



Relationship Between Alcohol Consumption and Among Gender and Age Groups

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Introduction

Consumption of alcohol is a social behavior, but when consumption is excessive it is no longer a casual, social behavior but is instead termed as alcoholism. It is associated with negative outcomes such as: driving suspensions, traffic accidents, social problems, marital problems, work problems, etc. Studies show drinking restraint (referring to when an individual consciously sets limits on consumption) can introduce negative effects and lead to increased drinking (Trim 2004). Trim’s study shows a relationship with alcohol consumption and the idea of drinking restraint among specific age groups, specifically college students is important to look at as it may be beneficial to future campaigns to help limit negative outcomes.

In addition to age affecting negative outcomes from excessive alcohol consumption, there is a relationship between gender and alcohol consumption; alcohol consumption is higher among males than females (Wilsnack 2009). This relationship is just as important as age as it can help narrow down target groups to address drinking restraint and alcohol consumption among specific age groups and genders.

By understanding the concept of drinking restraint and how that can lead to negative outcomes, it is important to understand the basic relationship between alcohol consumption among specific age groups and genders to grasp a general idea of how much the population is drinking and to then move forward with whether their alcohol consumption has increased as this can be an indicator for their dependence on alcohol.

The aims of this study are to examine the following:

- 1) Is there a relationship between alcohol consumption and alcohol dependence?
- 2) Is there a relationship between alcohol dependence and gender?
- 3) Is there a relationship between alcohol dependence and age?

Methods

The National Epidemiological Survey of Alcohol Repeated Condition Wave 1 (NESARC-1) data was collected from 2001-2002 from civilian, non-institutionalized adults in the United States via face-to-face interviews.

Bivariate analysis was conducted using independent t test to look at the difference between the mean of one’s heaviest drinking period among different genders. A second analysis was conducted using one-way ANOVA to examine if there was a difference in the ages among different types of consumers.

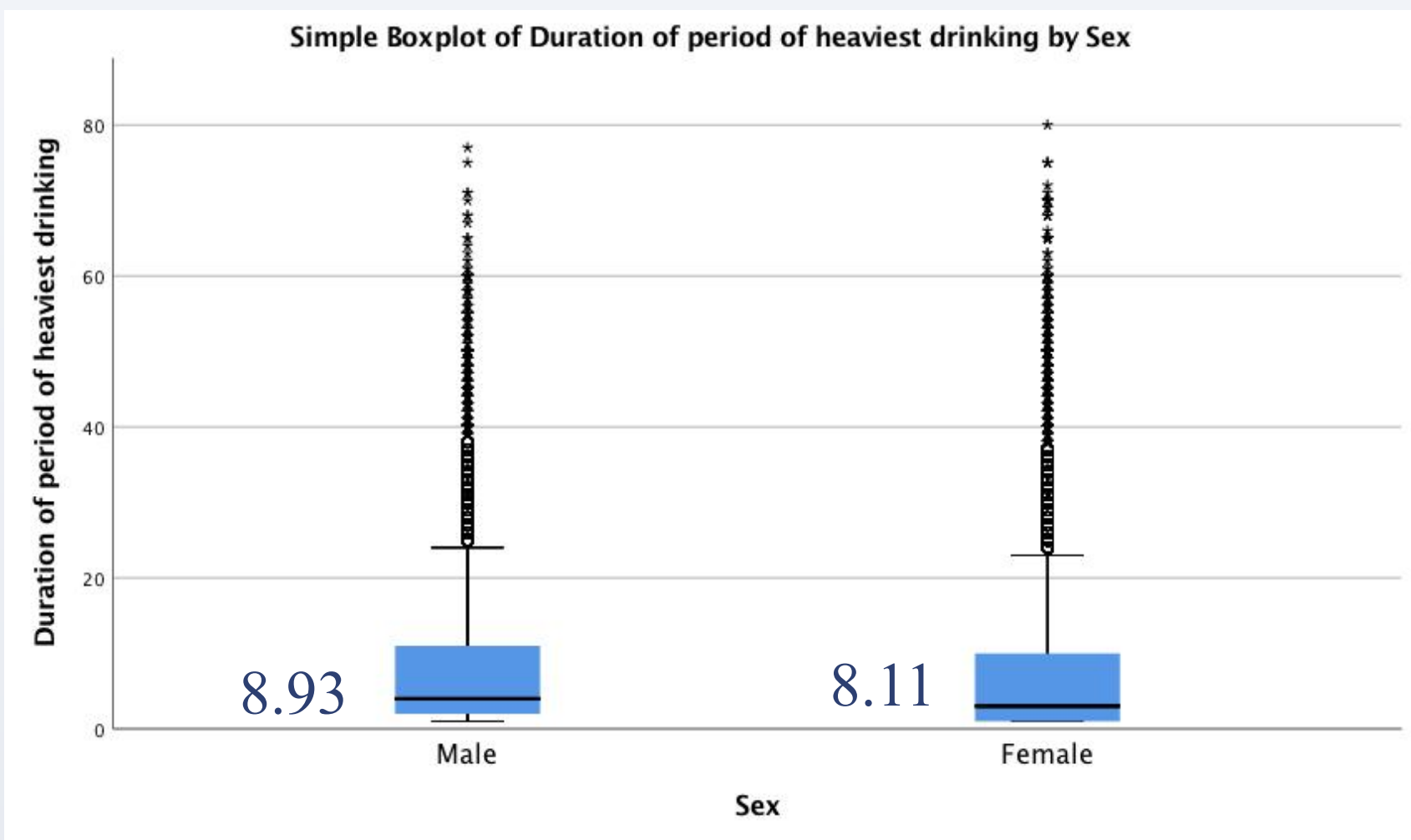
Multivariate model was conducted using logistic regression to investigate whether age, gender, increase in alcohol consumption to achieve desired effect, duration of heaviest drinking period, and education level predicted whether an individual consumed alcohol within the last 12 months.

