Demographic Correlates of Exposure to Cannabis Advertising and Social Media Content: Findings from the 2023 Australian International Cannabis Policy Study

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Introduction

As cannabis laws have relaxed globally, advertising has become a major tool for promoting cannabis products. Evidence from the United States and Canada links exposure to cannabis ads with lower risk perceptions, stronger intentions to use, and greater use, especially among vulnerable populations including young people.

In Australia, little is known about the reach of cannabis advertising. While the *Therapeutic Goods Act* (TGA) prohibits direct-to-consumer marketing of medicinal cannabis, companies continue to promote products, mainly through social media.

Social media further amplifies exposure through targeted ads, influencers, and user-generated content that blur the line between marketing and peer endorsement.

This study draws on the 2023 International Cannabis Policy Study (ICPS) Australian survey to:

1. Examine demographic patterns in exposure to cannabis ads and social media content; and
2. Explore the sentiment of cannabis-related content and its association with these demographics.

Figure 1: Examples of medicinal cannabis advertising and promotions in Australia

Method

The ICPS was collected via self-completed web-based surveys with respondents aged 16-65 **(N= 3,042).**

Measures

Cannabis ad exposure was based on whether the respondent had or had not noticed an ad in the past 12 months ('Yes', 'No').

Cannabis-related social media content involves all content related to cannabis which could include advertising, promotions, user-generated content, and influencer marketing. Social media content exposure was measured if the respondent had noticed any social media content related to cannabis ('Has noticed', 'Never noticed').

Social media sentiment descriptions were measured by asking respondents how they would describe content related to cannabis on social media. Response options were "Positive", "Positive and negative", "Neutral" and "Negative".

Demographic variables: sex assigned at birth, age groups, speaks another language other than English at home, education and income adequacy.

Cannabis use status was derived to reflect "Never user", "Used more than 12-months ago" and "Past 12-month user".

Analysis

Binary logistic regression was used to model demographic variables and noticing a cannabis ad and social media content.

Multinomial regression was used to model the relationship between demographics and cannabis content sentiment. Negative content was set as the reference group.

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Results

50% of the sample were female and age was evenly distributed across age groups. Majority of the sample (75%) did not speak a language other than English at home and had a tertiary education (60%). 37% had used cannabis more than 12 months ago and 14% had used cannabis in the past 12 months.

26% reported noticing a cannabis ad in the past 12 months and 45% noticed any cannabis content on social media.

Content sentiment was perceived as neutral by 29%, as positive by 29%, as both positive and negative (mixed) by 28% and as negative by 14%.

Table 1 and 2 show the regression models between demographics and noticing a cannabis ad, content on social media and content descriptions.

Table 1: Binary logistic regression models on noticing a cannabis ad and content on social media by demographics

	Odds Ratio	95% CI	p>
Model 1: Noticing a cannabis ad			
Age groups (ref: 55-65)			
16-25	5.83	[4.08, 8.32]	**<0.001**
26-35	4.48	[3.15,6.37]	**<0.001**
36-45	3.34	[2.35, 4.77]	**<0.001**
46-55	1.29	[0.86, 1.94]	0.223
Sex assigned at birth (ref: Female)			
Male	1.48	[1.22, 1.80]	**<0.001**
Cannabis status (ref: Never user)			
Used more than 12 months	1.26	[0.99, 1.60]	0.057
Past 12-month user	1.95	[1.53, 2.50]	**<0.001**
Speaks language other than English (ref: No)			
Yes	1.5	[1.19, 1.89]	**<0.001**
Education (ref: Non-tertiary)			
Tertiary	1.07	[0.85, 1.35]	0.566
Income adequacy (ref: Neutral)			
Inadequate	0.88	[0.69, 1.13]	0.318
Adequate	1.2	[0.94, 1.53]	0.141
Model 2: Noticing cannabis content on social media			
Age groups (ref: 55-65)			
16-25	6.5	[4.77, 8.87]	**<0.001**
26-35	3.91	[2.88, 5.30]	**<0.001**
36-45	2.59	[1.94, 3.45]	**<0.001**
46-55	1.38	[1.02, 1.86]	**0.036**
Sex assigned at birth (ref: Female)			
Male	1.56	[1.30, 1.88]	**<0.001**
Cannabis status (ref: Never user)			
Used more than 12 months	1.56	[1.27, 1.93]	**<0.001**
Past 12-month user	2.35	[1.84, 3.01]	**<0.001**
Speaks language other than English (ref: No)			
Yes	1.31	[1.04, 1.64]	**0.021**
Education (ref: Non-tertiary)			
Tertiary	1.18	[0.96, 1.45]	0.112
Income adequacy (ref: Neutral)			
Inadequate	1.07	[0.86, 1.33]	0.563
Adequate	1.01	[0.81, 1.26]	0.953

Conclusion

Younger people, males, speakers of other languages, and past year cannabis use were more likely to notice cannabis ads. Similar patterns were observed for noticing content on social media, with the addition that more distant cannabis users reported exposure.

