The efficacy of health warnings and package branding on perceptions of cannabis products among youth and young adults, a cross-sectional survey.

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Prof. David Hammond: Paid expert testimony – Public Health Litigation

Legal challenge to restrictions on cannabis promotion on behalf of the Province of Quebec.
BACKGROUND

Canadian non-medical cannabis legalization

- *Cannabis Act* came into effect on October 17th, 2018

- Established restrictions on:
  - Advertising and promotion
  - Packaging
  - Labelling
BACKGROUND

Canadian non-medical cannabis legalization

- Prohibits lifestyle advertising or promotion

- Feature 1 of 9 rotating health warning labels
BACKGROUND

Advertising & Promotion

- Widespread – particularly through digital media\textsuperscript{1,2}

\textsuperscript{1} Krauss et al., 2017. \textsuperscript{2} Bierut et al., 2017
BACKGROUND

Advertising & Promotion

- **Oregon**: higher levels of exposure to non-medical cannabis marketing than general US samples\(^3\)

\(^3\) Fiala et al., 2018
BACKGROUND

Advertising & Promotion

- **California**: exposure to medical cannabis advertising among 6th and 8th graders associated with
  - greater likelihood of cannabis use and
  - stronger intentions to use one year later

4 D’Amico et al., 2015
BACKGROUND

Advertising & Promotion

- Elicits similar brain reactivity and reward cues as marketing for alcohol and tobacco products\(^5\)

\(^{28}\) de Sousa et al., 2017
BACKGROUND

Packaging

- Designed to encourage **initiation of use**, **increased use**, and **promote brand loyalty** ⁶,⁷,⁸,⁹

- Can decrease **risk perceptions** of products ⁹,¹⁰

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Youth perceptions

- **Know very little** regarding the health effects of cannabis\(^{11,12}\)

- Perceive that **use is more prevalent and widespread** than it is\(^{11,13}\)

- Report that cannabis is **safe**, used by “**everybody**”, “**natural**”, “**not really a drug**”\(^{11,14}\)

- Risk perceptions influence **intentions to use**, rely on beliefs of personal **susceptibility**
BACKGROUND

Health warning labels

- Effective in reducing use and consequent tobacco-related disease burden\(^\text{15}\)

- High reach and frequency of exposure

- Cannabis users report consuming up to 3 cannabis cigarettes/day\(^\text{16}\)

\(^{15}\) WHO, 2013, \(^{16}\) Zeisser C et al., 2012
What is the effect of different types of branding elements and descriptors on product perceptions among youth and young adults?
METHODS

Study design

- Online cross-sectional survey: **October 2017**

- Inclusion criteria:
  - 16 to 30 years of age
  - Canadian IP address
  - Cannabis users and non-users

- Commercial consumer panel (400,000 active members)

- Non-probability sampling across Canada
METHODS

Survey design

- Comprehensive survey on cannabis consumption and behaviours

- Embedded 8 between-group experiments
RESULTS

Brand imagery, packaging, health warnings

Condition 1

Condition 2

Condition 3

Condition 4
RESULTS

Brand imagery, packaging, health warnings

Condition 1: n=129, 4.0
Condition 2: n=131, 4.9
Condition 3: n=134, 4.8
Condition 4: n=132, 5.1

Branded packs were more likely to receive greater appeal scores than plain packs.
RESULTS

Brand imagery, packaging, health warnings

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>129</td>
<td>4.0</td>
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<tr>
<td>2</td>
<td>131</td>
<td>4.9</td>
</tr>
<tr>
<td>3</td>
<td>134</td>
<td>4.8</td>
</tr>
<tr>
<td>4</td>
<td>132</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Packs with health warning labels were less likely to receive greater appeal scores than those without health warnings.
RESULTS

Flavour descriptors

Condition 1

Condition 2
### Flavour descriptors

<table>
<thead>
<tr>
<th>Condition 1</th>
<th>Condition 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=421</td>
<td>n=449</td>
</tr>
<tr>
<td><strong>6.4a</strong></td>
<td><strong>6.0b</strong></td>
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</table>
RESULTS

