Do different actors submit different evidence to alcohol advertising policy consultations?

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Abstract

**Introduction:** This study examined the extent to which industry and non-industry actors draw from the same (vs. different) bodies of peer-reviewed evidence in submissions to alcohol advertising policy consultations.

**Methods:** Submissions (\(n = 71\)) to two Australian public consultations about alcohol advertising policy were classified as submitted by industry or non-industry actors. Details of cited journal articles were extracted. Articles were coded according to whether: (i) cited in industry and/or non-industry actor submission(s); (ii) findings were supported or contested by the submitter; and (iii) the article was a systematic review. The most frequently cited first authors were identified.

**Results:** In total, 126 articles were cited in 45 industry actor submissions and 159 articles were cited in 26 non-industry actor submissions. Only seven articles were cited by both groups. Authors cited most frequently by one actor group were rarely cited by the other group. The first author most cited by industry actors declared alcohol industry links in two articles. Industry actors cited three systematic reviews (and contested the findings); non-industry actors cited (and supported) seven systematic reviews.

**Discussion and Conclusion:** There was a low degree of overlap in peer-reviewed evidence cited by industry and non-industry actors in submissions to Australian alcohol advertising policy consultations. Industry actors often omitted or contested high-quality evidence. Industry actors placed greater emphasis on evidence published by one industry-linked researcher than on evidence from systematic reviews and researchers with no apparent conflicts of interest. The findings raise questions about the suitability of industry actors to participate in evidence-informed policymaking processes.

**Key Words**

advertising, alcohol drinking, Australia, health policy, policy making

**Key Points**

- There was a low degree of overlap in peer-reviewed journal articles cited by industry and non-industry actors in submissions to Australian consultations about alcohol advertising policy.
Industry actors placed far greater emphasis on evidence published by one industry-linked researcher than on broader bodies of evidence generated by systematic reviews and researchers with substantial track records in relevant research areas and no apparent conflicts of interest. Industry actors’ limited contribution of trustworthy evidence via submissions raises questions about their suitability to participate in evidence-informed policymaking processes.

1 | INTRODUCTION

Comprehensive controls on alcohol advertising have been recommended among regulatory reforms needed to reduce alcohol-caused harm [1]. Many countries, including Australia, primarily rely on industry-led codes to manage alcohol advertising, rather than government-led approaches designed to effectively protect young people from advertising exposure [2]. Even where legislated restrictions exist, alcohol industry lobbying has resulted in weakened controls and brands have refocused their engagement via channels subject to fewer controls [3].

Further investigation of factors that obstruct progress towards effective regulation of alcohol marketing is needed. Resistance from alcohol industry actors remains a significant factor [4]. Due to inherent conflicts between commercial and public interests, concerns have been raised about participation of alcohol industry and allied industry actors in alcohol policy development processes, including via submissions to public policy consultations [4–6]. Documented strategies of alcohol industry actors have mirrored those used by the tobacco industry and include criticising evidence underpinning policy proposals, commissioning research, selective use of favourable evidence and omitting relevant evidence [4–6].

Gaining further insight into industry practises used to attempt to influence outcomes of alcohol advertising policy consultations will support efforts to counter commercial influences. The present study aimed to examine the extent to which industry and non-industry actors draw from the same (vs. different) bodies of peer-reviewed evidence in submissions to Australian alcohol advertising policy consultations.

2 | METHODS

2.1 | Data

Data were submissions to two public consultations on alcohol advertising policy: Australian National Preventive Health Agency’s 2012–2014 consultation on the effectiveness of alcohol advertising regulations (n = 34 submissions) [7] and New South Wales (NSW) Parliament’s 2017–2018 consultation on the NSW Alcoholic Beverages Advertising Prohibition Bill (n = 42 submissions) [8]. The purpose and outcomes of each consultation are described elsewhere [9]. In total, 71 of 76 submissions were publicly available and included in analyses.

2.2 | Procedure

Submissions were coded by type of actor: industry (included alcohol, advertising and media and sporting organisations with alcohol sponsorship arrangements) versus non-industry (all other submissions). Peer-reviewed journal articles were selected as the unit of analysis due to the quality assessment processes involved in their publication [10]. Bibliographic details of peer-reviewed journal articles cited across the sample were compiled into a spreadsheet. Articles were accessed via online databases (e.g. Scopus). Articles were coded according to whether: (i) they were cited in industry and/or non-industry actor submission/s; (ii) reported findings were supported or contested by the submitter; and (iii) the article was a systematic review of alcohol advertising studies. Systematic reviews can be particularly useful in evidence-informed decision-making as they apply established methods to systematically synthesise bodies of evidence concerning a specific research question and therefore tend to minimise bias relative to stand-alone studies [11].

