

“Binge Drinking in Selected States”

Read the following article regarding the study on binge drinking.

[Perspectives in Disease Prevention and Health Promotion Drinking and Driving and Binge Drinking in Selected States, 1982 and 1985](#)—The Behavioral Risk Factor Surveys. *Morbidity and Mortality Weekly Report*. January 2, 1987. 35(51-52):788-91

Case Summary

During the period 1981-1983, behavioral risk factor surveys were conducted in 28 states and the District of Columbia (1). The surveys were designed to gather data on the prevalence of specific behavioral risk factors in the adult population (18 years of age) in each state. Since 1984, several states have been collecting risk factor data on a monthly basis as part of the Behavioral Risk Factor Surveillance System. The following analysis was based on the 12 states ("states" includes the District of Columbia) that collected data on drinking and driving and/or binge drinking for 1982 and 1985.

For the purposes of this analysis, the prevalences of drinking and driving and of binge drinking were based on the percentage of persons selecting the answer "One or more times" when asked the following questions:

- For drinking and driving: "During the past month, how many times have you driven when you've had perhaps too much to drink?"
- For binge drinking: "Considering all types of alcoholic beverages, that is beer, wine, liquor, as drinks, how many times during the past month did you have five or more drinks on an occasion?"

Ten of the 12 states that gathered data on binge drinking in 1982 and 1985 also gathered data on drinking and driving. Table 2 shows the prevalence of drinking and driving, by age and sex, in 1982 and 1985 for these 10 states. Table 3 shows the prevalence of binge drinking by age and sex in 1982 and 1985 for all 12 states. The Wilcoxon Signed Rank Test for paired measurements* (2) was used to evaluate observed changes in the prevalence of drinking and driving and binge drinking in this group of states.

All states reporting drinking and driving data showed a decrease in that behavior among males 35 to 54 years of age between 1982 and 1985 (decrease = 10/10). However, the decrease was not consistent among either males 18 to 34 years of age (5/10) or males greater than or equal to 55 years of age (5/10). For both years, women had lower prevalences than men, but the proportion of states showing a decrease in drinking and driving among women was not statistically significant for any of the three age groups.

Between 1982 and 1985, a significant proportion ($p = .05$) of the 12 states reporting binge drinking data showed a decrease in the prevalence of binge drinking among men 18 to 34 years of age (10/12) and men 35 to 54 years of age (10/12). A majority of states showed a decrease in binge drinking among men greater than or equal to 55 years of age (8/12), but this change was not statistically significant. A majority of states also showed a decrease in binge drinking for women in each age group, but this decrease was statistically significant ($p = .01$) only among women 18 to 34 years of age.

Questions

1. Do you think that the binge drinking rates reported in this study are similar to other college-aged young adults? Explain your answer. (5 points)
2. What type of study is this? (2 points)
3. Calculate percent decrease from 1997 to 1999 (not just the difference between the numbers) in the proportion of students who drink to get drunk based on national data UNL data. Round to the nearest whole percent. Please show your work. (6 points)

Year	National Data	UNL Data
1997	52.4%	64.7%
1999	47.2%	48.2%

4. What do the data in this study mean? (9 points)

Answer Key: “Binge Drinking in Selected States”

1. Do you think that the binge drinking rates reported in this study are similar to other college-aged young adults? Explain your answer. (5 points)

Suggested Answer

No. The entire young adult population does not attend college. The comparable data to young adults in the working population may be different than college students.

One point would be generalizability. College students may have different demographics than the general young adult population. College students may be from more affluent families with greater disposable income. This may lead to a greater frequency of binge drinking. Answers may point out the difference between college students and other young adult populations (military recruits, high school dropouts, etc).

Another point may include the validity of self-reporting. Problem drinkers may answer intentionally underreport the amount and frequency of alcohol use.

2. What type of study is this? (2 points)

Suggested Answer

Cross-sectional

3. Calculate percent decrease from 1997 to 1999 (not just the difference between the numbers) in the proportion of students who drink to get drunk based on national data UNL data. Round to the nearest whole percent. Please show your work. (6 points)

Year	National Data	UNL Data
1997	52.4%	64.7%
1999	47.2%	48.2%

Suggested Answer

$$52.4 - 47.2 = 5.2$$

$$5.2 / 52.4 = 9.9\%$$

Answer = 10%

$$64.7 - 48.2 = 16.5$$

$$16.5 / 64.7 = 25.5\%$$

Answer = 26%

Answer Key: “Binge Drinking in Selected States”

4. What do the data in this study mean? (9 points)

Suggested Answer

These data indicate an overall decrease in risky drinking behaviors among college students. There has not been a large increase in college students abstaining from alcohol but the drinking student population has moderated their drinking habits, not as many students binge drinking or drinking to get drunk. Overall, the binge-drinking rate among UNL students is higher than college students nationally.