

Associations Among Ethnicity, Gender, Age, Age of First Drink, and Drinking Behavior Among High School Students

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Abstract

Moderation management theory was employed to assess whether gender, ethnicity, age, and age of first drink were associated with drinking among adolescents. The statistically significant model distinguished between adolescents who reported moderate versus binge drinking. Age of first drink made a statistically significant main-effect contribution to the model.

Problem

Research indicates that drinking is widespread among adolescents in many countries.

- 26 percent of American adolescents between the **ages of 12 to 20** reported drinking alcohol within the past month.
- Predominant focus relates to preventing or delaying alcohol use among teens, not education on how to drink for those that choose to drink

Although there is some research on the effectiveness of moderation management among adults who are non dependent problem drinkers, little or no research has been published on an exclusively adolescent population.

Purpose

The purpose of this quantitative study was to identify factors associated with the harm reduction method (minimizing adverse consequences of legal and illegal drugs) of moderate drinking among adolescents.

The results of this study will help guide intervention and drug prevention education programs to address the adolescent population that may be on a path to binge drinking behavior.

This predictive model can reduce the societal costs associated with harmful drinking behaviors among adolescents and, because alcohol is a known gateway drug, reduce the use of illicit drugs.

Relevant Literature

Traditional interventions for addressing alcohol and problem drinking among adolescents have taken the route of preventing alcohol consumption, rather than a **harm reduction approach**.

DARE is a popular abstinence-based program where children are taught about the consequences of alcohol. The main problem with DARE is its emphasis on abstinence, which may lead to experimentation and rebellion because alcohol is forbidden.

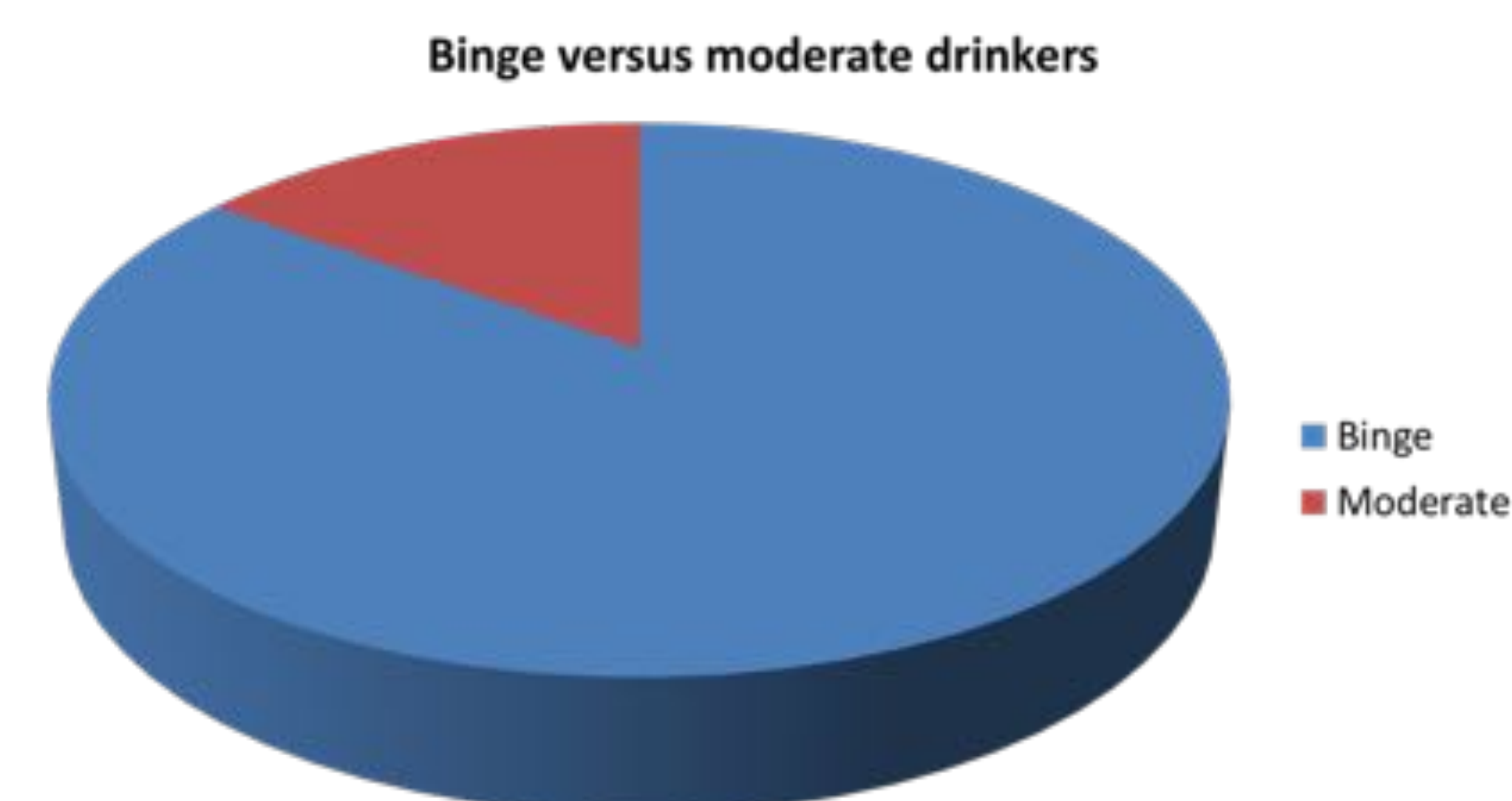
Researchers (Sobell and others) have observed that moderation, as a means of harm reduction, is more readily accepted in other parts of the world as compared to North America.

