



The Role of Gender and Ethnicity on Alcohol Use and Injury

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Abstract

At risk drinking remains a significant public health problem. The NIH defines at-risk drinking based on increased risk for alcohol use disorder and associated health problems including injuries. Few studies have investigated the role of gender and ethnicity on alcohol use and injuries. The current project investigates the relationship between alcohol use as a function of ethnicity and gender. Additionally, we examined the intent of injury by gender and ethnic group.

Introduction

The National Institute on Alcohol Abuse and Alcoholism defines at-risk drinking as drinking more than four drinks on any drinking day for men and more than three drinks on any drinking day for women. According to the Center for Disease Control and Prevention (2014), excessive consumption of alcohol led to approximately 88,000 deaths.

Gender and ethnicity play a role in alcohol use behavior. Studies indicate that males report higher alcohol use in comparison to females. These findings are often associated with greater risks of injury, which are commonly associated with alcohol use. Additionally, studies identify ethnic status as a predictor of alcohol use. With very minimal attention on the relationship alcohol and injuries, it is important to further the knowledge to explore what factors contribute to alcohol and injuries.



Hypotheses

Despite the extensive literature on the effects of gender and ethnicity on alcohol use, few studies have investigated how gender, ethnicity and alcohol use contribute to injuries. The current project seeks to investigate ethnic and gender differences as predictors of alcohol use and intent of injury. We conducted two analyses of variance with the following aims in mind:

- In comparison to females, males will report higher number of drinks per drinking day, higher maximum number of drinks per occasion, and higher number of total drinks in a week.
- In comparison to Whites, Blacks and Latinos will report higher number of drinks per drinking day, higher maximum drinks per occasion, and higher number of total drinks in a week.
- Explore the relationships between race and ethnicity on intent of injury and alcohol use.

Method

Procedure

The analyses for the present study consists of 595 participants that were recruited from three urban Level I trauma centers:

- Baylor University Medical Center (BUMC; Dallas, TX)
- Methodist (Dallas, TX)
- University Medical Center Brackenridge (UMCB; Austin, TX).

All participants who were over the age of 18 ($M = 34.79 \pm 12.39$) and were treated for unintentional injuries such as motor vehicle collisions and falls or intentional or violence-related injuries such as gunshot wounds, stab wounds, and other injuries related to assaults were eligible for inclusion in the study and were included in the analysis (Field et al., 2014).

Measures

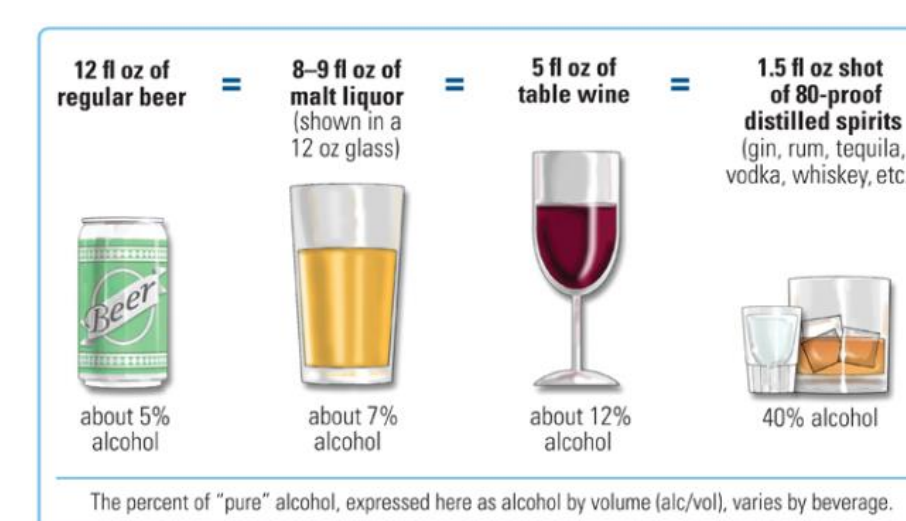
The measures are as follow:

Independent Variables

- Gender** - The range of characteristics pertaining to, and differentiating between masculinity and femininity. Participants self-identified as:
 - Male
 - Female
- Ethnicity** - Participants self-identified which group best described their own ethnic identification. Participants self-identified as:
 - White
 - Latino
 - Black
 - Other

