

# Driving Under the Influence of Cannabis (DUIC) Preliminary Results

**Center for Health and Safety Culture**

Jay Otto

May 18, 2016

# DUIC Survey

- Mailed Survey
  - 855 responses (Response Rate: 30.7%)
  - All 48 states participated (excluded AK, OR, and DC)
- Internet 18-30 year olds
  - 716 responses
  - All 48 states participated (excluded AK, OR, and DC)
- Internet 18-30 year olds, 30-day Cannabis users
  - 517 responses from just CO, WA

# Cannabis Use in Past Month

- Mailed Survey (excluding CO, WA): age 25+
  - 7% (unweighted), 8% (weighted),
  - NSDUH (2014) 6.6%
  
- Internet Survey (excluding CO, WA): Age 18-24
  - 16.7% (unweighted), 17.3% (weighted)
  - NSDUH (2014) 19.6%

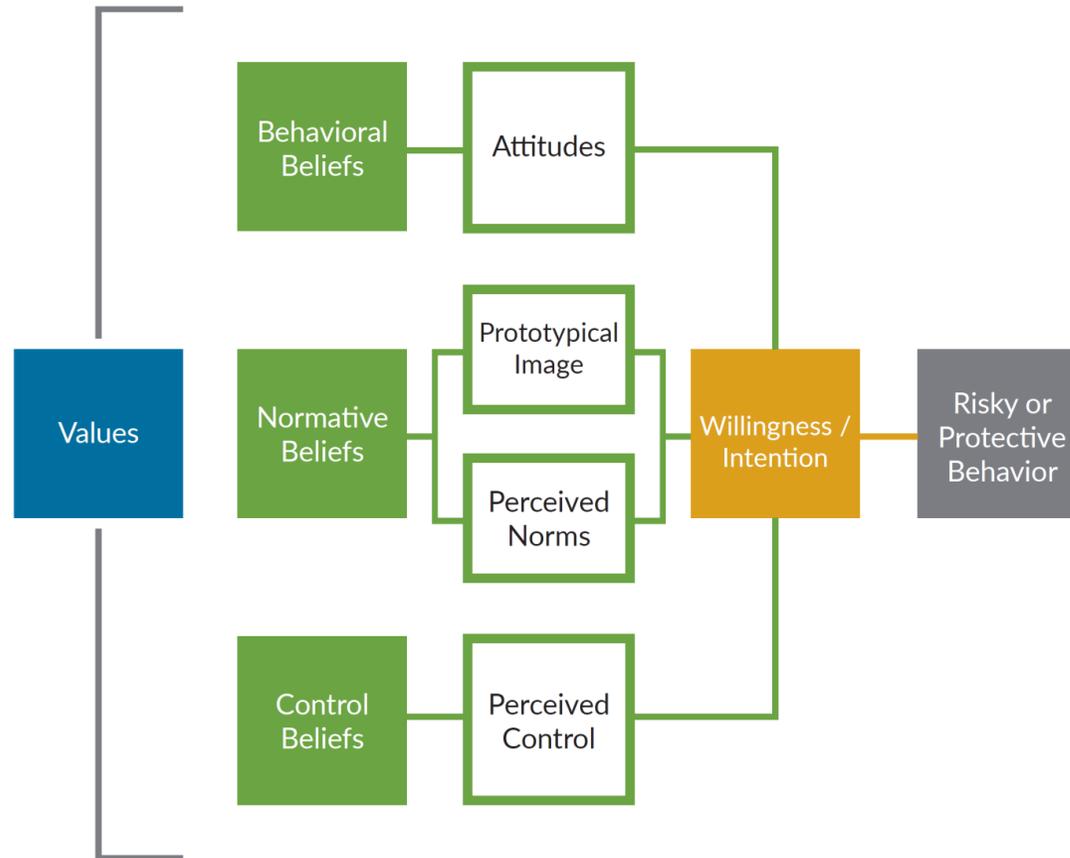
# DUIC among Cannabis Users

Thinking back over the past 12 months, when was the last time you drove a vehicle within four hours of using marijuana?

