



UC San Diego

Herbert Wertheim School of Public Health and Human Longevity Science

Personality Traits and Perceived Substance Use Among Undergraduate College Students

Valerie Ov, Amber Li, Melody Mao, Toan Bui

Herbert Wertheim School of Public Health and Human Longevity Science, UC San Diego

Background

Substance use of alcohol, marijuana, and Adderall results in increased risk of injury, cognitive defects, and a decrease in academic performance among college students.^{1,2,3}

- ❖ 50% of college students reported drinking in the last month, with 27% reporting binge drinking.⁴
- ❖ Marijuana use prevalence is higher among college students aged 18–21 years than non-college aged students aged 18–21 years.⁵
- ❖ Adderall is used non-medically by almost one-third of college students.⁶

Personality traits aligned with extraversion have been associated with increased use of alcohol and marijuana.⁷ Limited research has been done to investigate associations between Myers-Briggs Type Indicator personality traits and substance use.

Objectives

To determine the association between personality traits and perceived substance use of marijuana, alcohol, and Adderall among undergraduate college students across California.

Methods

- ❖ **Cross-sectional survey** across California universities
 - Online survey using Qualtrics software distributed to undergraduate college students through email and social media
- ❖ **Inclusion Criteria:** Undergraduate college students and English readers (N = 78)
- ❖ **Demographics:** Age, gender identity, and college year
- ❖ **Exposure:** Myers-Brigg Type Indicator (MBTI)
 - Extravert (E) / Introvert (I)
 - Sensing (S) / Intuition (N)
 - Thinking (T) / Feeling (F)
 - Judging (J) / Perceiving (P)
 - Assertive (A) / Turbulent (T)
- ❖ **Outcome:** Substance Use
 - How often do you think college students consume:
 - **Alcohol?** Never/Rarely/Monthly/Weekly/Daily
 - **Adderall?** Never/Rarely/Monthly/Weekly/Daily
 - **Marijuana?** Never/Rarely/Monthly/Weekly/Daily
- ❖ **Analysis:** Fischer's exact chi-square test and descriptive statistics

Results

Table 1. Participant Demographics (N = 78)

Gender Identity	
Female	55 (71%)
Male	20 (26%)
Non-binary/third gender	3 (4%)
Age	
17 – 20 years old	20 (26%)
21+ years old	58 (74%)
Year in College	
1st – 2nd Year	10 (13%)
3rd – 5th Year	68 (87%)

