



Brewing Awareness: Perception vs Actual Caffeine Consumption Amongst Undergraduate UCSD Students

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Background

- College students are more likely to consume more caffeine due to academic stress and lack of awareness.
- Excess daily caffeine intake:
 - Definition: Unsafe or excessive caffeine consumption over a long period
 - Consequences: Linked to insomnia, headaches, and gastrointestinal issues

Objectives

- To determine if a correlation exists between perceived daily recommended caffeine intake limit and daily caffeine intake in undergraduate students.

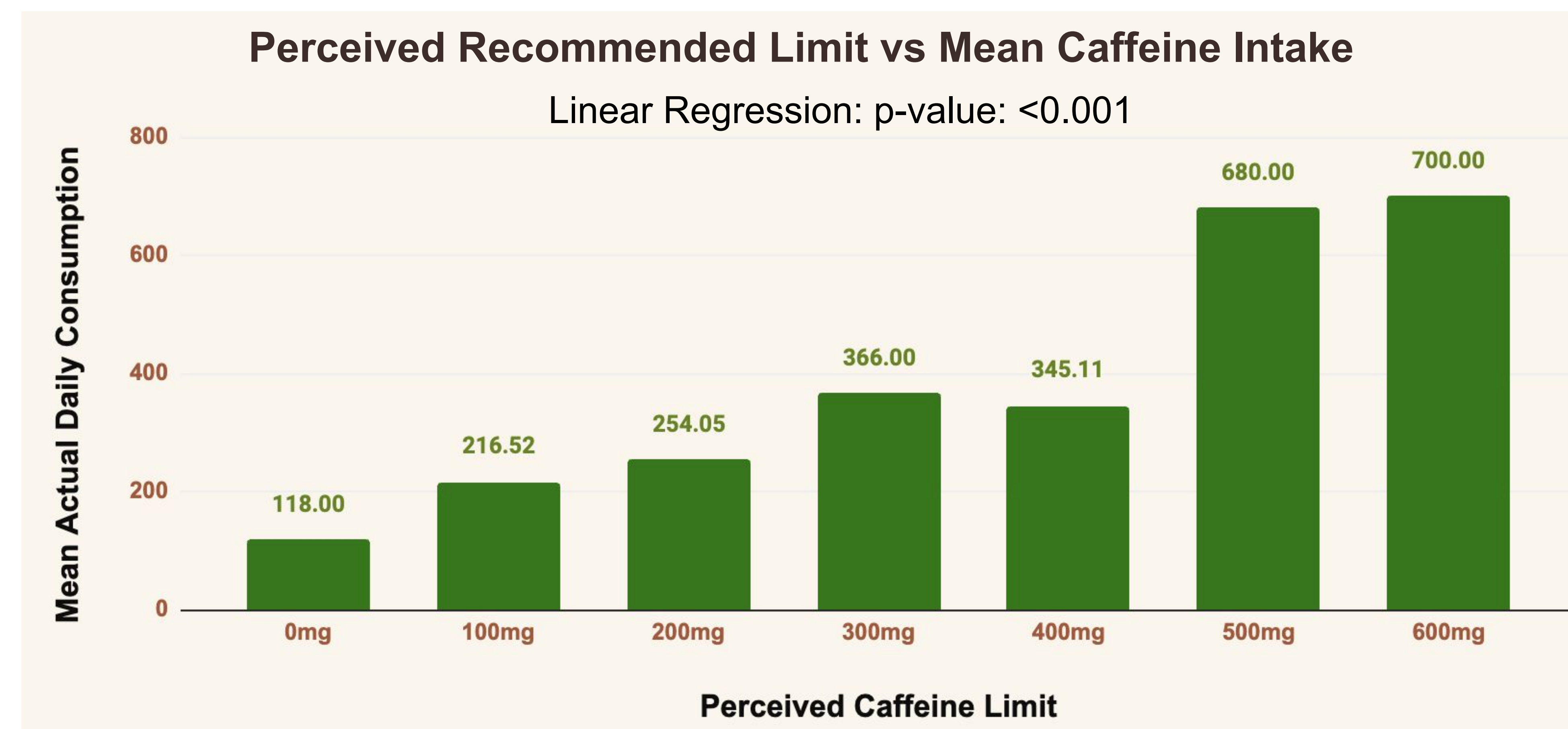
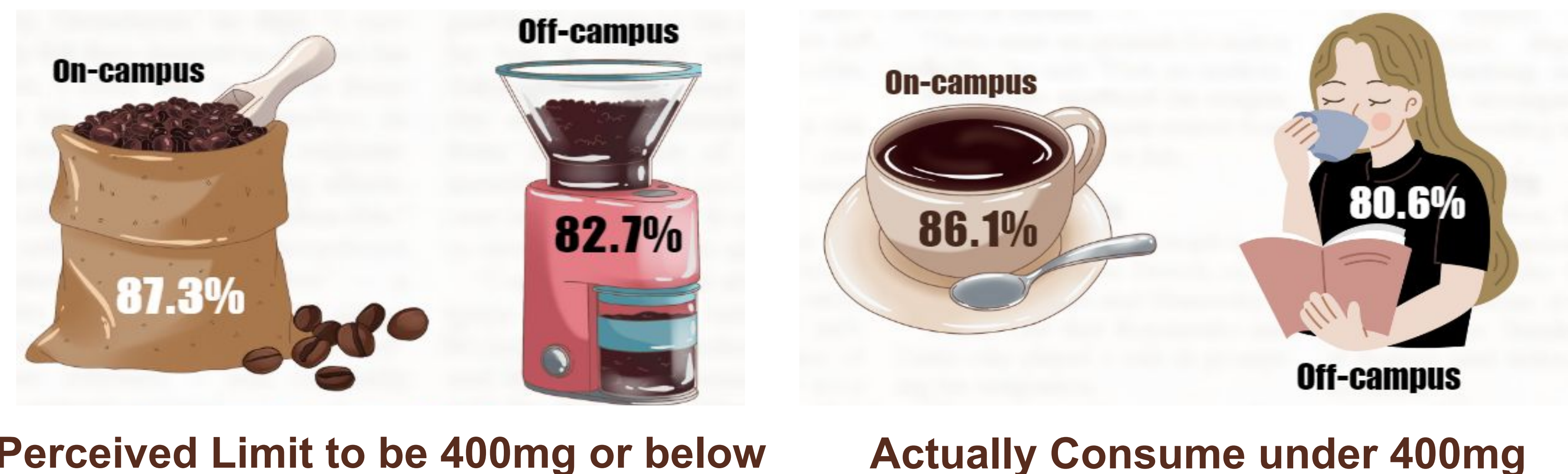
Methods