More than once

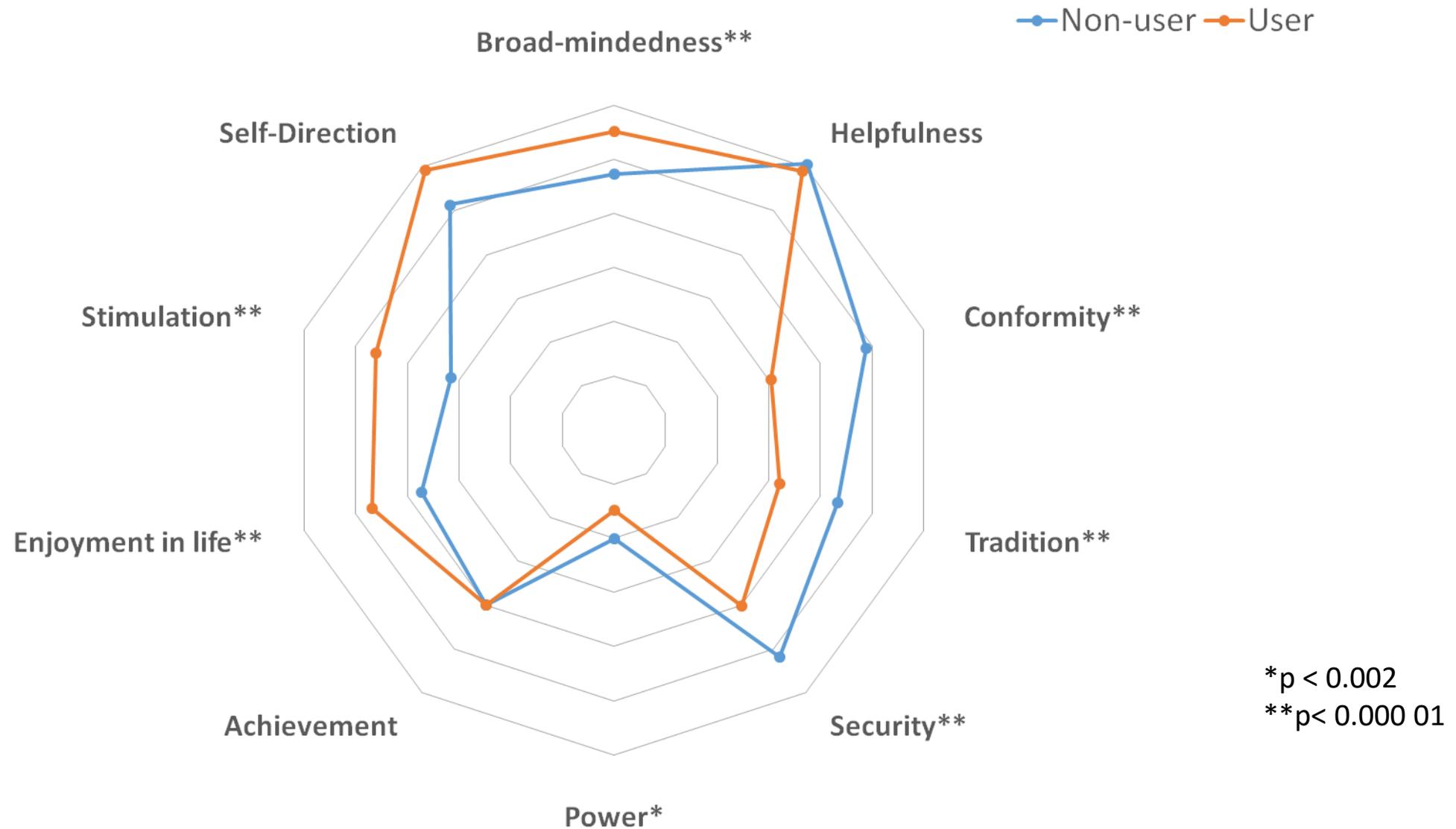
Mailed Survey (ages 21+)	39.3% (uw),	42.3% (w)
Internet (18-30)	50% (uw),	48.1% (w)
Internet (18-30, CO, WA, 30-day use)	50.9% (uw),	53.6% (w)

# Behavior Model



All scales show good internal reliability  
(Chronbach's Alpha > 0.85)

# Values by Cannabis Use (mailed survey, n=855)



# Willingness to DUIC Based on Use

Means	Non-Users	Users	Significance
Willingness Scale (1= Never; 8 = Extremely willing)	2.0	4.4	p<0.000 001
Drive in an emergency	2.9	6.0	p<0.000 001
Drive home on side streets	2.1	4.7	p<0.000 001
Drive home on the highway	1.8	4.1	p<0.000 001
Drive if you don't feel high	2.3	5.5	p<0.000 001
Drive even if you still feel high	1.7	3.8	p<0.000 001
Drive when you had also been drinking	1.6	2.2	p<0.000 001

