

Unpacking assertions made by the alcohol industry and how they make them An analysis of submissions into Australia's National Alcohol Strategy

Miller, Mia; Livingston, Michael; Maganja, Damian; Wright, Cassandra C.J.

Published in:
Drug and Alcohol Review

DOI:
[10.1111/dar.13682](https://doi.org/10.1111/dar.13682)

Published: 01/09/2023

Document Version
Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Miller, M., Livingston, M., Maganja, D., & Wright, C. C. J. (2023). Unpacking assertions made by the alcohol industry and how they make them: An analysis of submissions into Australia's National Alcohol Strategy. *Drug and Alcohol Review*, 42(6), 1312-1321. <https://doi.org/10.1111/dar.13682>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Unpacking assertions made by the alcohol industry and how they make them: An analysis of submissions into Australia's National Alcohol Strategy

Mia Miller¹  | Michael Livingston^{2,3,4}  | Damian Maganja⁵  |
Cassandra C. J. Wright^{1,3,6} 

¹Menzies School of Health Research, Charles Darwin University, Darwin, Australia

²National Drug Research Institute, Melbourne, Australia

³Centre for Alcohol Policy Research, La Trobe University, Melbourne, Australia

⁴Department of Clinical Neurosciences, Karolinska Institutet, Stockholm, Sweden

⁵The George Institute for Global Health, Sydney, Australia

⁶Burnet Institute, Melbourne, Australia

Correspondence

Mia Miller, Menzies School of Health Research, Charles Darwin University, Building Red 9, Casuarina Campus, University Drive North, Casuarina, NT 0811, Australia.

Email: mia.miller@menzies.edu.au

Abstract

Introduction: Alcohol is a leading cause of morbidity and mortality globally. One significant barrier to the implementation of evidence-based alcohol policy is alcohol industry opposition. Making submissions to national policy processes is one way in which the industry exert influence. The aim of this study was to analyse alcohol industry submissions into Australia's National Alcohol Strategy to determine key assertions made by the alcohol industry and the ways in which they use evidence and refute the effectiveness of public health policies to make their claims.

Methods: Submissions made by alcohol industry actors ($n = 12$) were analysed using content analysis to determine key industry assertions. A pre-existing framework on alcohol industry use of evidence was then applied to analyse the evidentiary practices used to make these assertions.

Results: Five common industry assertions were identified: 'Drinking alcohol in moderation has health benefits'; 'Alcohol isn't the cause of violence'; 'Targeted initiatives, not population level alcohol policies, are needed'; 'Strong alcohol advertising regulations are not necessary'; and 'Minimum unit price and pricing and taxation policies more broadly are not needed'. The industry systematically manipulated, misused and ignored evidence throughout their submissions.

Discussion and Conclusions: The alcohol industry is misusing evidence in their submissions to government consultations to make their assertions about alcohol policy. It is therefore essential that industry submissions are scrutinised and not accepted on face value. Additionally, it is suggested that the alcohol industry requires a distinct model of governance similarly to that which regulates the tobacco industry to prevent their attempts to undermine evidence-based public health policy.

KEYWORDS

alcohol industry, alcohol policy, submission

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. *Drug and Alcohol Review* published by John Wiley & Sons Australia, Ltd on behalf of Australasian Professional Society on Alcohol and other Drugs.

Key points

- Submissions into government inquiries and policy processes are one way in which alcohol policy can be influenced in Australia.
- The alcohol industry frequently contributes to such processes, with previous research demonstrating that they commonly misuse and obscure evidence to make their arguments.
- The present study analysed alcohol industry submissions into Australia's National Alcohol Strategy to determine the content of these submissions and the ways in which evidence was used and misused.
- The study found that the alcohol industry consistently made five common assertions: 'Drinking alcohol in moderation has health benefits'; 'Alcohol isn't the cause of violence'; 'Targeted initiatives, not population level alcohol policies, are needed'; 'Strong alcohol advertising regulations are not necessary'; and 'Minimum unit price and pricing and taxation policies more broadly are not needed'. The industry also frequently misused and misrepresented evidence.
- Systematic scrutiny of submissions made into government policy processes is required to ensure that policy makers are aware of misinformation and poor-quality evidence when policy decisions are being made.

1 | INTRODUCTION

Alcohol use is causally associated with more than 200 conditions, including cancer, cardiovascular disease and stroke [1], as well as short-term harms, such as injuries and accidents [2]. In Australia, alcohol is the sixth leading cause of disease with approximately 6000 alcohol-attributable deaths each year [3]. There are several evidence-based policy options available to reduce the harms from alcohol. The World Health Organization endorses a range of effective and cost-effective actions to reduce alcohol-related harm, such as excises, regulation of alcohol advertising, labelling, restrictions on the availability of alcohol, drink-driving laws and minimum unit pricing (MUP) [4].