- Exposure:** Participants selected their perceived daily caffeine limit from these options: 0mg, 100mg, 200mg, 300mg, 400mg, 500mg, 600mg, 600mg+.
- Outcome:** Daily caffeine consumption was calculated based on the type and frequency of caffeinated drinks reported by participants.
- Data Collection:** The Google Form questionnaire was distributed via social media and local posters to UCSD undergraduates from April to May 2024.
- Data Analysis:** Data were analyzed using Excel and SPSS software.

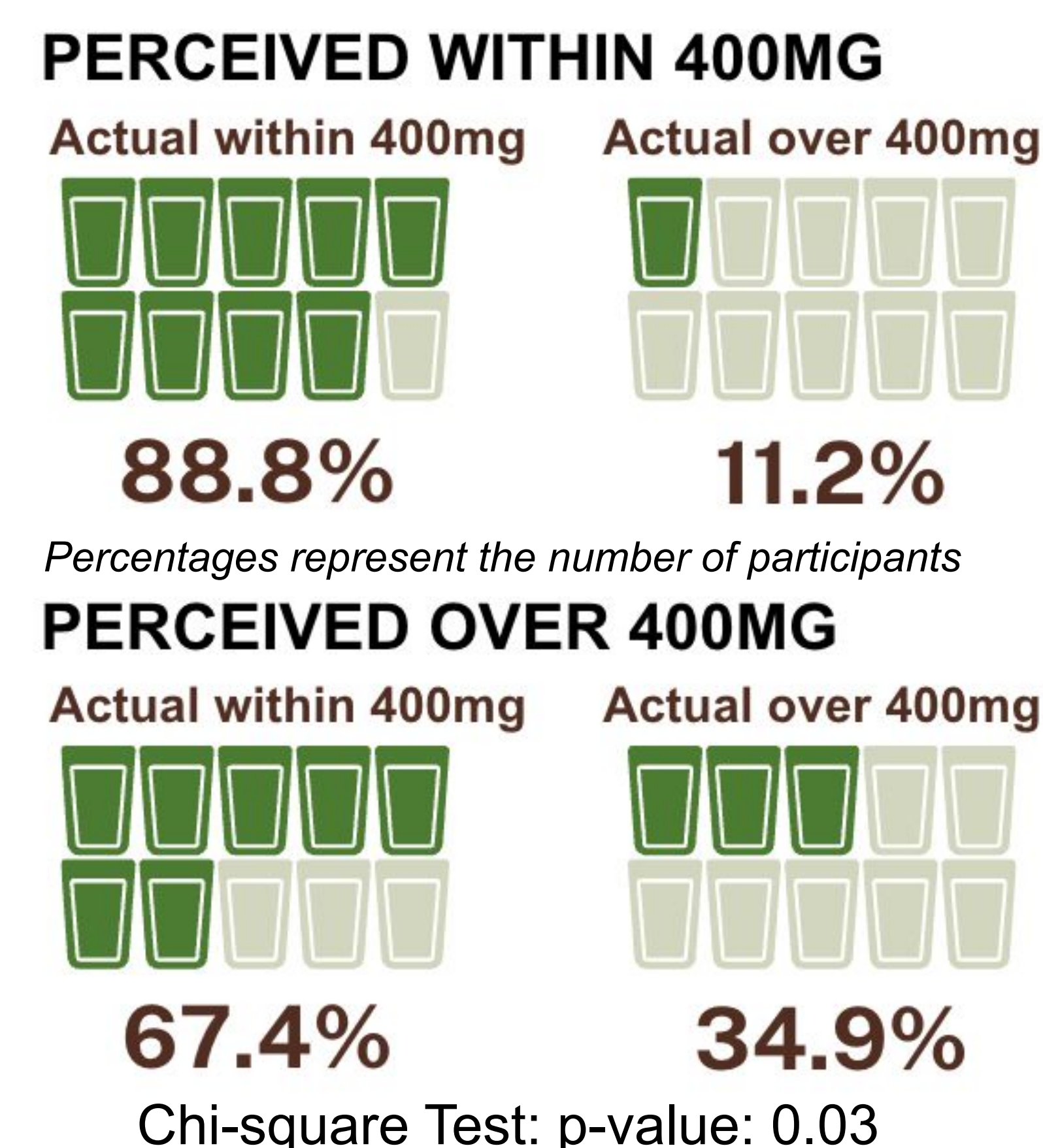
Results

170 people included in the final analysis | 74.6% are females | Median Age Group: 20-21 years old