Research indicates that the harm reduction approach shows promise of being an effective and pragmatic way to reduce hazardous drinking among adolescents (McBride et al 2004).

Research Questions

RQ1: Are gender, ethnicity, age, age of first drink significantly associated with the likelihood that adolescents who drink will report moderate drinking or binge drinking?

RQ2: Does age at first drink moderate the association of the independent variables of gender, ethnicity, and age and the dependent variable of moderate drinking or binge drinking?



Procedures

An ex post facto, secondary analysis was conducted using data from the 2011 **National Risk Youth Behavior** database: an epidemiologic surveillance system established by the Centers for Disease Control and Prevention (CDC) to monitor the prevalence of youth behaviors that most influence health.

For the second research question, a **moderation procedure** was conducted. The dependent variable was moderate drinking (dichotomized into moderate and binge drinking) and the moderator variable was age of first drink.

Data Analysis

Using logistic regression, the first research question was used to undergo the moderation procedure. The dependent variable was moderate drinking (dichotomized into moderate and binge drinking) and the moderator variable was age of first drink. AFD was selected as a possible moderator variable because research indicates earlier age of drinking onset is associated with more hazardous drinking and consequently more risky behaviors (Ellickson, 2003; Swahn, 2008)

Findings

The interaction of age and age of first drink made a statistically significant contribution to the model. Overall, there were more binge drinkers than moderate drinkers. However, as age and age of first drink increased, the likelihood of moderate drinking also increased. Specifically, respondents were 1.53 (odds ratio) times more likely to report moderate drinking with a one unit increase in age category.

The most alarming finding was that those who had their first drink by age 8, were extremely likely to become binge drinkers.

Three ethnic groups (American Indian, Asian and Multiple Hispanic/Latino) had twice the amount of binge drinkers than moderate drinkers. In the American Indian group, 67% were binge drinkers (remaining 33% were moderate). Among the Asian group, 51% were binge drinkers, and among the multiple Hispanic/Latino group 62% were binge drinkers

Limitations

Limitations include:

- Ex post facto, correlational study
- Social stigma
- Controlling for variables

Conclusions

Binge drinking seems to be the rule rather than the exception with adolescent drinkers. Binge drinking by male participants was more prevalent as compared to female binge drinkers.

More research needed is on ethnic disparities which may contribute to binge drinking, especially among an adolescent population

Social Change Implications

The findings that early onset age of drinking leads to a rapid progression to problem or binge drinking makes a compelling argument for early staged education and intervention programs and therefore there is a need for greater understanding of the factors that can lead to binge drinking.

Results of this study further substantiate the need to study racial differences to help recognize patterns and predictors of alcohol use.