| Table 1. Demographics | Sample Characteristics | N(%) |
|--|------------------------------|---------------|
| Alcohol consumption within the last 12 months | Yes | 26,946 (62.6) |
| | No | 16,116 (37.4) |
| Gender | Male | 18,518 (43) |
| | Female | 24,575 (57) |
| Type of consumer | Current drinker | 26,946 (62.5) |
| | Ex-drinker | 7,881 (18.3) |
| | Lifetime abstainer | 8,266 (19.2) |
| Education | No bachelor’s degree | 33,059 (76.7) |
| | At least a bachelor’s degree | 10,034 (23.3) |
| Increase in alcohol consumption because did not reach desired effect | Yes | 3,048 (8.8) |
| | No | 31,467 (91.2) |
| Age | | 46.40*, 44** |
| Duration of heaviest drinking period | | 8.49* 4** |

*Mean
**Median

Results

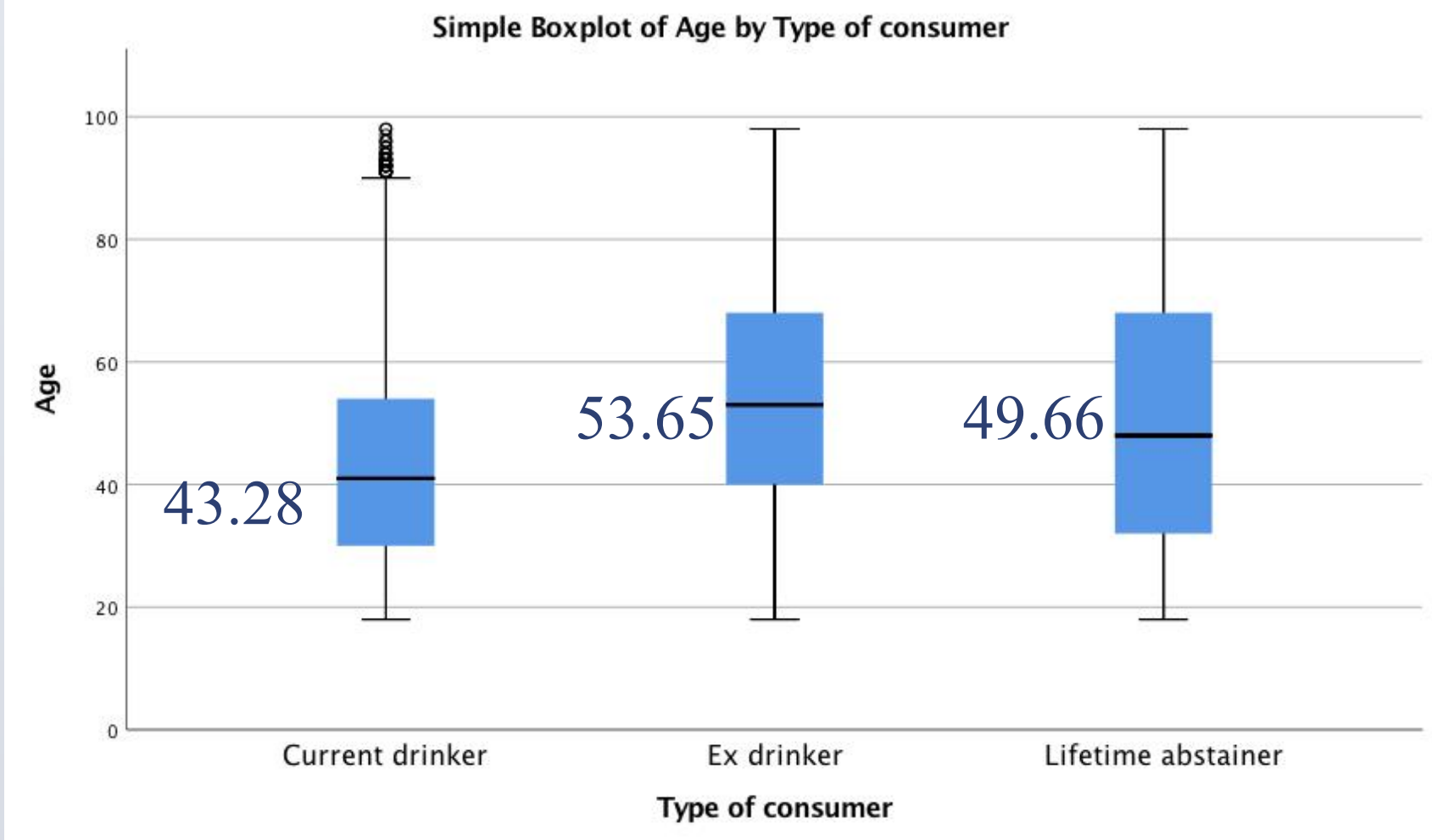
Figure 1. Bivariate analysis independent t-test