Despite evidence on the effectiveness of these policies, many are not implemented at the national or state/county level, or when proposed have faced significant barriers, often due to opposition from the alcohol industry. One of the ways in which the alcohol industry aim to influence policy making processes is through submissions into national policy processes [5]. While this is only one avenue through which the industry exert influence [5], analysing industry submissions provides important insights into the priorities and framing approaches of the industry.

A growing body of research both in Australia and internationally has analysed publicly available submissions into policy consultation processes. This evidence demonstrates that the alcohol industry consistently ignore, misrepresent and misuse high-quality evidence and promote weak evidence for various alcohol policy

issues, including drinking guidelines [6], alcohol advertising regulations [7], alcohol pregnancy warning labels [8] and taxation [9]. For example, the alcohol industry in Australia has claimed that industry self-regulation of pregnancy warning labels [8] and alcohol marketing is sufficient [10], and that other industry-led activities conducted by Social Aspect Public Relations Organisations (SAPRO) are effective [11], despite substantial evidence to the contrary [12–14]. This research, as well as a body of international work [15–18], has identified several common practices employed by the alcohol and tobacco industry regarding their use and misuse of evidence. Stafford and colleagues' 2021 study collated these practices into a single framework when examining alcohol industry submissions into public consultations between 2013 and 2017 [19]. This framework identifies eight core practices commonly used:

- Making unsubstantiated claims about the adverse effects of policy proposals: Claiming that alcohol policies will have negative effects without providing sufficient evidence to support their claims.
- Promoting policy alternatives without evidence: Promoting targeted measures over population-wide policies without providing sufficient evidence to support their approach.
- Emphasising complexity: Characterising the relationship between risk factors and outcomes as 'complex' to refute the need for population-wide policies.
- Misinterpretation of strong evidence: Providing a distorted view of strong evidence or questioning the credibility of strong evidence.

TABLE 1 List of submitting organisation.

Submitting organisation	Organisation type
Alcohol Beverages Australia	Peak body representing alcohol industry manufacturers, distributors and retailers
Australian Vignerons ^a	National peak body representing wine growers
Australian Wine Research Institute	Private company representing Australian grapegrowers and winemakers
Brewers Association of Australia	Peak body representing the beer industry
Canberra District Wine Industry Association	Organisations representing the Canberra district wineries
DrinkWise	Social aspects/public relations organisation
Murray Valley Winegrowers	Peak regional wine grape growers' body representing regions in Victoria and NSW
NSW Wine Industry Association	State peak body representing the wine industry
Riverina Wine Grapes Marketing Board	Organisation representing winegrape growers in the City of Griffith and the Shires of Leeton, Carrathool and Murrumbidgee
South Australian Wine Industry Association	State body representing South Australian wine grape growers and wine producers
Wine Industry Suppliers Australia	Peak national body representing suppliers to the Australian wine and grape sector
Winemakers' Federation of Australia ^a	Peak body representing the wine industry
Wines of Western Australia	State body representing Western Australian wine producers

Abbreviation: NSW, New South Wales.

^aNB: Australian Vignerons and Winemakers' Federation of Australia have since amalgamated to form Australian Grape and Wine Incorporated.

- Promotion of weak evidence: Promoting non-peer reviewed or industry funded research.
- Misleading quoting of evidence: Incorrectly quoting evidence or taking specific quotes from evidence out of context to try create an alternative meaning.
- Mimicked scientific critique: Attempting to critique evidence through measures that appear, on the surface, to be valid and reliable, but are in fact non-scientific.
- Evidential landscaping: Excluding relevant evidence and promoting only alternative evidence or evidence that supports their view or argument.

A recent alcohol consultation process in Australia informed a belated update of the National Alcohol Strategy, which had expired in 2011. The development of a new strategy was seen as an imperative by researchers and advocates who argued that existing policy approaches were incoherent, with a lack of role clarity between different levels of government [20]. Consultation for an updated strategy, including focus groups, key informant interviews, survey feedback and written submissions, began in 2015 and continued in 2018 with the public release of a draft strategy. The aim of the present study was to analyse submissions made by the alcohol industry to the 2018 National Alcohol Strategy consultation. Such research is important as the National Alcohol Strategy intends to guide both national and state alcohol policies until 2028. The strategy is also intended to examine all possible alcohol policy options, and thus analysing

submissions enables an understanding of the policy issues for which the alcohol industry is most concerted in directing their efforts. A 2019 report from the Foundation for Alcohol Research and Education's alcohol industry fingerprints: analysis of modifications to the National Alcohol Strategy' found that key changes and deletions were made between the 2017 consultation strategy and the 2019 'revised strategy' which benefitted the alcohol industry [21]. Thus, it is important to study these submissions and their use of evidence so that public health researchers and advocates can better understand how the industry craft their narratives.

2 | METHODS

Publicly available submissions into the draft National Alcohol Strategy were searched in December 2020 ($n = 96$). All submissions by an alcohol industry actor, including peak bodies representing the industry, producers and retailers, and industry-funded social aspects organisations, were included for analysis ($n = 12$). A list of the included submissions is provided in Table 1.

