

# Self-Determination Theory Correlates of Cannabis-Related Outcomes

## among a Large, Multi-Site Sample of College Students

Dylan K. Richards<sup>1</sup>, Jude G. Chavez<sup>1</sup>, Matthew R. Pearson<sup>1</sup>, Craig A. Field<sup>2</sup>, & Addiction Research Team

<sup>1</sup>Center on Alcohol, Substance Use, And Addictions (CASAA), University of New Mexico

<sup>2</sup>Latino Alcohol and Health Disparities Research and Training Center (LAHDR), Department of Psychology, University of Texas at El Paso



### INTRODUCTION

- ❖ Self-determination theory (SDT; Ryan & Deci, 2000) is a general theory of motivation that has been applied to understand why people engage in healthy behaviors
- ❖ More self-determined reasons for engaging in healthy behaviors is associated with an increased likelihood of initiation and persistence (Ryan et al., 2007)
- ❖ Greater autonomous functioning and satisfaction of the psychological needs for autonomy, competence, and relatedness increases self-determined motivation
- ❖ Research supports an SDT framework for understanding alcohol-related behaviors (Richards et al., 2020)
- ❖ This framework may be equally useful for cannabis with the potential to inform intervention efforts

#### Present Study

- ❖ We examined autonomous functioning and the psychological needs as correlates of cannabis-related outcomes among a large, multi-site sample of college students who used cannabis in the past month

### METHOD

#### Participants

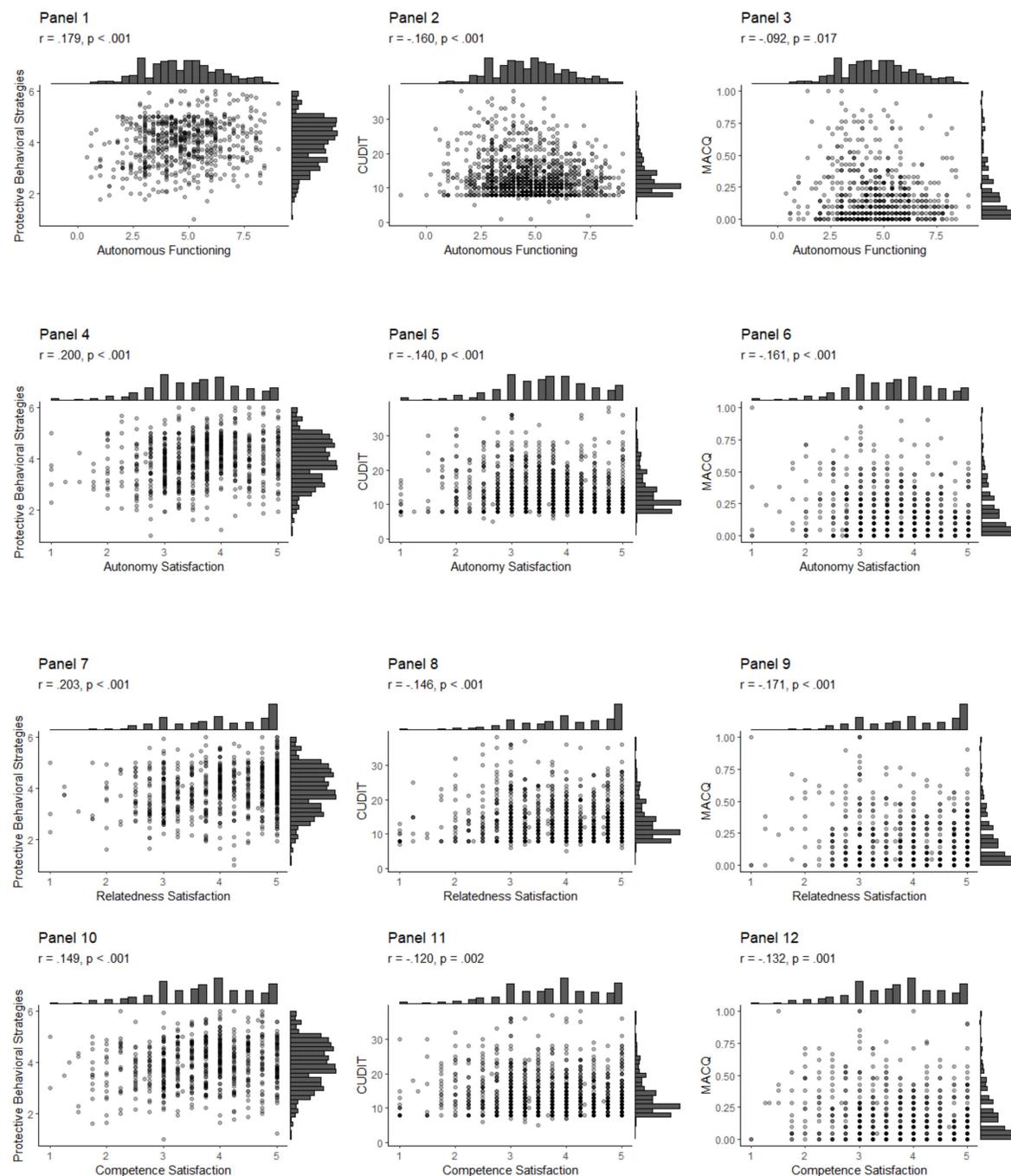
- ❖ 5497 students recruited from Psychology Department participant pools at 10 universities in 8 states across the U.S.: AK, CA, CO, ID, NM, TX, VA, and WA
- ❖ We restricted analyses to those who reported consuming cannabis at least once in the past month (n=1398, ~25%)
- ❖ The analytic sample was 20.25 years of age on average (SD=3.88) and mostly female (68.9%) and non-Hispanic white (59.4%)

