



# The Effects of Personality on Cannabis are Mediated by Cognitions in Youth

Maya A. Pilin, B.A. & Marvin D. Krank, Ph.D.  
University of British Columbia

# What I'm Going to Tell You About



A brief introduction to the role of cognition and personality in youth cannabis use



The goals and methodology of our research study



The results of our study and what they mean



Next steps



# Personality and Substance Use

- Role of personality in substance use initiation, brain mechanisms, response to treatment, and motivation (i.e. Comeau et al., 2001; Cloninger, 1987)
- The “addictive personality”? (Castellanos-Ryan, 2012)
- The role of personality in youth substance use interventions (Conrod et al., 2007)



# The Substance Use Risk Profile

SensationSeeking

Impulsivity

Negative  
Thinking

Anxiety  
Sensitivity



## Sensation-Seeking

Typically use  
substances for  
enhancement  
motives

## Impulsiveness

Consistent  
predictor of  
substance use

## Negative Thinking

Using substances to  
cope with  
depression &  
painful memories

## Anxiety Sensitivity

Potentially  
protective factor  
&  
mixed evidence



## Substance-Use Related Cognitions

- Positive expectancies of alcohol use lead to increased use in youth, negative expectancies as protective factors against cannabis youth (Schmits et al., 2015; Fulton, Krank, & Stewart, 2012)
- Attentional biases for cannabis-related words associated with cannabis craving (Field, Mogg, & Bradley, 2004)

# Acquired Preparedness

- Personalities impact what you learn from experiences and thus your future substance use (Smith & Anderson, 2001)





## Research Question

**Can the acquired preparedness model describe the relationship between personality and cannabis use in youth?**



# Participants

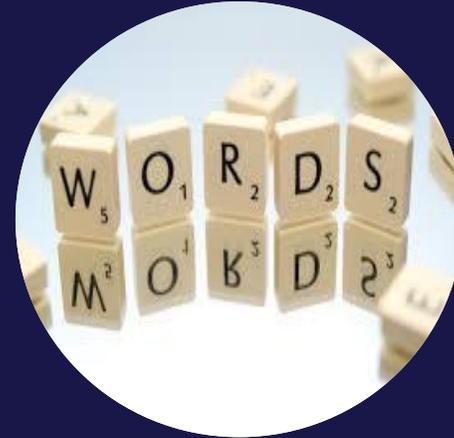
N = 255 grade 8 students from Western Canada

Mean age at Time 1: 14.35

55.7% female

Both users and Non-users at Time 1

# Measures



Substance Use Risk  
Profile Scale (SURPS)  
Time 1

Cannabis Outcome  
Expectancy Liking  
(COEL)  
Time 2

Cannabis Word  
Associates (WATs)  
Time 2

Past Year  
Cannabis Use  
Time 2

# Descriptive Statistics

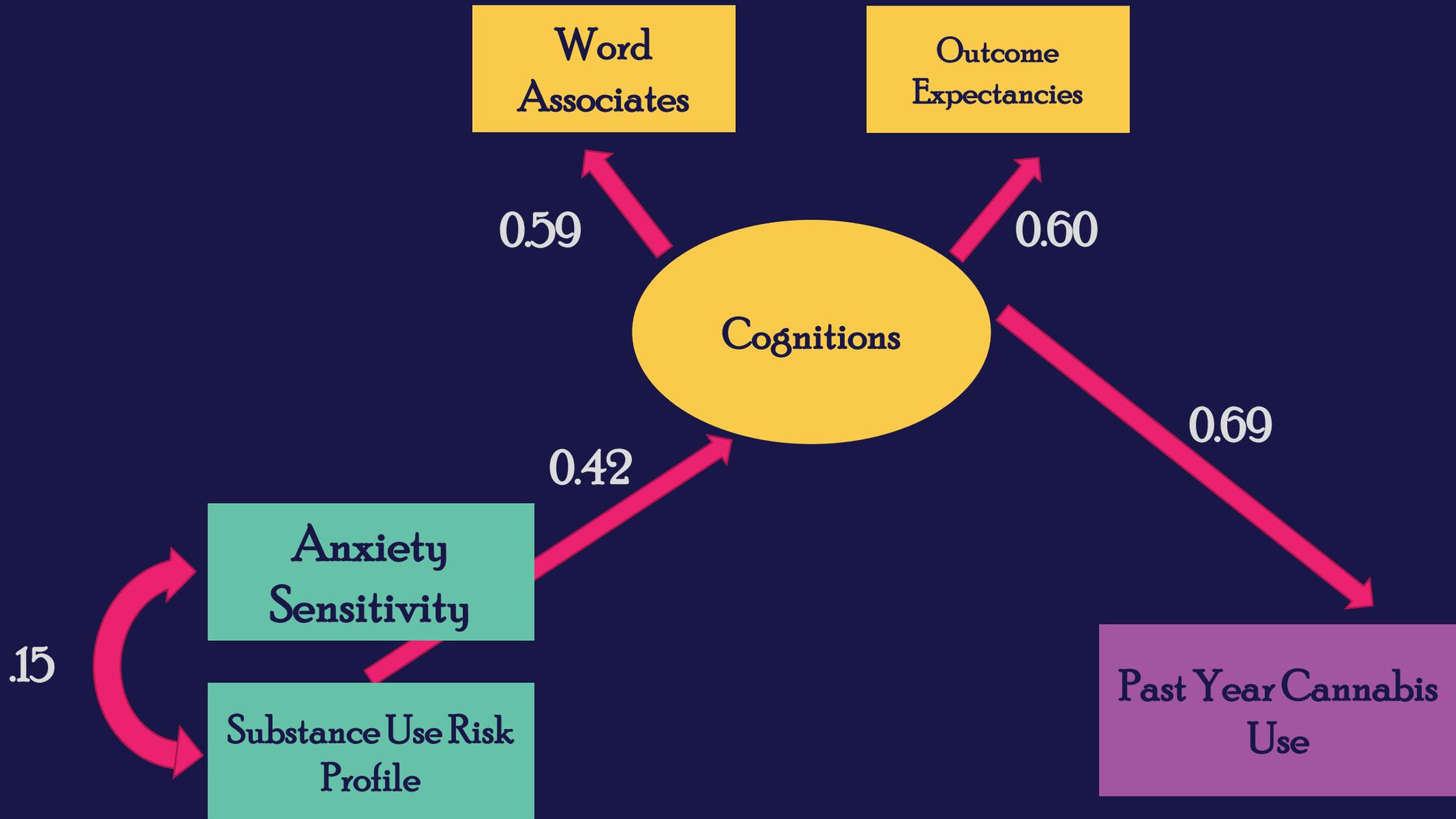
**Mean Cannabis  
Outcome Expectancy  
Liking Score** --0.88 (*SD*  
= 1.18)

