

Age and Sex Differences in Abnormal Blood Pressure among Cannabis and Psilocybin Co-Consumers in the Herbal Heart Study

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BACKGROUND

- Cannabis and classic psychedelic use, especially psilocybin, is gaining traction among the younger population.
- Evidence shows an increase in high blood pressure (BP) prevalence among young adults.
- The individual impact of cannabis and psilocybin consumption combined on abnormal BP is understudied.

OBJECTIVE

- To examine differences in abnormal BP status among cannabis-only, (cannabis+psilocybin) consumers, and non-consumers in South Florida by age group and sex.

METHODS

- Sample (N=189) are 18-to-35-year-old participants of the Herbal Heart Study in South Florida with complete psilocybin, cannabis, and BP data.
- Psilocybin and cannabis consumption were self-reported based on lifetime use and past 30-days, via the Drug Use History Questionnaire.
- BP was taken three times following American Heart Association standardized guidelines; abnormal BP was defined as: $\geq 130\text{mmHg}$ systolic or $\geq 85\text{mmHg}$ diastolic.
- Descriptive statistics and Chi-squared tests were calculated by consumption group. Logistic regression adjusted by age and sex were used to test associations between cannabis, psilocybin use, and abnormal BP

RESULTS

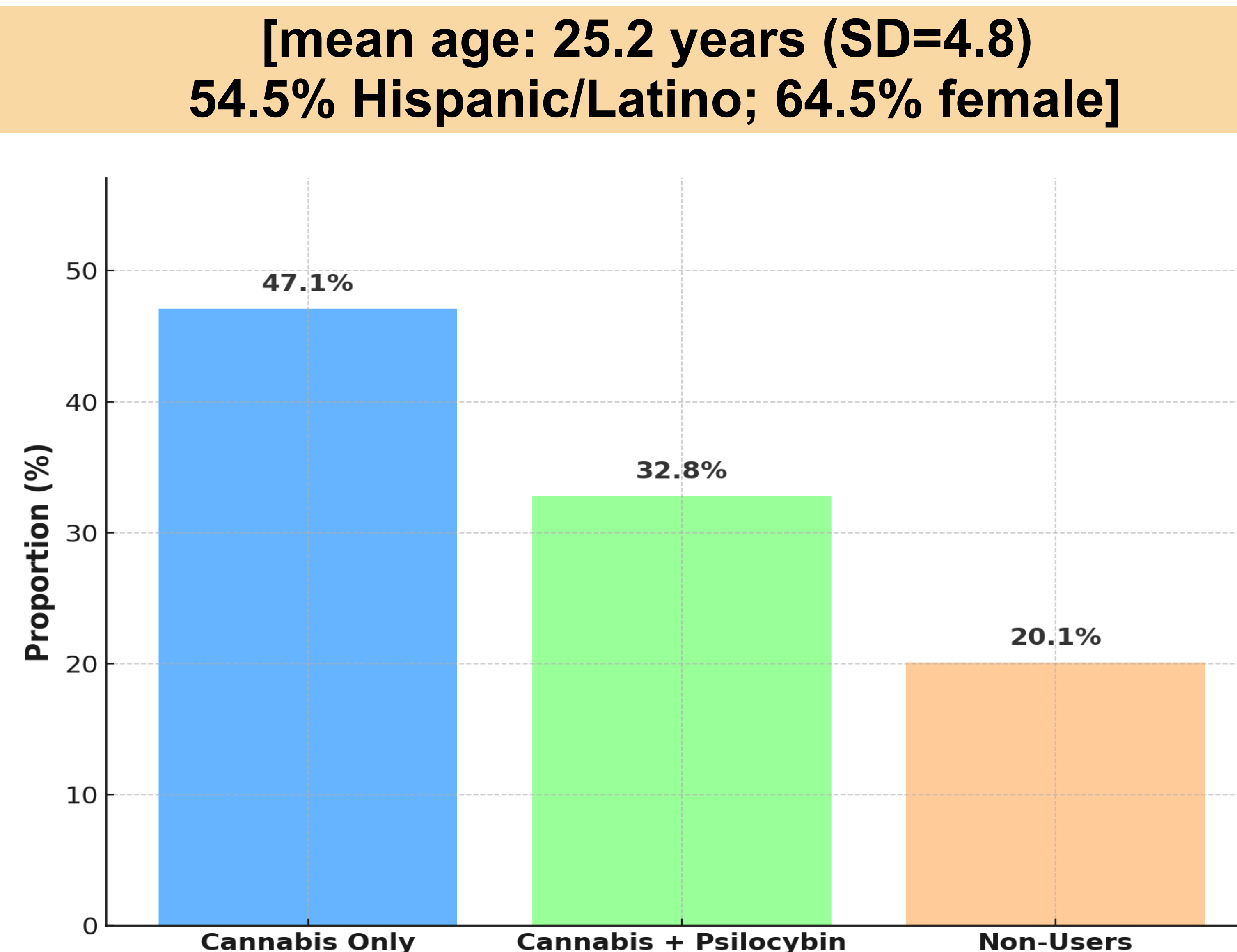


Figure 1. Distribution of Cannabis and Psilocybin Use Among Herbal Heart Study Participants