Descriptions of noticed cannabis-related content differed across demographic groups.

Findings highlight cannabis ads and content are readily accessible to Australian audiences despite TGA regulations banning it.

Persistent exposure underscores the need for stricter enforcement and monitoring of medicinal cannabis advertising.

Limitations:

The study could not distinguish between different types of social media content, and some exposures may have involved overseas material beyond the scope of Australian regulations.

Recall of cannabis ads may have been underestimated, as participants were asked to report exposure over the past 12 months.

Causal conclusions cannot be drawn considering the cross-sectional nature of the study.

Table 2: Multinomial regression on cannabis content description on social media by demographics

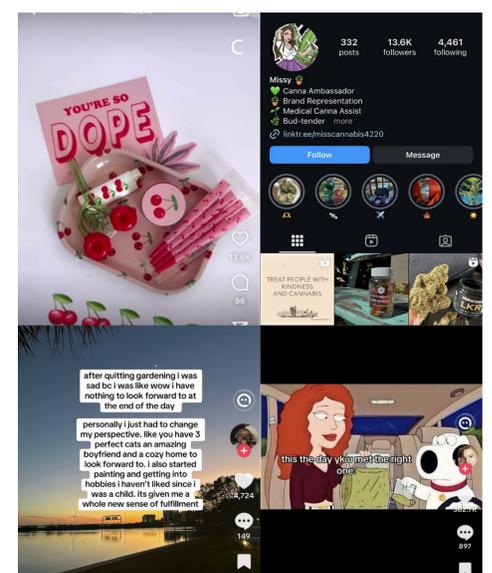| Content description	RRR	95% CI	p>
Positive content			
Age groups (ref: 36-45)			
16-25	1.57	[0.88, 2.83]	0.128
26-35	0.94	[0.58, 1.52]	0.792
46-55	1.91	[0.84, 4.33]	0.119
56-65	4.8	[1.65, 14.03]	**0.005**
Sex assigned at birth (ref: Female)			
Male	0.64	[0.40, 1.02]	0.058
Cannabis status (ref: Never user)			
Used more than 12 months	4.43	[2.38, 8.24]	**<0.001**
Past 12-month user	11.46	5.83, 22.53]	**<0.001**
Speaks language other than English (ref: No)			
Yes	0.59	[0.33, 1.05]	0.074
Education (ref: Non-tertiary)			
Tertiary	0.65	[0.33, 1.26]	0.195
Income adequacy (ref: Neutral)			
Inadequate	2.86	[1.34, 6.12]	**0.008**
Adequate	0.95	[0.58, 1.55]	0.844
Positive and negative content			
Age groups (ref: 36-45)			
16-25	2.69	[1.48, 4.90]	**<0.001**
26-35	1.99	[1.12, 3.54]	**0.020**
46-55	1.56	[0.73, 3.32]	0.242
56-65	5.08	[1.69, 15.25]	**0.005**
Sex assigned at birth (ref: Female)			
Male	0.56	[0.35, 0.91]	**0.020**
Cannabis status (ref: Never user)			
Used more than 12 months	3.1	[1.81, 5.31]	**<0.001**
Past 12-month user	6	[3.23, 11.16]	**<0.001**
Speaks language other than English (ref: No)			
Yes	0.92	[0.54, 1.57]	0.756
Education (ref: Non-tertiary)			
Tertiary	0.52	[0.28, 0.94]	**0.031**
Income adequacy (ref: Neutral)			
Inadequate	2.52	[1.31, 4.83]	**0.006**
Adequate	0.64	[0.36, 1.12]	0.114
Neutral content			
Age groups (ref: 36-45)			
16-25	1.18	[0.67, 2.09]	0.564
26-35	0.97	[0.60, 1.56]	0.889
46-55	1.79	[0.93, 3.45]	0.080
56-65	4.88	[1.72, 13.88]	**0.004**
Sex assigned at birth (ref: Female)			
Male	0.6	[0.36, 0.98]	**0.042**
Cannabis status (ref: Never user)			
Used more than 12 months	2.69	[1.45, 4.96]	**0.002**
Past 12-month user	6.2	[3.28, 11.70]	**<0.001**
Speaks language other than English (ref: No)			
Yes	0.68	[0.37, 1.26]	0.213
Education (ref: Non-tertiary)			
Tertiary	0.45	[0.23, 0.87]	**0.019**
Income adequacy (ref: Neutral)			
Inadequate	1.58	[0.86, 2.89]	0.134
Adequate	0.84	[0.54, 1.31]	0.439
Negative content (base outcome)			

Figure 2: Examples of cannabis content on social media

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