**Mean Cannabis  
Word Associates Sum**  
–  
1.93 (*SD* = 1.81)

**Self-Report Past Year Cannabis Use at Time  
2**

**5.5% Users – Time 1**

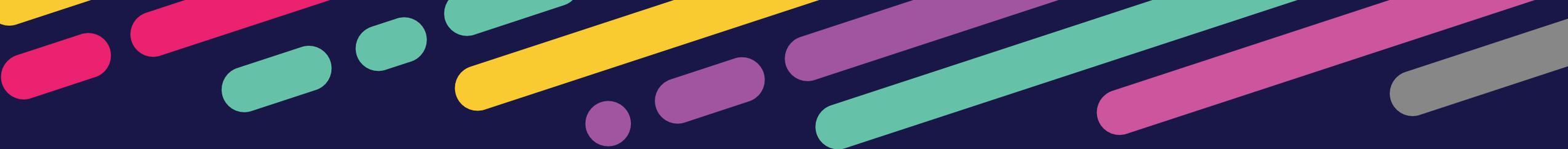
**12.2% Users – Time 2**



# Model Fit Statistics

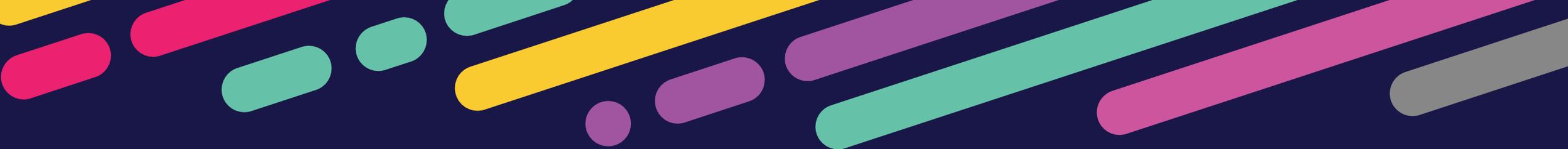
Confirmatory Fit Index: 0.99 - Excellent  
RMSEA: 0.03 - Excellent

Chi Square: 6.32  
Degrees of Freedom: 5  
Probability Level: 0.28



## What Does this Mean?

- The acquired preparedness model applies to personality traits other than impulsivity
- Evidence for the role of acquired preparedness in youth cannabis use
- Evidence for the role of different measures of cognitions in substance use



# Applications

- These findings can be applied to designing targeted interventions to prevent cannabis use in youth
- Further research with longer durations, larger sample sizes, substance use initiation, and different age groups must be conducted

# Disclosure Statement

- I have no affiliation (financial or otherwise) with a cannabis producer, processor, distributor or communications organization.



# THANK YOU!

ANY QUESTIONS?

Contact Information: [mayapilin@alumni.ubc.ca](mailto:mayapilin@alumni.ubc.ca)