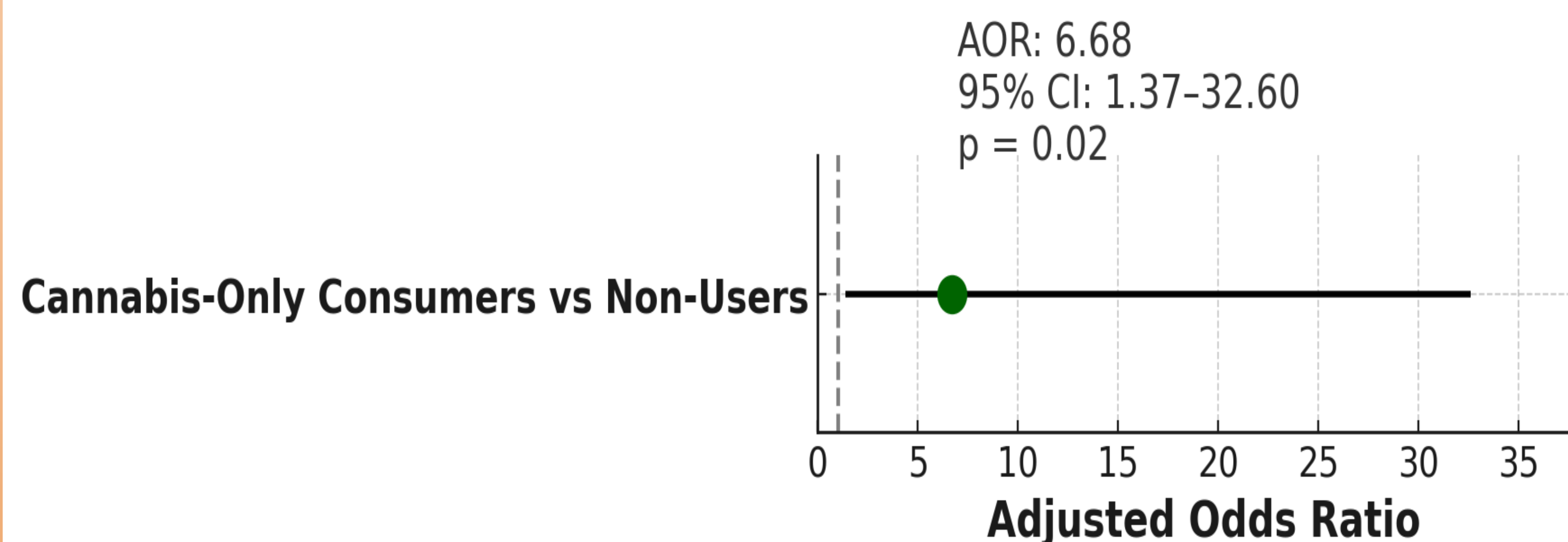


Figure 2. Association Between Cannabis-Only Use and Abnormal Blood Pressure, Adjusted for Age and Sex

KEY FINDINGS

- Among participants, 47.1% were cannabis-only users, 32.8% used both cannabis and psilocybin, and 20.1% were non-users.
- The patterns of substance use varied notably by sex ($p=0.0139$): males showed to use more cannabis plus psilocybin versus females showed more of being cannabis-only users.
- Psilocybin and Cannabis was more common in the 27+ age group (40.35) versus the age group of 18-26 (29.1%).
- Participants who only were cannabis-only (53.9%) or cannabis plus psilocybin consumers (41.0%), demonstrated to have more abnormal blood pressure versus non-consumers (5.3%).
- Cannabis-only consumers had significant greater odds of abnormal blood pressure compared to non-suers (AOR= 6.68, 95% CI: 1.37-32.6, $p= 0.02$)

CONCLUSION

- Cannabis-only consumers had more than six-fold greater odds of having an abnormal blood pressure compared to non-consumers of cannabis or psilocybin.
- The findings reveal a significant association between cannabis use and elevated blood pressure, underscoring the need for further research to determine causality and elucidate underlying mechanisms

ACKNOWLEDGMENTS

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