Sleep Interrupted: Alcohol's Hidden Role in Rest Quality

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Background

- Sleep is essential for physical and mental health.
- Sleep quality can be affected by **substances, habits, and environment.**
- Around **60%** of young adults report moderate to severe sleep deprivation.
- **80%** of U.S. college students consume alcohol; **40%** engage in binge drinking (4-5+ drinks per event).
- Alcohol disrupts circadian rhythms, affecting sleep patterns.

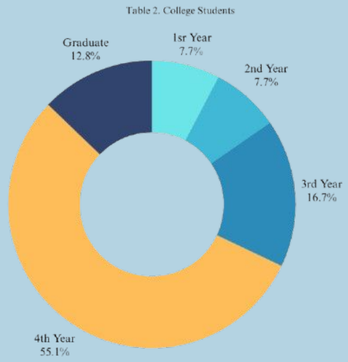
Objectives

- Investigate how alcohol consumption affects **sleep quality and patterns** in young adults.
- Assess the impact of alcohol-related sleep disturbances on **productivity**.
- Address gaps in research on alcohol's effects on sleep.
- Explore **health disparities** among young adults with high alcohol intake.

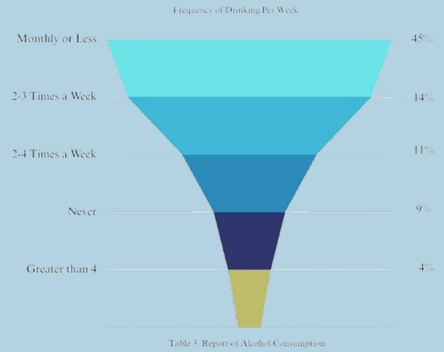
Methods

- **Participants**: N=147 (ages 18–24).
- **Survey format:** Online Qualtrics survey.
- **Sleep measures:** Self-reported sleep duration, nighttime awakenings, and restfulness.
- **Alcohol consumption:** Frequency, binge drinking patterns, and occasional use.
- **Demographics collected:** Age, gender, employment status, education level.
- **Survey distribution:** Personal networks and Reddit forums.
- **Statistical Analysis:** Pearson Chi-Squared

Results



Age	N (%)
18	5 (4%)
19	6 (4%)
20	15 (11%)
21	39 (28%)
22	34 (24%)
23	27 (19%)
24	14 (10%)
Gender	**N (%)**
Male	45 (32%)
Female	92 (65%)
Non-binary	2 (1%)
Non-disclosed	2 (1%)
Employment	**N (%)**
Yes	72 (53%)
No	65 (47%)

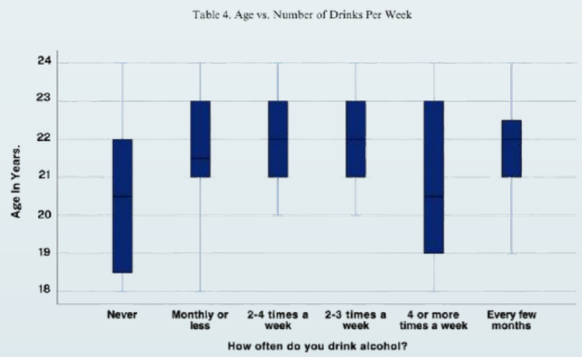


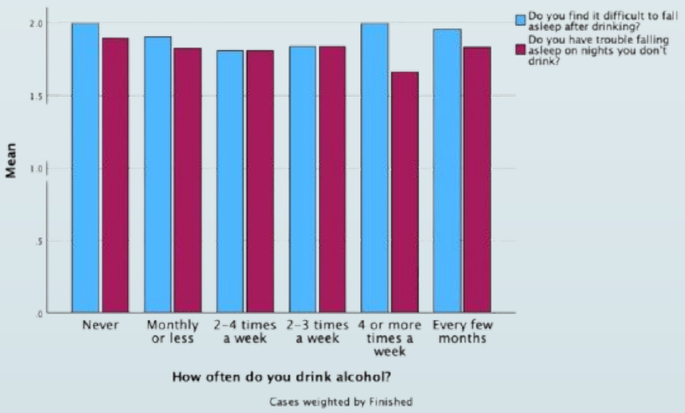
Primary Outcome (Sleep Duration): A Pearson Chi-Square Test showed *no significant relationship* between drinking frequency and sleep duration, with a Chi value of 3.312 and a P-value of 0.973, leading to the rejection of the null hypothesis.

Secondary Outcome (Productivity): A Spearman test showed no significant relationship between alcohol consumption and productivity, with a Chi value of 37.00 and a P-value of 0.11, indicating no impact on productivity.

Exploratory Outcome (Tiredness/Foggy Feeling): 34% of respondents agreed that alcohol consumption made them feel tired or "foggy" the next day, while 28% were neutral. A small percentage (21%) reported a slight impact on productivity the next day.

Hangover Impact: Only 5% of respondents reported always feeling a hangover the next day, while the majority did not feel any hangover effects.





Conclusion

- No significant relationship was found
- Evidence suggests that binge drinking may cause hangovers, which can indirectly affect productivity the following day.
- These findings may be influenced by the demographic characteristics of the participants, who are predominantly young adults with a natural capacity for rapid recovery and resilience.

Policy Implications

- Include **sleep education** in public health initiatives
- University programs should promote **responsible drinking** and **sleep hygiene**
- Encourage **interventions** targeting at-risk individuals

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