Figure 1. Introversion vs. Extroversion

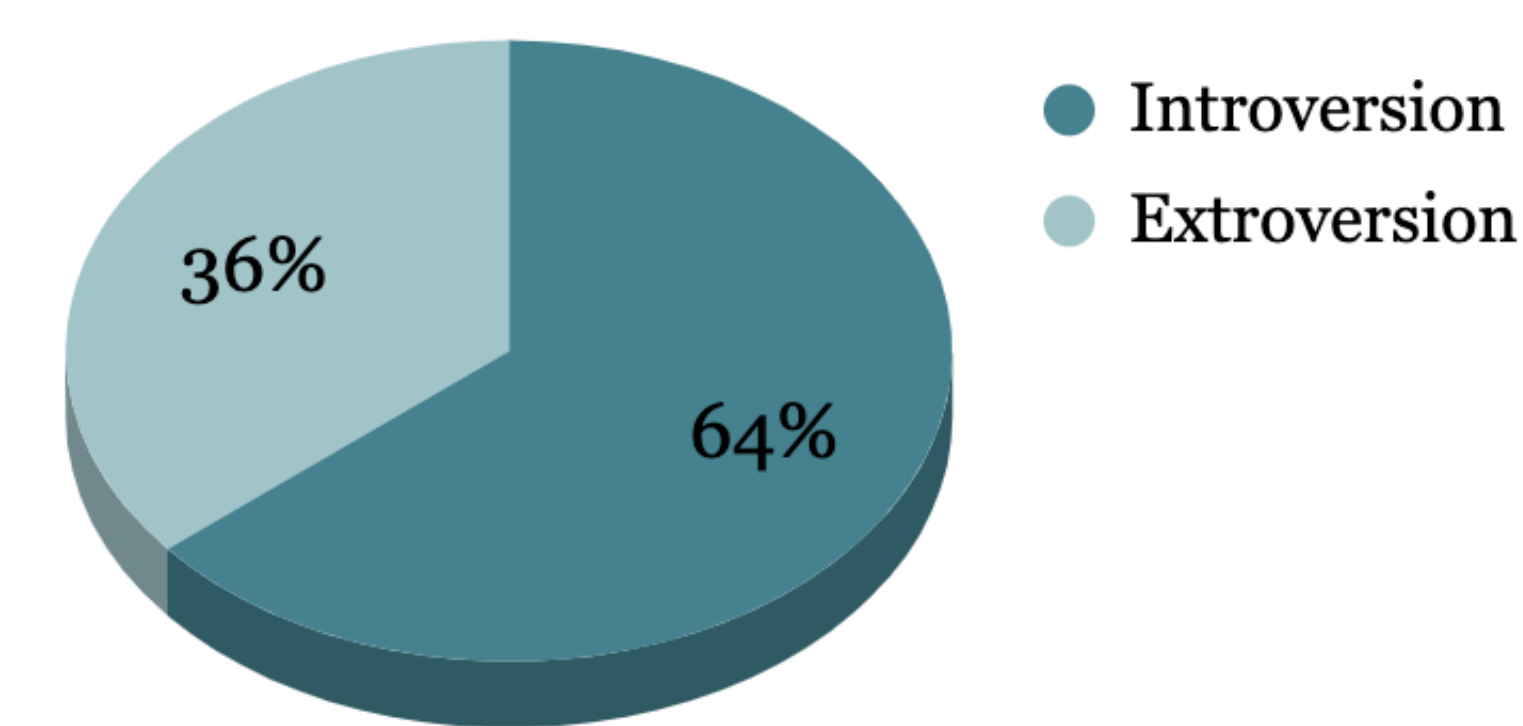
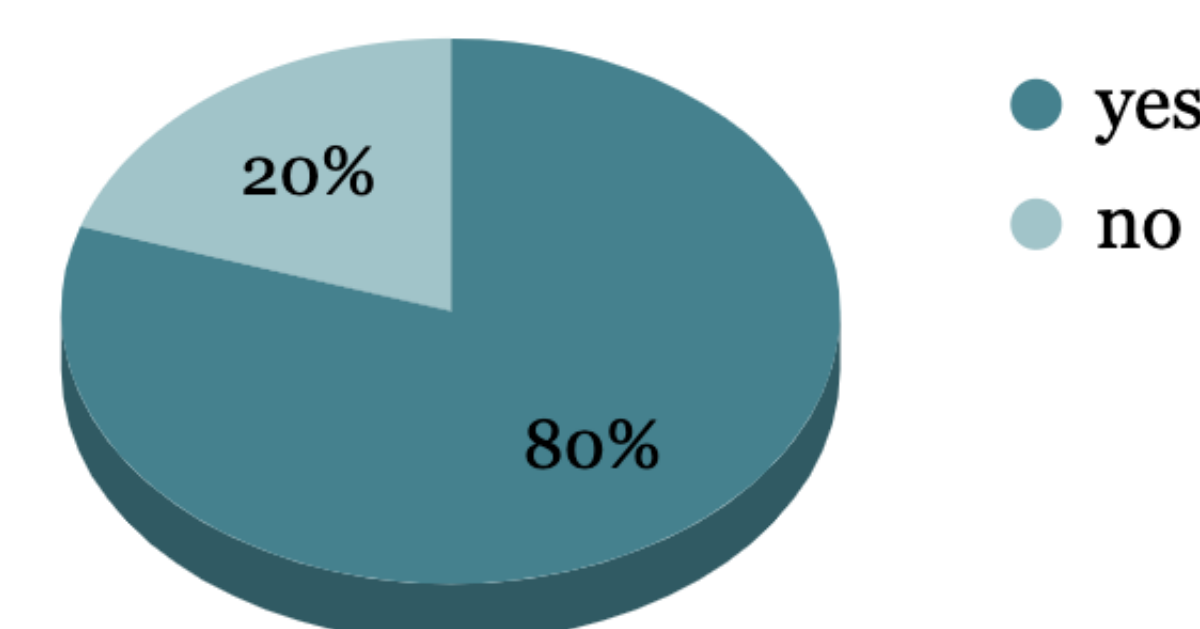


Figure 2. Consumption of Substances (Alcohol, Marijuana, Adderall)



Note. Consumption of substances was coded as "yes" if participants perceived substance use to be monthly, weekly, daily, or almost daily.