2.3 | Analysis

Frequencies were calculated for: (i) submissions by actor type; (ii) unique articles cited by each actor type; (iii) supported article findings; (iv) contested article findings; (v) articles cited in both industry and non-industry actor submissions; and (vi) systematic reviews. The five most frequently cited first authors were identified for industry and non-industry actors separately (this position typically indicates the author who made the most significant contribution). Where provided, funding acknowledgements and author conflict declarations accompanying articles authored by the most frequently cited first authors were examined to identify self-reported alcohol industry connections.
3 RESULTS

In total, 126 journal articles were cited in the 45 industry actor submissions and 159 articles were cited in the 26 non-industry actor submissions. All cited articles were accessible and included in analyses. Cited articles were unevenly distributed across submissions (industry actor range 0–76, median 0; non-industry actor range 0–32, median 10.5). Almost two-thirds (64%, n = 29) of industry actor submissions and 12% (n = 3) of non-industry actor submissions did not cite any articles.

Almost all cited articles were used to support arguments and in the small number of cases where they were contested (12 articles within four submissions), this only occurred among industry submissions. One industry actor submission (by an alcohol producer) accounted for the majority of contested evidence, with seven articles collectively criticised by the submitter as ‘flawed in methodology’.

Only seven articles were cited by both actor groups (see Table S1, Supporting Information, for bibliographic details). All but one of the overlapping articles were contested by the industry actors citing them.

Table 1 lists the most frequently cited first authors (see Table S2, Supporting Information, for bibliographic details). First authors cited most frequently by one actor group were rarely cited by the other actor group, the exception being S. C. Jones. The article by Jones most cited by non-industry actors (n = 9 submissions) found ‘exposure to alcohol advertisements across a variety of media is strongly associated with drinking patterns’ [12, p. 636]; this article was not cited by industry actors.

The Jones article most cited by industry actors (n = 3 submissions; all supported) explored roles of family and peers in influencing adolescent drinking (article does not mention alcohol advertising) [13]. The other two Jones articles cited in industry actor submissions were contested. J. P. Nelson was most cited by industry actors by a wide margin, with his most cited article (n = 8 submissions) concluding that ‘advertising bans do not have a large impact on drinking patterns’ [14, p. 293].

Two articles authored by Nelson (published in 2006 and 2008) indicated alcohol industry links; both declared the author/s had consulted with a law firm that represented alcohol companies. Disclosures in Nelson’s other articles were ambiguous (e.g., ‘the usual caveats apply’). No other alcohol industry connections were declared in articles from the most frequently cited first authors. However, only 4 (of 17) articles cited by industry actors and 16 (of 26) articles cited by non-industry actors were explicit that they were independent of industry; remaining articles did not include a statement from which independence could be assessed.

Table 2 lists systematic reviews cited in submissions. Non-industry actors cited seven systematic reviews across 15 submissions; industry actors cited three systematic reviews across 2 submissions. Industry actors contested systematic reviews by emphasising scientific limitations (e.g. possibility of unmeasured confounding factors), making unsubstantiated claims that methodologies were ‘flawed’ and ‘have been criticised’, and positioning the systematic reviews as less credible than Nelson’s assessment that the effect of alcohol advertising on youth is

Table 1 Most frequently cited first authors of peer-reviewed journal articles

| First author       | Industry actor submissions | Non-industry actor submissions |
|--------------------|----------------------------|--------------------------------|
|                    | n submissions | n cited articles per submission (range) | n submissions | n cited articles per submission (range) |
| Jones SC (14 articles) | 4           | 1–2                                      | 18 | 1–5 |
| Nelson JP (10 articles)   | 11          | 1–4                                      | Not cited | - |
| Jernigan DH (5 articles)   | Not cited   | -                                        | 14 | 1–2 |
| Kelly B (3 articles)      | Not cited   | -                                        | 7  | 1–2 |
| Pettigrew S (3 articles)  | Not cited   | -                                        | 12 | 1–3 |
| Anderson P (2 articles)   | Cited*      | N/A                                      | 12 | 1–2 |
| Baer JS (1 article)       | 5           | 1                                        | Not cited | - |
| Donovan JE (1 article)    | 4           | 1                                        | Not cited | - |
| Ogborne AC (1 article)    | 4           | 1                                        | Not cited | - |
| Snyder LB (1 article)     | Not cited   | -                                        | 8  | 1   |
| Young DJ (1 article)      | 4           | 1                                        | Not cited | - |