Independent t test conducted to examine difference in mean of heaviest drinking period among males and females

Males have a significantly longer duration of heaviest drinking period (8.93 years, 0.59-1.06) compared to females (p<0.001)

Figure 2. Bivariate analysis one-way ANOVA



One-way ANOVA conducted to examine differences in age among different types of alcohol consumers

The age of each type of consumer is significantly different than each other (p<0.001)

Discussion

After conducting bivariate analysis there was statistical significance found, indicating that males tend to have a longer and heavier drinking periods than females (8.93, 0.59-1.06). This longer duration of heavy drinking periods can translate into males consuming more alcohol than females. In the second bivariate analysis there was a significant difference in age among different types of consumers, with the mean age of current drinkers being 43.28.

Through logistic regression, analysis was explored further into more variables than just age and gender; after controlling for heaviest drinking period, education and whether an individual increased their alcohol consumption because the previous amount no longer gave the desired effect it was found that the odds of males consuming alcohol within the last 12 months was 1.32 (1.24 – 1.40) times higher than females. This finding was statistically significant (p < 0.001).

There is a definite relationship between alcohol consumption and age and gender, but the multivariate model introduces more interest as it indicates how many other variables can explain the outcome of alcohol consumption such as their education level, heaviest drinking period, and whether they had increased the amount of consumption because the previous amount no longer gave the desired effect can explain the outcome of alcohol consumption.

The results of the study agree with previous research results, the relationship has been well established in the literature, specifically only pertaining to men consuming more alcohol than women (Wilsnack 2009). The importance of this current research is to move forward in investigating more indicators of what can explain alcohol consumption and to then look further at alcohol consumption leading to negative outcomes and to then find ways to prevent that. Limitations of the study were that sample size of subset analysis group decreased greatly when creating the multivariate model, also family environment was not considered at all in the study which could explain even more in terms of alcohol consumption. Another final limitation is that the ages were not dichotomized into specific age groups rather looked at against type of consumer, which was not very informative in alcohol consumption among age groups but rather average age of an alcohol consumer.

Implications

Alcohol consumption among age groups, specifically college students, can be explored further and be seen as a potential indicator of health conditions in the future. Other researchers can further investigate whether there are moderators on the relationship between alcohol consumption among age and gender groups. Understanding that alcohol consumption is not only dependent on age and gender can allow further investigation for reasons why an individual drinks and whether specific situations can lead to excessive drinking and negative outcomes.

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