#### Procedures

- ❖ Participants completed an online survey for partial course credit that included the following measures:
  1. Index of Autonomous Functioning (IAF)
    - 15 items;  $\alpha = .846 - .924$
  2. Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS)
    - 24 items;  $\alpha = .743 - .894$
  3. Protective Behavioral Strategies for Marijuana (PBSM)
    - 17 items;  $\alpha = .902$
  4. Revised version of the Cannabis Use Disorder Identification Test (CUDIT)
    - 8 items;  $\alpha = .854$
  5. Brief version of the Marijuana Consequences Questionnaire (MACQ)
    - 21 items;  $\alpha = .879$

### RESULTS

**Figure 1. Histograms, scatterplots, and bivariate correlations for (protective) self-determination theory constructs with cannabis-related outcomes**



Note. CUDIT = Cannabis Use Disorder Identification Test; MACQ = Marijuana Consequences Questionnaire.

### RESULTS (CONT'D)

**Table 1. Bivariate correlations between (risk) self-determination constructs and cannabis-related outcomes**

	PBS	CUDIT	MACQ
Autonomy Frustration	-.127**	.199**	.147**
Relatedness Frustration	-.144**	.216**	.133**
Competence Frustration	-.121**	.229**	.215**

Note. CUDIT = Cannabis Use Disorder Identification Test; MACQ = Marijuana Consequences Questionnaire.  
\*\*  $p < .01$

### DISCUSSION

- ❖ The present study was an initial application of SDT to understanding cannabis-related behaviors
- ❖ Replicating prior work on alcohol, greater autonomous functioning and psychological need satisfaction were protective factors for cannabis: related to more frequent use of harm reduction behaviors, less consumption, and fewer negative consequences
- ❖ In contrast, greater psychological need frustration was a risk factor for cannabis
- ❖ These findings support SDT as related to cannabis
- ❖ SDT provides a rich framework for understanding why college students may engage in healthy cannabis-related behaviors as well as the conditions that foster that engagement, making it an ideal theory to inform cannabis interventions
- ❖ The present findings warrant replication but suggest promise for SDT as a framework for understanding cannabis-related outcomes that future research should investigate further

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### CONTACT

- ❖ e-mail: [dkrichards@unm.edu](mailto:dkrichards@unm.edu)
- ❖ Website: <http://mateolab.yolasite.com/>
- ❖ Twitter: @DylanKRichards