

Relationship Between Binge Drinking and Perceived Stress Levels Among College Students



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Introduction

Stress & Mental Health

- In 2020, the American Psychological Association (APA) identified a national mental health crisis in the United States (US) that could lead to serious social and health consequences for many years to come.¹
- Young adults ages 18-25 account for 30.6% of the 52.2 million adults in the United States who live with any mental illness (AMI).²

Alcohol-Use

- Misuse of alcohol is associated with many health concerns such as an increased risk of liver disease, many types of cancers, cardiovascular disease, injuries and alcohol use disorder.³
- Young adults who are under high amounts of stress use alcohol to enhance social connections as well as to reduce internal negative thoughts.⁴
- Alcohol can be overlooked as a serious determinant of one's health, especially for young adults entering an environment where a high consumption of alcohol is normalized.

Study Objective

To examine the relationship between levels of binge drinking and perceived stress among college students

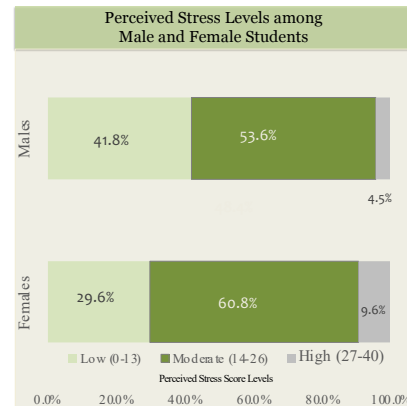
Methods

- Data were collected through the College Health and Nutrition Assessment survey (CHANAS), an ongoing cross-sectional study at a public, northeastern university, between 2012-21. (UNH IRB #5524)
- Participants self-reported their number of binge-drinking episodes in the past 30 days via online survey (Qualtrics). Binge drinking was determined by # drinks per occasion (≥ 5 drinks for men; ≥ 4 drinks for women).
- Participants' stress level (0-40) was assessed using the Cohens Perceived Stress Scale 10-item questionnaire (PSS).⁵
- Differences in PSS in relation to binge drinking status were evaluated via ANCOVA, with BMI, Pell-grant status, age, and smoking status serving as covariates. Associations between alcohol consumption patterns and stress levels were explored using a chi-square test.

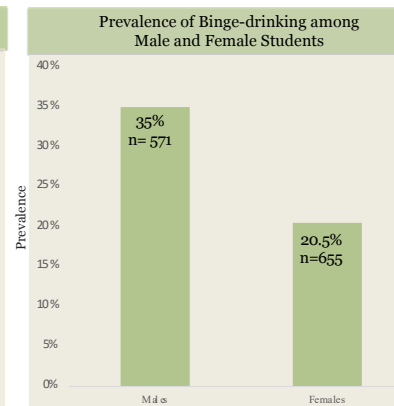
Study Population Demographics & Characteristics

	Males Mean \pm SD or n(%)	Females Mean \pm SD or n(%)
Age (y)	19.2 \pm 1.3	18.7 \pm 1.0
BMI kg/m ²	24.3 \pm 3.8	22.9 \pm 3.5
Sex (n,%)	1,585 (33.2%)	3,189 (66.7%)
Pell grant status (n,%)	718 (24.4%)	308 (27.9%)*
Smoking status (n, %)	148 (8.9%)	110 (3.4%)*
Perceived Stress Score	15 \pm 6.5	17.5 \pm 6.4 *

Table 1: All descriptives and analyses are stratified by sex. $p < .05$ vs males

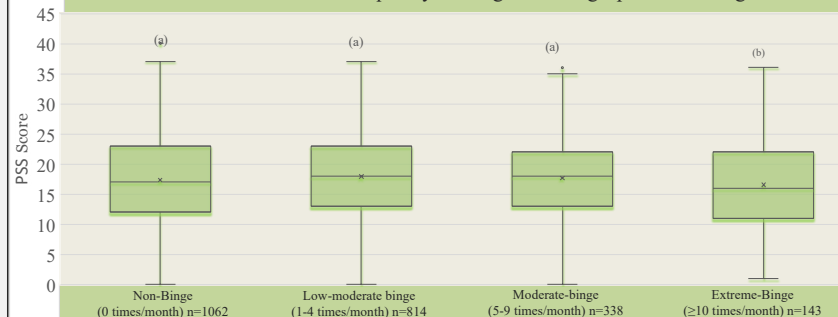


Females showed higher levels of moderate and high stress scores compared to males. In the final sample (n=4774), mean perceived stress score was higher among women than men (17.6 \pm 6.4 vs. 15 \pm 6.5, $p < .001$).



Higher rates of binge drinking (≥ 5 times/month) were seen in men vs. women (35 vs. 20.5%, $p < .001$).

Perceived Stress Levels and Frequency of Binge-Drinking Episodes among Females



In women the mean PSS significantly differed in the EB group compared to the rest of the groups (NB, MD= -1.372, $P=.027$), (LMB, MD=-1.843, $P=.003$), (MB, MD= -1.608, $P=.020$) but not men ($P=.29$).

Key Findings

- In the final sample (n=4774), perceived stress was higher among women than men (17.6 \pm 6.4 vs. 15 \pm 6.5, $p < .001$).
- Higher rates of binge drinking (≥ 5 times/month) were seen in men vs. women (35 vs. 20.4%, $p < .001$).
- In women the mean PSS significantly differed in the EB group compared to the rest of the groups (NB, MD= -1.372, $P=.027$), (LMB, MD=-1.84, $P=.003$), (MB, MD= -1.608, $P=0.020$) but not men ($P=.29$).

Conclusions

Perceived stress levels were found to be higher in women than men, while men had a higher rate of binge drinking episodes.

Future Implications

This study emphasizes the need to fill the knowledge gap of the mental and physical health effects regarding alcohol among the young adult population.

Acknowledgments and References

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