U. N., Adams, I., Porter, C., & Marriott, R. (2021). Indigenous resilience in Australia: A scoping review using a reflective decolonizing collective dialogue. *Frontiers in Public Health*, 9, 630601. <https://doi.org/10.3389/fpubh.2021.630601>

Willis, K. (2013). Analysing qualitative data. In M. Walter (Ed.), *Social research methods* (3rd ed., pp. 315–336). Oxford University Press.

Funding and Conflict of Interest Statements

Sarah MacLean

During 2022–2024, Sarah MacLean received research funding from the Victorian Responsible Gambling Foundation (VRGF) (funds derived from the hypothecation of gambling tax revenue). These funds are allocated on the basis of independent peer review, and the funding body did not influence the research design or study findings. She has also received research funding as a Chief Investigator from the Australian Research Council and the Victorian Aboriginal Health Service. Further research funding was obtained to conduct a literature review for the Aerosol Association of Australia. She has provided paid consultancy advice on research concerning bingo conducted by the Victorian Gambling and Casino Control Commission, and the NSW Crown Solicitor in relation to volatile substance misuse. A list of relevant grants is provided below.

- Laslett, A.-M., Smit, K., Jiang, H., MacLean, S., & Room, R. (2024). Secondary analysis of data from the Victorian Population Gambling and Health Study (2018–2019) to explore the relationship between alcohol use and gambling participation and their impact on associated harms. Victorian Responsible Gambling Foundation.
- Laslett, M., Jiang, H., Dwyer, R., MacLean, S., Anderson-Luxford, D., Willoughby, B., & Room, R. (2022–2023). Exploring the relationship between alcohol use and gambling participation and their impact on associated harms. Victorian Responsible Gambling Foundation.
- MacLean, S., Griffin, T., Pennay, A., & Savic, M. (2021–2022). Online gambling in a world changed by COVID-19: trajectories for people in the Sunraysia Aboriginal community. Victorian Responsible Gambling Foundation GR11/20/06.

- Bryant, J., MacLean, S., Skattebol, J., Neale, J., Hallam, K., & Ferry, M. (2020–2023). Aftercare for young people: A sociological study of resource opportunities. ARC Discovery Project DP200100492.
 - MacLean, S. (2024). Expert advice on bingo surveys. Victorian Gambling and Casino Control Commission (VGCCC).
 - MacLean, S. (2024). Review of academic literature concerning efficacy of warning labels on aerosols. Aerosol Association of Australia.
 - MacLean, S. (2022). Expert statement on volatile substance use and attendance at expert enclave at coronial inquiry. Requested by NSW Crown Solicitor.
 - MacLean, S. (2022–2023). Subcontracted research on the 'Staying Strong' project. Subcontract to Victorian Aboriginal Health Services, funded by Victorian Responsible Gambling Foundation SR/22/02.
 - Cook, M., MacLean, S., Cooklin, A., Pennay, A., Riordan, B., Caluzzi, C., & Callinan, S. (2022). Differences in how men and women are studied in alcohol research: A systematic review. La Trobe University, ABC Grant Scheme.
 - Cook, M., & MacLean, S. (2022). Systematic review of studies of men's and women's alcohol consumption. SPPH Internal Grant Scheme.
 - Laslett, A.-M., MacLean, S., Room, R., Jiang, H., Cooklin, A., McIntosh, J., Blackberry, I., Riordan, B., Hooker, L., Ison, J., & Forsdike, K. (2022). Substance use: Its impact on children across the care economy. La Trobe University, Rapid Synergy Initiative Grant.
- undertake research on topics related to alcohol and other drugs from La Trobe University. A list of relevant grants is provided below.
- Hooker, L., Bourne, A., Henry, N., Ison, J., Forsdike, K., Theobald, J., Caluzzi, G., & Young, F. (2024–2027). Community-led sexual violence prevention pilots. Department of Social Services, Australian Government.
 - Cook, M., MacLean, S., Cooklin, A., Pennay, A., Riordan, B., Caluzzi, C., & Callinan, S. (2022). Differences in how men and women are studied in alcohol research: A systematic review. La Trobe University, ABC Grant Scheme.
 - Ison, J., Hooker, L., Riordan, B., Caluzzi, G., Wilson, I., Laslett, A.-M., Theobald, J., Forsdike, K., & Wilson, E. (2022). Victimisation and perpetration of alcohol and other drug-facilitated sexual violence. La Trobe University, ABC Grant Scheme.
 - Pennay, A., Callinan, S., Caluzzi, G., Törrönen, J., & Holmes, J. (2022–2026). From mainstream to the margins: The denormalisation of underage heavy drinking. Australian Research Council Discovery Project DP230101792.
 - Pennay, A., Callinan, S., Livingston, M., Mojica-Perez, Y., Torney, A., Caluzzi, G., & Taylor, N. (2022, Nov.). Understanding socioeconomic inequalities in alcohol use, purchasing, and harm in Victoria. Victorian Health Promotion Foundation.
 - Caluzzi, G., Riordan, B., Kuntsche, E., Kuntsche, S., & Pennay, A. (2022). Research infrastructure grant for health tracking wearables (Project: Mothers little helper: Alcohol use in working mothers). La Trobe University, School of Psychology and Public Health Infrastructure Grant.
 - Caluzzi, G., & Callinan, S. (2022, May). Investigating attitudes towards drug-checking services using National Drug Strategy Household Survey data. La Trobe