2.1 | Data analysis

We used a qualitative thematic approach [22] to analyse industry submissions to identify the key assertions made by industry and the practices used to make these

TABLE 2 Practices identified by Stafford et al. [20].

Practice
Making unsubstantiated claims about adverse effects of policy proposals
Promoting alternatives without evidence
Emphasising complexity
Misrepresentation of strong evidence
Promotion of weak evidence
Mimicked scientific critique
Evidential landscaping

assertions. One author (MM) reviewed a random subset of submissions ($n = 4$) and developed an initial set of codes that captured the industry assertions and a second author (DM) then trialled these codes with a second random set of submissions ($n = 4$). The thematic codes were discussed and agreed upon between the two authors, and both authors then coded all submissions with any discrepancies resolved in consultation with a senior author (CW). Codes were included in the study if at least two submissions addressed them. To reflect the nature of these codes, they will from hereon in be referred to as 'industry assertions'. Each time reference to evidence was made within a submission, the industry statement and the accompanying references were entered into an Excel spreadsheet. The authors then reviewed each included reference alongside the statement made by the industry to determine if any of the practices identified in the framework (Table 2) were used.

3 | RESULTS

We identified five common industry assertions made in submissions to the National Alcohol Strategy. Table 3 summarises the key assertions, the number of submissions that included the assertion and who these submissions were made by. Stafford and colleagues' [19] identified practices were used extensively throughout the submissions to make these assertions.

3.1 | Industry assertion 1: 'Drinking alcohol in moderation has health benefits'

Three submissions discussed the health effects of alcohol, focusing primarily on alcohol's putative benefits. While some submissions used weak, out of date evidence to make their claims, many did refer to peer-reviewed, recent research. However, the submissions used evidential

landscaping to provide a one-sided view of the evidence. For example, they oversimplified the link between alcohol and heart disease by excluding evidence that moderate drinking's ostensible beneficial effects are only for ischemic heart disease and stroke, and as well as evidence that low levels of consumption have detrimental impacts on hypertensive heart disease, atrial fibrillation and haemorrhagic stroke [23]. The Alcohol Beverages Australia and Brewers Association submissions also ignored the body of evidence which demonstrates that even 'moderate' drinking increases the risk of seven types of cancers [24, 25]. Additionally, submissions selectively quoted from the findings of studies that showed some protective effects while discounting those same studies' broader findings that the harms from alcohol significantly outweigh any potential benefits. For example, the Australian Wine Research Institute quoted a study stating that there was a cardioprotective effect for ischaemic heart disease for drinkers consuming one or two drinks per day, but ignored the conclusion of the paper which stated that: 'the picture is clear: alcohol consumption should be as low as possible, no amount of consumption is safe' [26].

Additionally, peer-reviewed evidence was misquoted and misrepresented by the Australian Wine Research Institute, who claimed that a multi-country study showed that 'the net effect of alcohol consumption was to reduce adverse health outcomes' whereas the study concluded that drinking is 'not associated with a net health benefit' [27]. While the Australian Wine Research Institute included a number of studies regarding the purported health benefits of alcohol, they did not substantiate these claims with traceable citations so it could not be determined whether they appropriately used these studies in their submission.

3.2 | Industry assertion 2: 'Alcohol isn't the cause of violence'

Three submissions argued that alcohol is not a causal factor for violence. The Brewers Association of Australia's submission used evidential landscaping by claiming that the issue of a causal link between alcohol and violence is of 'significant academic debate', citing both an industry-funded review of the anthropological literature and a 25-year old meta-analysis to support their view [28]. They selectively quoted parts of this meta-analysis which highlighted the gaps in the literature due to the methodological weaknesses of some studies in the field [28]. Crucially, the submission failed to acknowledge the more recent, high quality literature which unequivocally demonstrates that alcohol contributes to violence [29, 30]. Additionally, the submission from Alcohol Beverages

TABLE 3 Industry assertion, number of submissions and submitters.

Industry assertion	Number of submissions	Submitters
Industry assertion 1: 'Drinking alcohol in moderation has health benefits'	3	Alcohol Beverages Australia Australian Wine Research Institute Brewers Association
Industry assertion 2: 'Alcohol is not the cause of violence'	3	Alcohol Beverages Australia Australian Wine Research Institute Brewers Association of Australia
Industry assertion 3: 'We need targeted initiatives and not population level alcohol policies'	8	Alcohol Beverages Australia Australian Vignerons Australian Wine Research Institute Brewers Association of Australia DrinkWise Murray Valley Wine Growers NSW Wine Industry Association Riverina Wine Grapes Marketing Board
Industry assertion 4: 'Strong alcohol advertising regulations are not necessary'	8	Alcohol Beverages Australia Australian Wine Research Institute Brewers Association of Australia Drinkwise NSW Wine Industry Association Riverina Wine Grapes Marketing Board Winemakers' Federation of Australia Wines of Western Australia
Industry assertion 5: 'Minimum unit price and pricing and taxation policies more broadly are not needed'	8	Alcohol Beverages Australia Australian Vignerons Brewers Association Murray Valley Winegrowers NSW Wine Industry Association South Australian Wine Industry Association Winemakers' Federation of Australia Wines of Western Australia

Australia uses data from only one state, New South Wales, and one type of violent-related crime, domestic violence, thus further demonstrating evidential landscaping. The Australian Wine Research Institute's submission claimed that alcohol is not a contributing or secondary factor in violent behaviour, but used no references to support their claims.