Source: Mailed Survey: Weighted, n= 802

# Attitude About DUIC Based on Use

Means	Non-Users	Users	Significance
Attitude Scale (1= Not favorable; 7 = favorable)	1.6	3.3	p<0.000 001
Uncool : Cool	1.4	2.8	p<0.000 001
Dangerous : Safe	1.6	3.3	p<0.000 001
Stupid : Sensible	1.5	3.1	p<0.000 001
Unpleasant : Pleasant	1.8	3.8	p<0.000 001
Unacceptable : Acceptable	1.5	3.4	p<0.000 001

Source: Mailed Survey: Weighted, n= 802

# Attitude About DUIC Among Cannabis Users

Means	Never DUIC	Sometimes DUIC	Significance
Attitude Scale (1= Not favorable; 7 = favorable)	2.3	4.2	p<0.000 001
Uncool : Cool	2.1	3.4	p<0.000 001
Dangerous : Safe	2.0	4.6	p<0.000 001
Stupid : Sensible	2.0	4.1	p<0.000 001
Unpleasant : Pleasant	3.0	4.5	p<0.000 001
Unacceptable : Acceptable	2.2	4.5	p<0.000 001

Source: Mailed Survey: Weighted, n= 176

# Behavioral Beliefs About DUIC Among Cannabis Users

Means 1= Strongly Disagree; 4= Neither; 7 = Strongly Agree	Never DUIC	Sometimes DUIC	Significance
"If I drive after using marijuana, I will feel calmer."	2.51	4.51	p<0.000 001
"If I drive after using marijuana, I will be more alert."	2.08	3.81	p<0.000 001
"If I drive after using marijuana, I will be more cautious."	3.25	4.83	p<0.000 001
"If I drive after using marijuana, I will be more likely to get arrested."	4.95	3.97	P<0.0001
"If I drive after using marijuana, my reaction time will be slower."	5.54	4.03	p<0.000 001
"If I drive after using marijuana, I am more likely to be in an accident."	4.67	3.02	p<0.000 001

# Normative Beliefs About DUIC Among Cannabis Users

Means 1= Strongly Disagree; 4= Neither; 7 = Strongly Agree	Never DUIC	Sometimes DUIC	Significance
"My friends would think it was OK if I drove after using marijuana."	3.54	5.45	p<0.0001
"My family would think it was OK if I drove after using marijuana."	2.38	3.47	p<0.0001
"My employer would think it was OK if I drove after using marijuana."	1.97	3.01	p<0.0001
"Law enforcement in my community would think it was OK if people drove after using marijuana."	1.54	1.98	P<0.012
"Most people in my community think it is OK to drive after using marijuana."	3.00	4.19	p<0.0001
"Most people who are important to me think it is OK to drive after using marijuana."	2.52	4.67	p<0.0001

Source: Mailed Survey: Weighted, n= 176

# Analyses

Question #1: *How does culture compare between users and non-users of cannabis?*

- *All constructs measured will be compared between users and non-users of cannabis. These comparisons will reveal how the values, attitudes, and beliefs related to driving under the influence vary.*

# Analyses

Question #2: *How does culture affect the decision to drive under the influence of cannabis?*

- *A model will be created using linear regression techniques to see how well the constructs predict behavior. The model will be created using a combined database of all respondents as well as internet-only and mail-only respondents. In addition, we will create a model for states with and without legalized recreational use. The models will be compared for overall predictability as well as relative influence of various constructs.*

# Analyses

Question #3: *How does culture compare between states with and without legalized recreational use laws?*

- *Values, attitudes, beliefs and behaviors will be compared between the states with and without legalized recreational use. Those constructs most predictive of driving under the influence behaviors will be highlighted.*

# Reviewers

- Proposed:
  - Jason Kilmer, Ph.D., University of Washington

# Traffic Safety Citizenship Survey

Demographic	Geography	Method	Proposed Plan	Current Status
Adults age 18 and older	All states	internet	800 responses Purchased panel (400 responses age 18-30; 400 responses age 31 and older)	Obtained 1,260 responses
Adults age 18 and older	All states	mail	800 responses Random sample of households, \$2 cash incentive	So far have received: 668

# Reviewers

- Proposed:
  - Tom Welch

# TraSaCu Visitor's Schedules

- July 1<sup>st</sup>- July 30<sup>th</sup>
  - Gerlad Furian, senior researcher from KFV in Austria, Vienna
- July 29<sup>th</sup>- August 31<sup>st</sup>
  - Susanne Kaiser, project staff from KFV in Austria, Vienna
- August 1<sup>st</sup>- August 31<sup>st</sup>
  - Tamara Vlk, project assistant from Technical University of Vienna
- September 1<sup>st</sup>- November 21<sup>st</sup>
  - Yeşim Üzümcüoğlu and Özlem Ersan, Ph.D. students from METU