Lifestyle brand references

Condition 1

Condition 2
RESULTS

Lifestyle brand references

Condition 1

n=425

5.6\textsuperscript{a}

Condition 2

n=445

4.7\textsuperscript{b}
RESULTS

‘Organic’ and ‘Natural’ descriptors

Condition 1

Condition 2
RESULTS

‘Organic’ and ‘Natural’ descriptors

<table>
<thead>
<tr>
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<th>Condition 2</th>
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<tbody>
<tr>
<td>n=447</td>
<td>n=423</td>
</tr>
<tr>
<td>6.0</td>
<td>6.2</td>
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</table>
RESULTS

Fashion references

Condition 1

Condition 2
RESULTS

Fashion references

<table>
<thead>
<tr>
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<th>Condition 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=454</td>
<td>n=416</td>
</tr>
<tr>
<td>5.4</td>
<td>5.5</td>
</tr>
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</table>
DISCUSSION

Health warning labels and packaging

- Brand imagery on cannabis packaging can promote lifestyle associations and influence appeal of cannabis products.
Health warning labels and packaging

- Health warnings can **reduce the appeal** of consumer products both by:
  - highlighting negative health effects
  - displacing promotional branding
Health warning labels provide a **broad reach**
- Support of marketing restriction in Canada’s *Cannabis Act*

- Involvement of multinational companies’ investments

- Surveillance of brand associations, evolve regulations
Thank you!

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WARNING: Do not use if pregnant or breastfeeding. Using cannabis during pregnancy may harm your baby and result in low birth weight.

MISE EN GARDE : Ne consommez pas si vous êtes enceinte ou allaitante. Consommer du cannabis pendant la grossesse pourrait être dangereux pour le bébé et réduire son poids à la naissance.

**THE COLOUR**

**RED** (Primary Colour)

- CMYK: C0 M100 Y92 K0
- RGB: R235 G0 B41
- HTML: #EB0028
- PANTONE: 185

**BLACK**

- CMYK: C0 M0 Y0 K100
- RGB: R0 G0 B0
- HTML: #000000
- PANTONE: 209

**WHITE**

- CMYK: C0 M0 Y0 K0
- RGB: R255 G255 B255
- HTML: #FFFFFF

**YELLOW** (Background Colour)

- CMYK: C0 M0 Y100 K0
- RGB: R255 G242 B0
- HTML: #FFFF00

**THE COLOUR**

- CMYK: C0 M0 Y0 K0
- RGB: R255 G255 B255
- HTML: #FFFFFF

Example of **MINIMUM SIZE**

**Example of minimum size**

Dotted border not required/used to illustrate outlet

**Example of FRONT (principal display panel)**

with white/plain background and brand/producer name

**Example of BACK (secondary display panel)**

with white/plain background

**WARNING:** Do not use if pregnant or breastfeeding. Using cannabis during pregnancy may harm your baby and result in low birth weight.

MISE EN GARDE : Ne consommez pas si vous êtes enceinte ou allaitante. Consommer du cannabis pendant la grossesse pourrait être dangereux pour le bébé et réduire son poids à la naissance.

**BRAND NAME**

**MARQUE NOMINATIVE**

THC % (Total THC 19% / THC Total 18 %)
CBD % (Total CBD 1% / CBD Total 1 %)

**Example of FRONT (principal display panel) with solid coloured background and brand/producer logo**

**Example of BACK (secondary display panel) with solid coloured background**

Health warning message must appear in both official languages and be given equal prominence.

Example of **MINIMUM SIZE**
RESULTS

Sample Characteristics (N=870)

52.1% female

25.2% aged 16 to 18
30.7% aged 19 to 24
44.1% aged 25 to 30

64.5% identified as white

41.5% never users
36.0% former users (not in past 30 days)
22.5% current users (use within past 30 days)