3.3 | Industry assertion 3: 'We need targeted initiatives and not population level alcohol policies'

Eight submissions argued against the need for population-wide alcohol policies. Many of these submissions claimed that alcohol consumption and alcohol-attributable deaths were declining, meaning that population-wide policies were not required. Several industry submissions appropriately used indicators from the National Drug Strategy Household Survey to show that alcohol consumption in

Australia in the general population and amongst youth has declined. However, these submissions selectively quoted from this national survey by failing to acknowledge increasing consumption amongst middle-aged and older adults, and the continuing high proportions of adults consuming alcohol at levels that increase their risk of lifetime and short-term harm [31, 32].

Industry submissions also misrepresented strong evidence and mimicked scientific critique to make their claims. The Alcohol Beverages Australia submission refuted that alcohol is responsible for 5500 deaths in Australia by attempting to discredit the study that produced the figure [33], claiming it was flawed as it 'departed from using ABS [Australian Bureau of Statistics] figures for overall per capita consumption'. This assertion, however, is false; the study did use Australian Bureau of Statistics data for consumption and supplemented it with state-level sales data, where available, as an important and rigorous methodological approach to ensure that drinking levels and patterns are not

underestimated (as is widely known to occur in self-reported alcohol use data) [34]. Furthermore, the results are in line with the Australian Institute of Health and Welfare estimate of 5039 deaths from alcohol in 2011 [35] which is not referenced in the submission.

Many submissions claimed, without substantiating references, that population measures are ineffective at reducing consumption or harm. To argue their claim, the Alcohol Beverages Australia submission promoted weak evidence in the form of a cross-sectional study [36] that has been subsequently exposed to be scientifically flawed [37], while also ignoring the larger body of evidence demonstrating the effectiveness of population policies [4]. Additionally, The Brewers Association of Australia mimicked scientific critique by creating a graph that took results from the 2011 European School Survey Project on Alcohol and Other Drugs report [38] and overlaying it with a 'control policies' variable in an attempt to demonstrate that heavy episodic drinking amongst students is more prevalent in countries with strong alcohol policies; this data is not contained in the European School Survey Project on Alcohol and Other Drugs report and no supporting references were provided. In fact, peer-reviewed, scholarly articles have consistently found that countries with higher scores on the Alcohol Policy Index (indicating that national alcohol policies are more comprehensive) have lower rates of adolescent drinking [39] and per-capita consumption [40].

The Brewers Association of Australia and the NSW Wine Industry Association claimed that targeted measures implemented by the alcohol industry, particularly through their SAPRO DrinkWise, have been effective at reducing alcohol consumption and harms in Australia. However, no evidence was provided to support this assertion, while studies show that SAPRO initiatives are significantly less effective at reducing motivations to consume alcohol and alcohol consumption itself [41] and are perceived to be more ambiguous and open to interpretation [42] than public health driven initiatives.

3.4 | Industry assertion 4: 'Strong alcohol advertising regulations are not necessary'

Eight submissions addressed alcohol advertising. A number of these submissions stated that alcohol advertising, sponsorship and promotions are not strong predictors of alcohol consumption, particularly amongst youth. The Brewers Association of Australia and Winemakers' Federation of Australia emphasised complexity by presenting evidence on other factors that influence youth alcohol consumption, such as parental attitudes and peer pressure. While the findings of some of the individual papers

cited were accurately reported, the submitters used them to argue that alcohol advertising is not an important factor in youth drinking. However, few of the cited papers included alcohol advertising as a variable, meaning that this assertion could not be tested or reported. The DrinkWise and Winemakers' Federation of Australia submissions mimicked scientific critique by proposing that advertising cannot be an important factor because youth drinking is trending down while advertising has proliferated. These trends and the apparent links between them are simply presented as self-evident, however no evidence supporting this purported association was cited.

Several submissions also referred to weak evidence and selectively quoted evidence to argue against the link between alcohol advertising and consumption. For example, the Brewer's Association of Australia refuted the findings of a systematic review by Anderson and Colleagues [43] by claiming that a commentary by Nelson [44] examining the same issue found that the evidence is 'inconclusive'. This commentary, however, did not involve a systematic search of the literature, with the included studies handpicked by the author, and as such is an example of weak evidence.