MBTI Prone to Substance Consumption

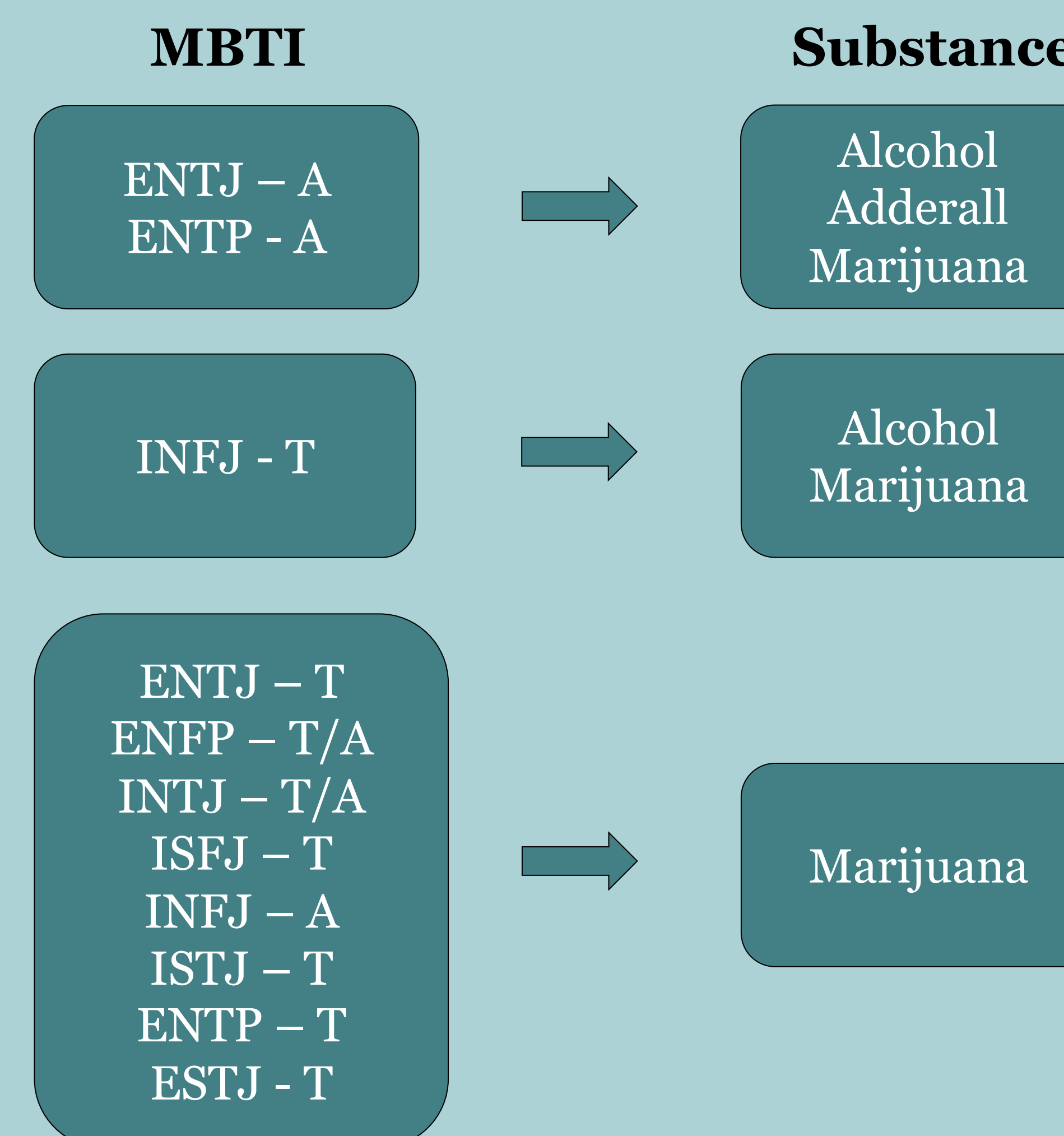
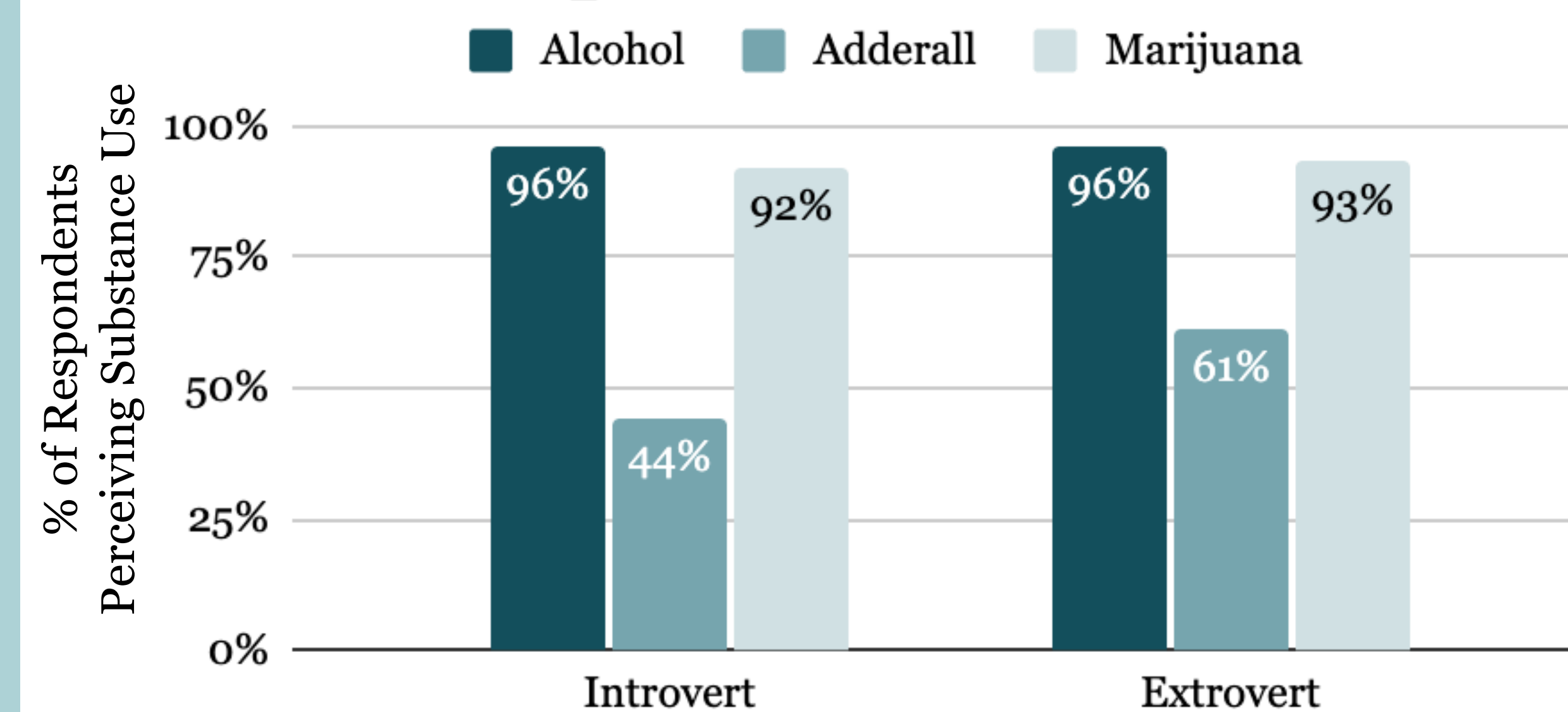


Figure 3. Introvert vs. Extrovert Perception of Substance Use



No association was found between extroverts and introverts and perceived consumption of substances among undergraduate college students ($p > 0.05$).

Conclusion

While no association was found between MBTI personality type and perception of substance use, the majority of respondents reported high perceptions of alcohol and marijuana use.

Policy Implications

Our research aims to support the development of recommendations for university programs to potentially reduce substance use rates among undergraduate college students. Such programs may include workshops and seminars that educate students on the health effects of substance use and provide counseling on how to succeed without the use of substances.

Acknowledgements

We would like to thank all study staff and participants.

This research was supported in part by the Herbert Wertheim School of Public Health and Human Longevity Science at UC San Diego. The contents are solely the work of the authors and do not represent the official views of UC San Diego.

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