Gabriel Caluzzi

Gabriel Caluzzi has received research funding as a Chief Investigator from the Australian Research Council and the Australian Department of Social Services. He has received travel support from the National Drug and Alcohol Research Centre. Further research funding was obtained to

University, School of Psychology and Public Health Internal Grant.

Michael Savic

During 2022–2024, Michael Savic received research funding from the Victorian Responsible Gambling Foundation (VRGF) (funds derived from the hypothecation of gambling tax revenue). These funds are allocated on the basis of independent peer review, and the funding body did not influence the research design or study findings. He has also received research funding as a Chief Investigator from the Australian Research Council and the National Centre for Healthy Ageing. Further research funding was obtained to undertake research on topics related to alcohol and other drugs from NSW Health, Camerus AB, and the Transport and Accident Commission. A list of relevant grants is provided below.

- Fomiatti, R., Pienaar, K., Savic, M., Keane, H., & Treloar, C. (2024–2026). Understanding the role of trauma in alcohol and other drug-related problems. Australian Research Council, Discovery Project.
- Savic, M., & Manning, V. (2023–2024). Drug checking rapid review: Update on the latest evidence. NSW Health.
- Lubman, D., Barnett, A., Savic, M., & Lintzeris, N. (2023). Australian clinicians' views, knowledge, and experiences of long-acting, injectable buprenorphine: How can care be optimised in the future? Camerus AB.
- Lam, T., Savic, M., Lalor, A., Sturgiss, L., Alfrey, L., Francia, L., Stragalinos, P., Rudlin, K., Shipton, A., Nielsen, S., & Hill, K. (2022–2025). National Centre for Healthy Ageing.
- Savic, M., Manning, V., & Scott, D. (2022–2024). Experiences of drug driving. Transport Accident Commission.
- MacLean, S., Griffin, T., Pennay, A., & Savic, M. (2021). Online gambling in a world changed by COVID-19: Trajectories for people in the Sunraysia Aboriginal

community. Victorian Responsible Gambling Foundation GR11/20/06.

- Nielsen, S., Lam, T., Morgan, K., Savic, M., Pickard, H., Kuhn, L., Andrew, N., White, R., Bendall, K., & Watkins, G. (2021–2022). Mapping the alcohol and other drug patient journey to improve treatment access and engagement in care. National Centre for Healthy Ageing (NCHA), Living Labs Program.
- Savic, M., Roberts, S., Elliott, K., Robards, B., & Dwyer, R. (2020–2023). Alcohol consumption practices in crisis. Australian Research Council, Special Research Initiative (Australian Society, History, and Culture).

Amy Pennay

During 2022–2024, as Chief Investigator, Amy Pennay has received funding from the Australian Research Council, the Victorian Health Promotion Foundation, and veski. She has also received competitive funding from La Trobe University as part of fellowship funding, and from a range of internal university pilot-project funding schemes.

- Kuntsche, E., Pennay, A., Riordan, B., & Room, R. (2023). Disrupting the unhealthy relationship between alcohol, gambling, and sport spectatorship and sponsorship. La Trobe University Synergy Grant Funding.
- Pennay, A., MacLean, S., Kuntsche, E., Connor, S., Theobald, J., & Riordan, B. (2023). Left behind? Understanding the impacts of Victoria's public intoxication reform on regional communities. La Trobe University Internal Grant Scheme.
- Pennay, A. (2023). Understanding socio-economic inequalities in alcohol use and harm. La Trobe University, Tracey Banivanua Mar Fellowship.
- Pennay, A. (2022). Paradigm shifting alcohol policy to reduce alcohol-related harm. Veski Inspiring Women Bridging the Funding Gap Fellowship.