Additionally, the Brewers Association of Australia misrepresented evidence from another systematic review [45] by stating that the impact of advertising on alcohol consumption is a 'matter of much debate', whereas the authors actually concluded that 'all seven studies demonstrated significant effects across a range of different exposure variables and outcome measures' [45]. The Brewers Association also selectively quoted from a paper on exposure to alcohol advertisements and teenage alcohol related problems, stating that 'causality cannot be verified' without the full and necessary context: 'Although causality cannot be verified in one observational study, the relevant theories and empirical evidence from the current prospective study and previous research are consistent with possible causal effects linking alcohol advertising to underage alcohol use and alcohol-related problems' [46]. None of the industry submissions acknowledged the more recent systematic review of longitudinal studies which showed that youth who have higher exposure to alcohol advertising are more likely to engage in binge and hazardous drinking and initiate alcohol use [47].

Many of the submissions also stated that Australia's current co-regulatory approach to alcohol advertising is sufficient, without providing any evidence to demonstrate that this approach is effective in reducing alcohol-related harms. The submitters made these claims despite the strong body of evidence demonstrating that quasi-regulatory, industry-led approaches to alcohol advertising, both in Australia and internationally, are ineffective at protecting consumers [15, 48–52].

3.5 | Industry assertion 5: 'Minimum unit price and pricing and taxation policies more broadly are not needed'

Eight submissions addressed MUP. Alcohol Beverages Australia claimed that these policies are ineffective at reducing consumption and harms from alcohol, describing the Sheffield Alcohol Policy Model as 'scientifically disproven and derided' without substantiation for this claim. Alcohol Beverages Australia also misinterpreted strong evidence by claiming a study on MUP in British Columbia that adjusted for underlying trends, other policy changes and regional differences 'manipulated' the data, when the approach of adjusting for covariates and confounders is best scientific practice [53, 54]. Alcohol Beverages Australia also mimicked scientific critique by inappropriately using raw data to try and disprove the effectiveness of the MUP in British Columbia.

The Brewers Association of Australia, along with the Murray Valley Wine Growers, NSW Wine Industry Association and the Winemakers' Federation of Australia, claimed that an MUP and taxation policies more broadly are regressive and unfairly impact those in lower socio-economic groups, without references to substantiate their claims. The Brewers Association ignored the broader literature which demonstrates that alcohol-related harm contributes significantly to inequalities [55] and that any pricing policy, even if regressive, will likely lead to improved outcomes in terms of reduced health inequity.

The Murray Valley Winegrowers and Winemakers' Federation of Australia accurately used evidence when they claimed that alcohol consumption is more prevalent amongst those in higher socio-economic communities. They inappropriately argued, however, that this means Australia should not introduce pricing policies by ignoring evidence that drinkers from low socio-economic communities experience the most harm, even when consuming alcohol at equal levels [56, 57]. Thus, these submitters engaged in evidential landscaping. Australia Vignerons also made unsubstantiated claims about MUP by suggesting that it would lead to beverage substitution, and the NSW Wine Industry Association and Murray Valley Wine growers made unsubstantiated claims that MUP would unfairly disadvantage moderate consumers.

4 | DISCUSSION

This study describes five common assertions made by the alcohol industry in their attempts to influence the development of the Australian National Alcohol Strategy. The content of alcohol industry submissions was largely consistent, including through the explicit endorsement of

industry peak body submissions, thus demonstrating a level of coordination between industry stakeholders. Through identifying these assertions, our study provides an understanding of the policy issues for which the alcohol industry is most concerted in directing their efforts. Unsurprisingly, the industry consistently argued for individual-level policies and criticised those which restricted or impeded their capacity to advertise or sell their products, as these are the policies which have been found to be most effective in reducing consumption [4]. It is interesting to note that submissions to the National Alcohol Strategy came primarily from the wine industry, perhaps as wine is the most commonly consumed alcoholic beverage in Australia [58, 59] and as is also taxed differently to other beverages [60]. As such, this segment of the industry may be most impacted by population-wide policies.

We also found that the alcohol industry consistently used the eight practices identified in Stafford and Colleagues' framework [19]. Our results build on the Australian evidence on the industry's systematic misuse of evidence, and they also align with findings from the United Kingdom [9, 15, 61] and globally [18], demonstrating a consistency in industry practices. Our findings suggest that those reviewing submissions into consultations must take caution interpreting the evidence presented by the industry and review cited evidence to assess if data is accurately represented and interpreted and whether conflicts of interest are presented by study authors. This is further supported by recent evidence that analysed submissions into two alcohol advertising policy consultations and showed that the industry consistently emphasised industry-linked research rather than systematic reviews authored by individuals with no apparent conflicts of interest [62].

Overall, the alcohol industry's use of a range of practices, such as mimicking scientific critique, misrepresenting strong evidence and evidential landscaping, can be seen as an attempt to position themselves as legitimate stakeholders in alcohol policy debates. By constructing an image of themselves as credible contributors to such debates, the industry then casts doubt on the effectiveness of evidence-based policies using the practices explored in this paper. Unsurprisingly, these tactics are borrowed directly from the tobacco industry, who claimed unintended consequences of tobacco policies without evidence [63], promoted weak evidence and misrepresented strong evidence [17, 64, 65], amongst other techniques, all with the aim of creating doubt and stalling government regulatory action [17, 64]. This demonstrates the need for tighter regulation of the alcohol industry, akin to the regulation of the tobacco industry under the Framework Convention on Tobacco Control [66, 67].

