The Culture of Driving Impaired: A Partnership Project

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Traffic Safety Culture is defined as:

“The values and beliefs shared among groups of road users and stakeholders that influence their decisions to behave or act in ways that affect traffic safety.”

(NCHRP 17-79)
Sounds like ...
“It is difficult to expect that people will change their behavior easily when many forces in their social environment conspire against such change.”

[Source: Syme & Belfour, 1998]
Figure 1. Percentage of Washington drivers testing positive for THC before and after recreational marijuana sales were made legal in November, 2013.6
Crashes

Rising Frequency of Poly-Drug Drivers in Fatal Crashes

<table>
<thead>
<tr>
<th>Year</th>
<th>THC Only</th>
<th>Alcohol Only</th>
<th>One Drug Only (not Alcohol or THC)</th>
<th>Poly-Drug (Any combination of the other categories)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>115</td>
<td>94</td>
<td>19</td>
<td>67</td>
</tr>
<tr>
<td>2009</td>
<td>113</td>
<td>90</td>
<td>19</td>
<td>89</td>
</tr>
<tr>
<td>2010</td>
<td>96</td>
<td>81</td>
<td>26</td>
<td>81</td>
</tr>
<tr>
<td>2011</td>
<td>96</td>
<td>80</td>
<td>27</td>
<td>84</td>
</tr>
<tr>
<td>2012</td>
<td>80</td>
<td>78</td>
<td>18</td>
<td>78</td>
</tr>
<tr>
<td>2013</td>
<td>97</td>
<td>84</td>
<td>33</td>
<td>84</td>
</tr>
<tr>
<td>2014</td>
<td>106</td>
<td>65</td>
<td>33</td>
<td>65</td>
</tr>
<tr>
<td>2015</td>
<td>120</td>
<td>62</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td>2016</td>
<td>137</td>
<td>65</td>
<td>38</td>
<td>65</td>
</tr>
</tbody>
</table>

Figure 2. Number of Washington drivers involved in fatal crashes before and after recreational marijuana sales were made legal in November, 2013.
Partnership

CHSC
- Framework
- Skills
- Advance Knowledge

WTSC
- Public Health Issue
- Resources
- Target Zero
Sample

- Qualtrics panel
- N = 180
- WA residents
- Drive at least monthly
- Use cannabis at least monthly
- Use alcohol at least monthly
- Age 18 to 70 years
- 66% female
- 39% “chronic” users
- Medical (14%), Recreational (28%), Both (58%)
### Behavior

**In the past 12 months, how often have YOU driven within two hours of consuming alcohol and marijuana?**

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>98</td>
<td>54.4</td>
<td>54.4</td>
<td>54.4</td>
</tr>
<tr>
<td>Once or twice</td>
<td>36</td>
<td>20.0</td>
<td>20.0</td>
<td>74.4</td>
</tr>
<tr>
<td>3 to 6 times</td>
<td>11</td>
<td>6.1</td>
<td>6.1</td>
<td>80.6</td>
</tr>
<tr>
<td>7 to 11 times</td>
<td>3</td>
<td>1.7</td>
<td>1.7</td>
<td>82.2</td>
</tr>
<tr>
<td>Monthly</td>
<td>9</td>
<td>5.0</td>
<td>5.0</td>
<td>87.2</td>
</tr>
<tr>
<td>Weekly</td>
<td>13</td>
<td>7.2</td>
<td>7.2</td>
<td>94.4</td>
</tr>
<tr>
<td>Daily</td>
<td>10</td>
<td>5.6</td>
<td>5.6</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Analysis

Framing Strategies

- Behavioral Beliefs
- Normative Beliefs
- Control Beliefs

Core Model

- Attitudes
- Perceived Norms
- Perceived Control
- Willingness
- Intention
- Risky or Protective Behavior

Values
Analysis

Core Model

Values
- Behavioral Beliefs
- Normative Beliefs
- Control Beliefs

Attitudes
- Perceived Norms
- Perceived Control

Willingness

Intention

Risky or Protective Behavior
How likely is it you will drive within two hours of consuming alcohol and marijuana at least once in the next 12 months?

How willing would you be to drive within two hours of consuming alcohol and marijuana if you still felt buzzed or high?

How likely is it you will drive within two hours of consuming alcohol and marijuana at least once in the next 12 months?
Core Model

How do you feel about driving within two hours of consuming alcohol and marijuana: dangerous … safe?

How common do you think it is for people like yourself to drive within two hours of consuming alcohol and marijuana?

How acceptable would most people important to you feel it is for you to drive within two hours of consuming alcohol and marijuana?

How easy would it be for you to refrain from driving within 2 hours of consuming alcohol and marijuana?
Analysis

Strategies

Values

Behavioral Beliefs → Attitudes → Willingness

Normative Beliefs → Perceived Norms

Control Beliefs → Perceived Control

Intention → Risky or Protective Behavior

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Strategies
(Behavioral beliefs -> Attitudes)

“How much do you agree with the following statements?

- I will feel calmer: 0.66
- I will be more aware: 0.63
- I will be better able to respond to unexpected events: 0.68
- I will be more likely to get arrested: -0.41
- My reaction time will be slower: -0.38
- I will be more likely to be in a crash: -0.42
Framing

- Broad-mindedness*
- Self-Direction*
- Stimulation**
- Enjoyment in Life**
- Helpfulness
- Conformity*
- Tradition***
- Achievement
- Security***
- Power

No past-year use
Past-year use, no DUIC
DUIC

*p<0.001; **p<0.0001; ***p<0.00001
Questions?

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