*Anderson was cited in industry actor submissions, but was not among the most frequently cited first-authors in industry actor submissions.
| Systematic review | Conclusion of the systematic review | Cited in industry actor submissions, n submissions (supported or contested) | Cited in non-industry actor submissions, n submissions (supported or contested) |
|-------------------|-------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 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 | Alcohol advertising and promotion increases the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol. | 2 (both contested) | 12 (all supported) |
| Smith LA, Foxcroft DR. 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. | There is an association between exposure to alcohol advertising or promotional activity and subsequent alcohol consumption in young people. | 2 (both contested) | 3 (all supported) |
| Jernigan D, Noel J, Landon J, Thornton N, Lobstein T. Alcohol marketing and youth alcohol consumption: a systematic review of longitudinal studies published since 2008. Addiction 2017;112 (Suppl 1):7–20. | Young people who have greater exposure to alcohol marketing appear to be more likely subsequently to initiate alcohol use and engage in binge and hazardous drinking. | Not cited | 3 (all supported) |
| Noel JK, Babor TF, Robaina K. Industry self-regulation of alcohol marketing: a systematic review of content and exposure research. Addiction 2017;112 (Suppl 1):28–50 | The current self-regulatory systems that govern alcohol marketing practises are not meeting their intended goal of protecting vulnerable populations. | 1 (contested) | 1 (supported) |
| Brown K. Association between alcohol Sports sponsorship and consumption: a systematic review. Alcohol Alcohol 2016;51:747–55 | All studies report positive associations between exposure to alcohol sports sponsorship and self-reported alcohol consumption. | Not cited | 1 (supported) |
| Gupta H, Pettigrew S, Lam T, et al. A systematic review of the impact of exposure to internet-based alcohol-related content on young people’s alcohol use behaviours. Alcohol Alcohol 2016;51:763–71 | The review reported significant associations between exposure to Internet-based alcohol-related content and intentions to drink and positive attitudes towards alcohol drinking among young people. | Not cited | 1 (supported) |
| Vendrame A, Pinsky I. Inefficacy of self-regulation of alcohol advertisements: a systematic review of the literature. Rev Bras Psiquiatr 2011;33:196–202 | Industry self-regulation of alcohol advertising does not show evidence of efficacy. | Not cited | 1 (supported) |

Note: Smith and Foxcroft (2009) declared that one of the authors had received funding from Diageo for a project to develop and evaluate a family-based prevention program.
modest, but ... may not exist at all’ and evidence is ‘mixed, contradictory and inconclusive’.

4 | DISCUSSION

4.1 | Principal findings

There was a low degree of overlap in peer-reviewed journal articles cited by industry and non-industry actors in submissions to Australian consultations about alcohol advertising policy. Only seven articles were cited by both actor groups, but in most instances they were contested by industry submitters. Industry actors rarely cited systematic reviews of alcohol advertising studies and where they did it was to contest the reviews’ conclusions.

4.2 | Comparison with other studies

The findings provide further evidence of strategies applied by the alcohol industry to manufacture doubt about science [4–6]. First, in criticising and questioning systematic reviews reporting associations between alcohol advertising exposure and young people’s drinking [15, 16] and weaknesses in relevant self-regulatory systems [17], industry actors contested strong evidence [4–6]. Second, they omitted much of the high-quality systematic review evidence and other peer-reviewed evidence frequently cited by non-industry actors [4]. Third, in relying heavily on articles authored by Nelson, industry actors selectively cited evidence favourable to their own position [4].

Publications by Nelson about alcohol policy (not included in dataset) have disclosed his service as a consultant to law firms representing SABMiller and Anheuser-Busch [e.g. 18] and receipt of support from alcohol industry-funded organisations (International Center for Alcohol Policies and International Alliance for Responsible Drinking) [e.g. 19]. However, disclosures are inconsistent across Nelson’s body of work, and alcohol industry connections were not disclosed in most journal articles analysed in the present study. Nelson’s inconsistent disclosure of potential conflicts of interest and use of ‘faulty reasoning and inappropriate review methods’ [20, p. 2] to cast doubt on effective alcohol policy levers have been noted elsewhere.

4.3 | Strengths, limitations and unanswered questions

The primary strength of this study was the analysis of all cited journal articles across almost all submissions to two policy consultations, providing a comprehensive analysis of how peer-reviewed evidence is differentially employed by actors. Other forms of cited evidence have been examined elsewhere [9]. As only self-declared industry connections were assessed in a sub-sample of journal articles, other connections may have been missed. This study was not able to assess the extent to which policymakers accounted for actors’ selective presentation of evidence in deliberations.

4.4 | Implications for policymakers

Consultation submissions are vulnerable to policy actors selectively presenting evidence, compounding the challenge for policymakers’ limited time and attention. Among submissions analysed in the present study, actors with commercial interests in alcohol advertising policy were far less likely to present evidence from journal articles compared to non-industry actors. Overall, industry actors placed greater emphasis on evidence published by one industry-linked researcher than on broader bodies of evidence generated by systematic reviews and researchers with substantial track records in relevant research areas and no apparent conflicts of interest. Industry actors’ limited contribution of trustworthy evidence via submissions raises questions about their suitability to participate in evidence-informed policymaking processes.

AUTHOR CONTRIBUTIONS

Each author certifies that their contribution to this work meets the standards of the International Committee of Medical Journal Editors.

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CONFLICT OF INTEREST

Julia Stafford contributed to the written submission of the McCusker Centre for Action on Alcohol and Youth to the inquiry into the NSW Alcoholic Beverages Advertising Prohibition Bill 2015 and Julia Stafford appeared as a witness to a public hearing held for the inquiry. Julia Stafford contributed to the written submission of the McCusker Centre for Action on Alcohol and Youth to the Australian National Preventive Health Agency issues paper. Tanya Chikritzhs was a member of the Australian National Preventive Health Agency’s expert committee on alcohol and contributed to drafting of the final report.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher’s website.

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