There are several limitations of our study. We only had access to publicly available submissions. Future studies could undertake interviews with key policy stakeholders to understand how the industry frame policy issues or otherwise influence policy in more private fora. Additionally, at the time of writing this paper, the consensus document used by previous studies analysing submissions, *Alcohol, No Ordinary Commodity* [15] was 11 years old, and thus we relied on our expert knowledge of the evidence-base, rather than a consensus document, which may pose a limitation.

Overall, our study demonstrates that the alcohol industry continue to manipulate, misuse and ignore evidence in attempts to influence policy. The submissions analysed here likely represent only a fraction of the total influence the alcohol industry has in public policy processes through, for example, lobbying, political donations and shaping public discourse. Understanding the policy issues raised by industry provides a useful starting point for developing a toolbox to categorise and scrutinise likely industry arguments, allowing the public health community to pre-emptively counter their claims with consistent and credible evidence.

AUTHOR CONTRIBUTIONS

Mia Miller and Michael Livingston conceptualised the study, and Cassandra C. J. Wright assisted with the development of the methodology. Mia Miller and Damian Maganja undertook the coding and data analysis. Mia Miller prepared the original draft, and Michael Livingston, Cassandra C. J. Wright and Damian Maganja reviewed and edited the paper. Each author certifies that their contribution to this work meets the standards of the International Committee of Medical Journal Editors.

FUNDING INFORMATION


MM and DM are supported by Australian Government Research Training Program Scholarships. ML is funded by an Australian Research Council Future Fellowship. CJCW is funded by a National Health and Medical Research Council Early Career Fellowship.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

ORCID

Mia Miller  <https://orcid.org/0000-0003-0755-8624>

Michael Livingston  <https://orcid.org/0000-0002-8995-9386>

Damian Maganja  <https://orcid.org/0000-0003-1245-3288>

Cassandra C. J. Wright  <https://orcid.org/0000-0001-9751-4005>

REFERENCES

1. World Health Organization. Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018.
2. Shield K, Mathey J, Rylett M, Probst C, Wettlaufer A, Parry C, et al. National, regional, and global burden of disease from 2000 to 2017 attributable to alcohol use: a comparative risk assessment study. *Lancet Public Health*. 2020;5:e51–61.
3. Australian Institute of Health and Welfare. Australian Burden of Disease Study. Impact and causes of illness and death in Australia. Australian Burden of Disease series no. 19. Cat. no. BOD 22. Canberra: AIHW; 2019.
4. World Health Organization. Tackling NCDs: 'Best buys' and other recommended interventions for prevention and control of noncommunicable diseases. Geneva: World Health Organization; 2017.
5. McCambridge J, Mialon M, Hawkins B. Alcohol industry involvement in policymaking: a systematic review. *Addiction*. 2018;113(9):1571–84.
6. Wilkinson C. Responses to risk: public submissions on Australian alcohol guidelines for low-risk drinking. *Drug Alcohol Rev*. 2013;31:162–9.
7. Stafford J, Chikritzhs T, Pierce H, Pettigrew S. An evaluation of the evidence submitted to Australian alcohol advertising policy consultations. *PLoS One*. 2021;16:e0261280.
8. Avery M, Droste N, Giorgi C, Ferguson A, Martino F, Koerber K, et al. Mechanisms of influence: alcohol industry submissions to the inquiry into fetal alcohol spectrum disorders. *Drug Alcohol Rev*. 2016;35:655–72.
9. Cullen D, Smith K, Collin J. 'Half-cut' science: a qualitative examination of alcohol industry actors' use of peer-reviewed evidence in policy submissions on minimum unit pricing. *Evid Policy*. 2019;15:49–66.
10. Martino F, Miller P, Coomber K, Hancock L, Kypri K. Analysis of alcohol industry submissions against marketing regulation. *PLoS One*. 2017;12:e0170366.
11. Miller P, de Groot F, McKenzie S, Droste N. Alcohol industry use of social aspect public relations organizations against preventative health measures. *Addiction*. 2011;106:1560–7.
12. Mialon M, McCambridge J. Alcohol industry corporate social responsibility initiatives and harmful drinking: a systematic review. *Eur J Public Health*. 2018;28:664–73.
13. O'Brien P. Warning labels about alcohol consumption and pregnancy: moving from industry self-regulation to law. *J Law Med*. 2021;27:259–73.
14. Noel JK, Babor TF. Does industry self-regulation protect young people from exposure to alcohol marketing? A review of compliance and complaint studies. *Addiction*. 2017;112:51–6.
15. McCambridge J, Hawkins B, Holden C. Industry use of evidence to influence alcohol policy: a case study of submissions to the 2008 Scottish government consultation. *PLoS Med*. 2013;10:e1001431.
16. Kypri K, Wolfenden L, Hutchesson M, Langley J, Voas R. Public, official, and industry submissions on a Bill to increase the alcohol minimum purchasing age: a critical analysis. *Int J Drug Policy*. 2014;25:709–16.
17. Ulucanlar S, Fooks G, Hatchard J, Gilmore A. Representation and misrepresentation of scientific evidence in contemporary tobacco regulation: a review of tobacco industry submissions to the UK Government consultation on standardised packaging. *PLoS Med*. 2014;11:e1001629.

