The Role of Cognitive Risk Factors and its Association with Vaping

Karen T. Y. Tang[1], Mohammed Al-Hamdani[2], Igor Yakovenko[1,3]
[1]Department of Psychology and Neuroscience, Dalhousie University, Canada; [2]Lung Association of Nova Scotia, Canada;
[3]Department of Psychiatry, Dalhousie University, Canada

INTRODUCTION

- Vaping has become a common form of young adult consumption of nicotine and cannabis.
- Despite the danger posed by the increased prevalence of vaping, research on the benefits and harms of vaping remain unknown.
- Previous research has found that cognitions, such as holding more distorted attitudes toward vaping are associated with smoking.

PURPOSE

- Determine the role of cognitive risk factors in predicting increased vaping behavior and greater cannabis/tobacco use disorder severity.
- Hypotheses: Lower levels of accurate knowledge about vaping will be associated with increased frequency of e-cig use (Hypothesis 1), and greater symptom severity of tobacco/cannabis use disorder (Hypothesis 2).

METHODS

Sample

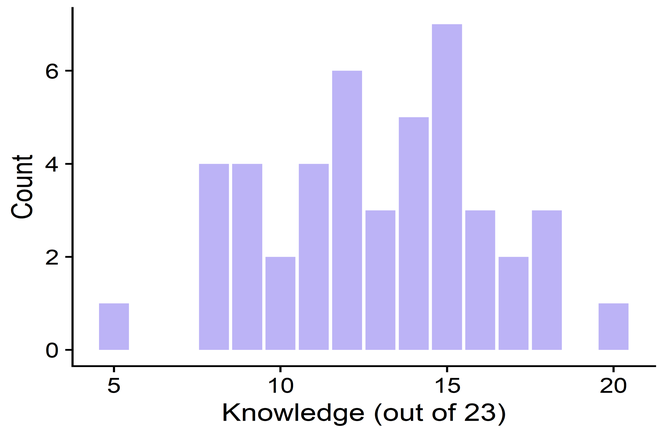
- Undergraduate students N = 59 (74.6% female, M_{age} = 19.98, SD = 1.54, age range: 17-25)
- Inclusion: Dal undergrads, aged 18-25, vape nicotine and/or cannabis, vaped weekly for 3 mths

Procedure

- **IV:** Knowledge on vaping (scored out of a total of 23)
- **DV:** (1) Frequency of e-cig use; (2) Symptom severity of tobacco (FTND)/cannabis use disorder (CUDIT) (continuous variables)
- **Design:** Online Survey, Cross-sectional
- **Data analyses:** Regression

FIGURES

Figure 1: Knowledge score (out of 23)
Higher score = greater knowledge about vaping.



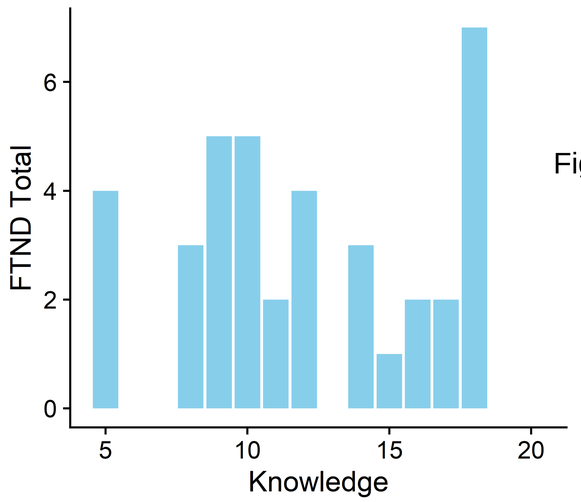
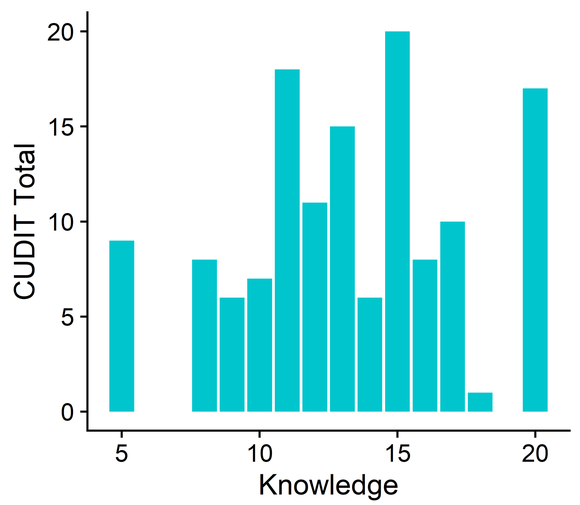


Figure 2: Scores on knowledge as a function of tobacco symptom severity.

Figure 3: Scores on knowledge as a function of cannabis symptom severity.



PRELIMINARY RESULTS

- 40.7% vape nicotine only, 25.4% vape cannabis only, and 33.9% vape both nicotine and cannabis.
- Contrary to hypothesis 1, lower levels of vaping knowledge did not significantly predict increased frequency of e-cig use in both nicotine, $F(1) = 0.15$, $p = .698$, and cannabis users, $F(1) = 0.14$, $p = .711$.
- Contrary to hypothesis 2, lower levels of vaping knowledge did not significant predict greater symptom severity of tobacco, $F(1) = 2.55$, $p = .120$, or cannabis use disorder, $F(1) = 3.77$, $p = .544$.
- Data collection is ongoing and has expanded to include a community young adult sample.

CONCLUSION

- The preliminary results provide the first empirical data on cognitive factors about vaping in young adults.
- Cognitive risk factors are predicted to facilitate increased vaping behavior given that inaccurate beliefs about the harms of vaping may act as permissive information for continued use by rationalizing one's own cannabis/nicotine use habits as safe or beneficial.

Further Information: karen.tang@dal.ca