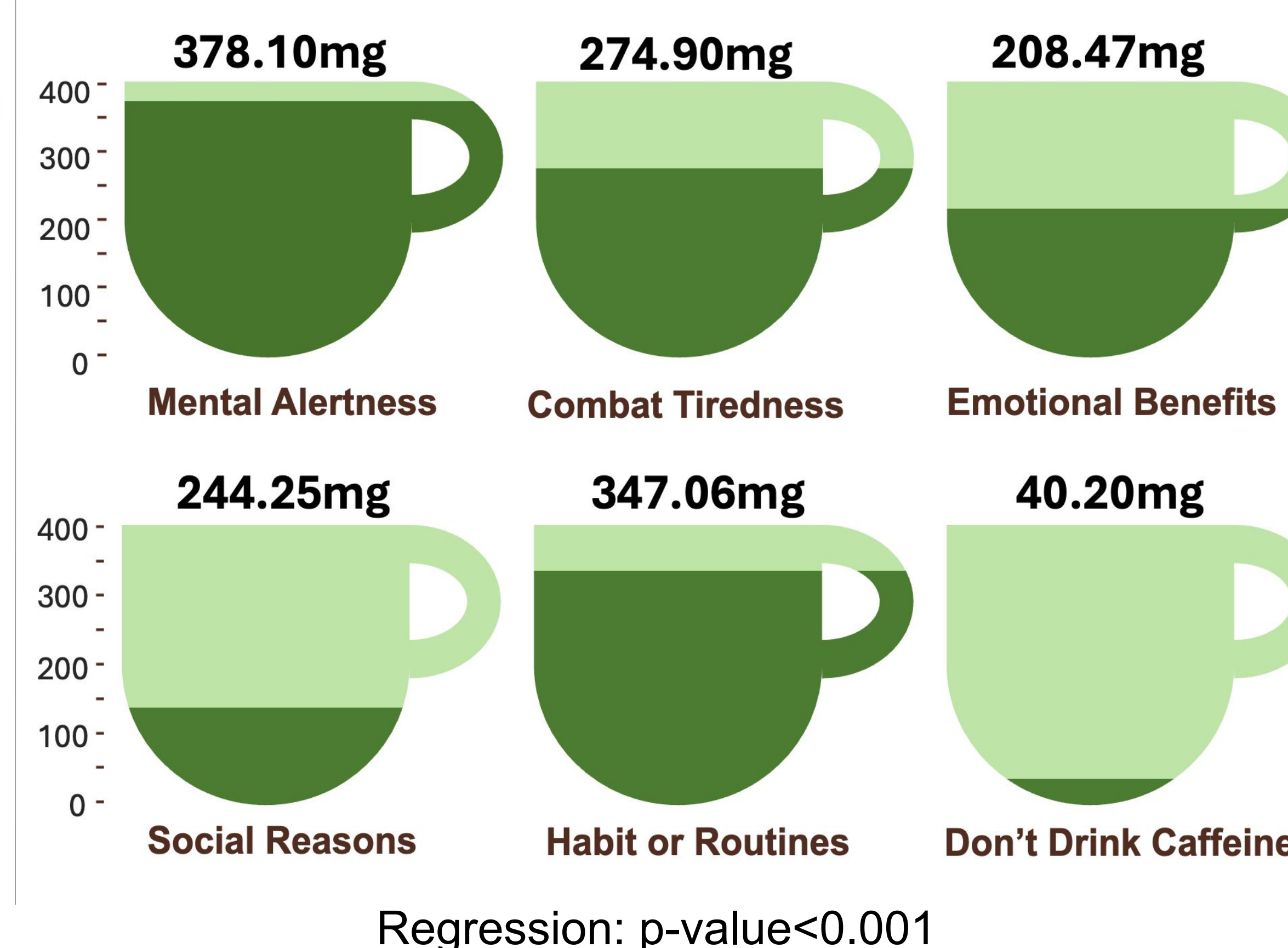
FDA Recommended Daily Caffeine Intake Limit = 400mg



Perceived vs Actual Daily Intake



Primary Motivation vs Mean Caffeine Intake



Conclusions

- Undergraduate students generally stay within daily caffeine consumption limits.
 - Higher perceived recommended daily caffeine intake limit was **significantly** associated with higher caffeine consumption
 - Daily caffeine intake **differed significantly** based on motivations for caffeine intake
 - No significant** difference in the mean daily caffeine consumption between on-campus and off-campus students

Policy Implications

- Implement **educational programs to increase awareness** of safe consumption levels and the potential risks of excessive caffeine intake
- Establish policies regarding the **availability and marketing** of caffeinated beverages **on campuses**.
- Consider limiting the sale of high-caffeine products on campus to **reduce accessibility**.

Acknowledgements

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References

- Bradley, J. R., & Petree, A. (1990). Caffeine consumption, expectancies of caffeine-enhanced performance, and caffeineism symptoms among university students. *Journal of Drug Education*, 20(4), 319-328. <https://doi.org/10.2190/r64x-uemw-he3y-uuna>
- FDA. (2018, December 12). Spilling the beans: How much caffeine is too much? U.S. Food and Drug Administration. <https://www.fda.gov/consumers/consumer-updates/spilling-beans-how-much-caffeine-too-much>
- Bertasi, R. A. O., Humeda, Y., Bertasi, T. G. O., Zins, Z., Kimsey, J., & Pujalte, G. (2021). Caffeine intake and mental health in college students. *Cureus*, 13(4). <https://doi.org/10.7759/cureus.14313>