18. Rinaldi C, Van Schalkwyk MC, Egan M, Petticrew M. A framing analysis of consultation submissions on the WHO global strategy to reduce the harmful use of alcohol: values and interests. *Int J Health Policy Manag.* 2021;11:1550–61.
19. Stafford J, Kypri K, Pettigrew S. Industry actor use of research evidence: critical analysis of Australian alcohol policy submissions. *J Stud Alcohol Drugs.* 2021;81:710–8.
20. Kypri K, Thorn M, Crozier J. The National Alcohol Strategy 2018–2026 has to become a set of commitments. *Drug Alcohol Rev.* 2018;37:563–4.
21. Foundation for Alcohol Research and Education. Alcohol industry fingerprints: analysis of modifications to the National Alcohol Strategy. Canberra: Foundation for Alcohol Research and Education; 2019.
22. Forman J, Damschroder L. Qualitative content analysis. Empirical methods for bioethics: a primer. *Advances in Bioethics.* Volume 11. Bingley: Emerald Group Publishing Limited; 2007. p. 39–62.
23. Rehm J, Gmel GE Sr, Gmel G, Hasan OS, Imtiaz S, Popova S, et al. The relationship between different dimensions of alcohol use and the burden of disease—an update. *Addiction.* 2017;112:968–1001.
24. Boffetta P, Hashibe M. Alcohol and cancer. *Lancet Oncol.* 2006;7:149–56.
25. Connor J. Alcohol consumption as a cause of cancer. *Addiction.* 2016;112:222–8.
26. Roerecke M, Rehm J. Alcohol consumption, drinking patterns, and ischemic heart disease: a narrative review of meta-analyses and a systematic review and meta-analysis of the impact of heavy drinking occasions on risk for moderate drinkers. *BMC Med.* 2014;12:182.
27. Smyth A, Teo KK, Rangarajan S, O'Donnell M, Zhang X, Rana P, et al. Alcohol consumption and cardiovascular disease, cancer, injury, admission to hospital, and mortality: a prospective cohort study. *Lancet.* 2015;386:1945–54.
28. Fox A. Sociocultural factors that foster or inhibit alcohol related violence. Washington, DC: International Center for Alcohol Policies; 2008.
29. Leonard K, Quigley B. Thirty years of research show alcohol to be a cause of intimate partner violence: future research needs to identify who to treat and how to treat them. *Drug Alcohol Rev.* 2017;36:7–9.
30. Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. Alcohol, no ordinary commodity: research and public policy. Oxford: Oxford University Press; 2010.
31. Miller M, Mojica-Perez Y, Livingston M, Kuntsche E, Wright C, Kuntsche S. The who and what of women's drinking: examining risky drinking and associated socio-demographic factors among women aged 40–65 years in Australia. *Drug Alcohol Rev.* 2022;41:724–31.
32. Jiang H, Griffiths S, Callinan S, Livingston M, Vally H. Prevalence and socio-demographic factors of risky drinking in Australian older adults. *Drug Alcohol Rev.* 2020;39:684–93.
33. Gao C, Ogeil R, Lloyd B. Alcohol's burden of disease in Australia. Canberra: FARE and VicHealth in collaboration with Turning Point; 2014.
34. Nelson D, Naimi T, Brewer R, Roeber J. US state alcohol sales compared to survey data, 1993–2006. *Addiction.* 2010;105:1586–96.
35. Australian Institute of Health and Welfare. Australian burden of Disease study: impact and causes of illness and death in Australia 2011. Canberra: AIHW; 2016.
36. Poikolainen K. The weakness of stern alcohol control policies. *Alcohol Alcohol.* 2015;51:93–7.
37. Holmes J, Angus C. A response to two papers critiquing the total consumption model by Kari Poikolainen. *Alcohol Alcohol.* 2017;52:264–5.
38. Hibell B, Guttormsson U, Ahlstrom S, Balakireva O, Bjarnason T, Kokkevi A, et al. The 2011 ESPAD report: substance use among students in 36 European countries. Sweden: The Swedish Council for Information on Alcohol and other Drugs (CAN); 2011.
39. Paschall M, Grube J, Kypri K. Alcohol control policies and alcohol consumption by youth: a multi-national study. *Addiction.* 2009;104:1849–55.
40. Madureira-Lima J, Galea S. Alcohol control policies and alcohol consumption: an international comparison of 167 countries. *J Epidemiol Community Health.* 2018;72:54–60.
41. Brennan E, Schoenaker DAJM, Durkin SJ, Dunstone K, Dixon HG, Slater MD, et al. Comparing responses to public health and industry-funded alcohol harm reduction advertisements: an experimental study. *BMJ Open.* 2020;10:e035569.
42. Jones S, Hall S, Kypri K. Should I drink responsibly, safely or properly? Confusing messages about reducing alcohol-related harm. *Plos One.* 2017;12:e0184705.
43. Anderson P, de Bruijn A, Angus K, Gordon R, Hastings G. Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol Alcohol.* 2009;44:229–43.
44. Nelson J. Reply to Sieget at al.: Alcohol advertising in magazines and disproportionate exposure. *Contemp Econ Foreign Policy.* 2008;26:493–504.
45. Smith L, Foxcroft D. The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies. *BMC Public Health.* 2009;9:51.
46. Grenard JL, Dent CW, Stacy AW. Exposure to alcohol advertisements and teenage alcohol-related problems. *Pediatrics.* 2013;131:e369–e79.
47. Jernigan D, Noel JK, Landon J, Thornton N, Lobstein T. Alcohol marketing and youth alcohol consumption: a systematic review of longitudinal studies published since 2008. *Addiction.* 2016;112(Suppl 1):7–20.
48. Noel JK, Babor TF, Robaina K. Industry self-regulation of alcohol marketing: a systematic review of content and exposure research. *Addiction.* 2017;112:28–50.
49. Jongenelis MI, Pierce H, Keric D, Stafford J, Jongenelis G, Pettigrew S. Are Australian regulatory codes adequate in scope to protect youth from alcohol advertising? *Health Promot J Austr.* 2021;32(Suppl 2):212–7.
50. Donovan RJ, Fielder L, Jalleh G. Alcohol advertising advocacy research no match for corporate dollars: the case of Bundy R Bear. *J Res Consum.* 2011;20:1.
51. Aiken A, Lam T, Gilmore W, Burns L, Chikritzhs T, Lenton S, et al. Youth perceptions of alcohol advertising: are current advertising regulations working? *Aust N Z J Public Health.* 2018;42:234–9.
52. Australian National Preventive Health Agency. Alcohol advertising: the effectiveness of current regulatory codes in addressing community concern. 2014.
53. VanderWeele T. Principles of confounder selection. *Eur J Epidemiol.* 2019;34:211–9.