- Pennay, A., Callinan, S., Caluzzi, G., Törrönen, J., & Holmes, J. (2022). From the mainstream to the margins: Investigating the processes and implications of the de-normalisation of heavy drinking for underage young people in Australia. Australian Research Council Discovery Project.
- Cook, M., MacLean, S., Cooklin, A., Pennay, A., Riordan, B., Caluzzi, C., & Callinan, S. (2022). Differences in how men and women are studied in alcohol research: A systematic review. La Trobe University, ABC Grant Scheme.
- Pennay, A., Callinan, S., Livingston, M., Mojica-Perez, Y., Torney, A., Caluzzi, G., & Taylor, N. (2022) Understanding socioeconomic inequalities in alcohol use, purchasing, and harm in Victoria. Victorian Health Promotion Foundation.
- Caluzzi, G., Riordan, B., Kuntsche, E., Kuntsche, S., & Pennay, A. (2022). Research infrastructure grant for health tracking wearables. La Trobe University, School of Psychology and Public Health Infrastructure Grant.
- Pennay, A. (2022) Understanding the changing place of alcohol for young people in Australia, Sweden, and the UK. La Trobe University, School of Psychology and Public Health Internal Grant Scheme.
- Cook, M., Kuntsche, S., Pennay, A., & Kuntsche E. (2022). "Mommy, beer's not for you, it's a daddy's thing!": Young children's alcohol-related cognitions in Australia. La Trobe University, School of Psychology and Public Health Internal Grant Scheme.
- Riordan, B., Kuntsche, E., Cook, M., & Pennay, A. (2022). Out of sight, out of mind? Co-design of a browser plugin to block online alcohol exposure. La Trobe University, School of Psychology and Public Health Internal Grant Scheme.

Author Details

Sarah MacLean's ancestors were uninvited settlers in Australia. Her research explores practices that are both legal and dependency forming. She has published extensively on alcohol and inhalant use, and in recent years, also on gambling. Currently, she is employed as Professor in the Discipline of Social Work and Social Policy at La Trobe University, where she is also affiliated with the Centre for Alcohol Policy Research. During 2019–2022, she was joint Editor-in-Chief of *Health Sociology Review*.

Anastasia Kanjere is a white settler researcher in the fields of critical race studies, critical whiteness studies, and media studies. She was employed as a research officer on this project. She is now completing a degree in Education.

Tiffany Griffin is a proud Yamatji woman, with ancestors from Wajarri and Wattandee tribes of the northwest of Western Australia. Tiffany is the Team Leader of the Intense Social and Emotional Wellbeing Support team. She is also studying Social Work at La Trobe University in Mildura. Tiffany has worked at MDAS for the past 8 years and loves working in the mental health and addiction space. She is very passionate about social change and supporting Indigenous people along their healing journey.

Jai Portelli is a proud Aboriginal man who was employed as the Gamblers' Awareness Support Worker at MDAS during the period when we conducted this project. He conducted research interviews for this project and advised on cultural matters.

Gabriel Caluzzi is a postdoctoral researcher at the Centre for Alcohol Policy Research, La Trobe University and University of New South Wales. His PhD was a qualitative exploration of the social conditions and cultural meanings of light and non-drinking practices in a sample of young Australians. His work aims to understand how drug and alcohol practices among young people are informed by sociocultural context.

Michael Savic is a Senior Research Fellow in Addiction Studies at the Eastern Health Clinical School, Faculty of Medicine, Nursing, and Health Sciences, and he is Strategic Lead of Clinical and Social Research at Turning Point, Eastern Health. Michael's research focuses on the social and cultural contexts of alcohol and other drug use, addiction concepts, treatment, and experiences of intervention implementation and care across several mediums. His research is multi-disciplinary in orientation, policy and practice relevant, and often draws on critical approaches and qualitative methods. Michael is a co-convenor of the Victorian Substance Use Research Forum, an Associate Editor at the *International Journal of Drug Policy*, and a Deputy Editor at *Drug and Alcohol Review*.

Amy Pennay is a Senior Research Fellow and the Deputy Director of the Centre for Alcohol Policy Research (CAPR) at La Trobe University. Within CAPR, she is the Strategic Lead of the Intersections of Drinking Cultures, Health, and Policy program. She is Co-Editor in Chief of *Drugs: Education, Prevention, and Policy*.

ORCID

Sarah MacLean  [0000-0002-8329-0722](https://orcid.org/0000-0002-8329-0722)

Anastasia Kanjere  [0000-0001-5764-1376](https://orcid.org/0000-0001-5764-1376)

Gabriel Caluzzi  [0000-0003-3203-6123](https://orcid.org/0000-0003-3203-6123)

Michael Savic  [0000-0002-6161-4511](https://orcid.org/0000-0002-6161-4511)

Amy Pennay  [0000-0002-6271-8996](https://orcid.org/0000-0002-6271-8996)