54. Pourhoseingholi MA, Baghestani AR, Vahedi M. How to control confounding effects by statistical analysis. *Gastroenterol Hepatol Bed Bench*. 2012;5:79–83.
55. Probst C, Roerecke M, Behrendt S, Rehm J. Socioeconomic differences in alcohol-attributable mortality compared with all-cause mortality: a systematic review and meta-analysis. *Int J Epidemiol*. 2017;43:1314–27.
56. Lewer D, Meier P, Beard E, Boniface S, Kaner E. Unravelling the alcohol harm paradox: a population-based study of social gradients across very heavy drinking thresholds. *BMC Public Health*. 2016;16:599.
57. Bellis MA, Hughes K, Nicholls J, Sheron N, Gilmore I, Jones L. The alcohol harm paradox: using a national survey to explore how alcohol may disproportionately impact health in deprived individuals. *BMC Public Health*. 2016; 16:111.
58. Wine most popular, but beer most drunk [press release]. 2018.
59. Australian Institute of Health and Welfare. National Drug Strategy Household Survey. 2019 Available from: <https://nadk.flinders.edu.au/kb/alcohol/consumption-patterns/drinking-habits-of-australians>
60. Parliamentary Library. Alcohol taxation reform: considerations and options. 2009 Available from: <https://www.aph.gov.au/binaries/library/pubs/rp/2009-10/10rp11.pdf>
61. Savell E, Fooks G, Gilmore A. How does the alcohol industry attempt to influence marketing regulations? A systematic review. *Addiction*. 2016;111:18–32.
62. Stafford J, Pettigrew S, Chikritzhs T. Do different actors submit different evidence to alcohol advertising policy consultations? *Drug Alcohol Rev*. 2022;41:1457–62.
63. Freeman B, Hagan K, Barnsley K, Winstanley M. The arguments. Melbourne: Cancer Council Victoria; 2018.
64. Lavery AA, Diethelm P, Hopkinson NS, Watt HC, McKee M. Use and abuse of statistics in tobacco industry-funded research on standardised packaging. *Tob Control*. 2015;24:422–4.
65. Proctor R. The history of the discovery of the cigarette–lung cancer link: evidentiary traditions, corporate denial, global toll. *Tob Control*. 2012;21:87–91.
66. Yeung S, Lam T. Unite for a framework convention for alcohol control. *Lancet*. 2019;393:1778–9.
67. Room R, Ornberg J. A framework convention on alcohol control: getting concrete about its contents. *European journal of risk. Regulation*. 2020;12:433–43.

How to cite this article: Miller M, Livingston M, Maganja D, Wright CCJ. Unpacking assertions made by the alcohol industry and how they make them: An analysis of submissions into Australia's National Alcohol Strategy. *Drug Alcohol Rev*. 2023; 42(6):1312–21. <https://doi.org/10.1111/dar.13682>