Dependent Variables

- Intent of Injury** - Participants self-identified their respective injuries. Injuries were reported according to the following:
 - Unintentional
 - Assault
- Alcohol Use** - The variable of alcohol use was assessed by the Timeline Follow-back Measure. Alcohol use was broken down into three variables:



- Maximum number of drinks in one occasion
- Total number of drinks in a week
- Number of drinks per drinking day

Results

One hundred and forty participants were female (N=144) and the remaining were male (N=455). The majority of the participants self-identified as White (44%). The remaining participants self-identified as Latino (26.2%), Black (27.3%), and other (2.5%).

To test our first and second hypotheses, we conducted a series of analyses of variance to assess gender and ethnic differences in alcohol use.

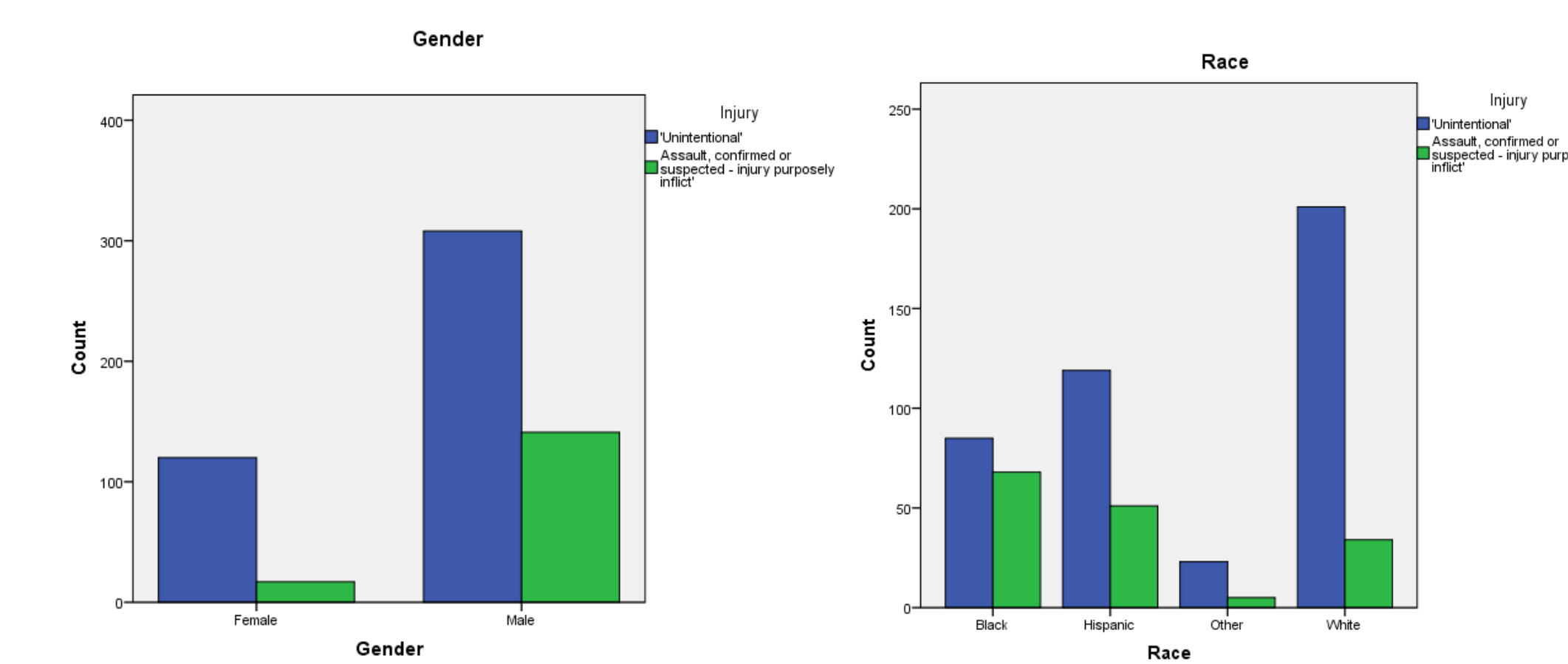
H1: In comparison to females, males reported higher alcohol use across all outcome variables.

Variable	F(1,585)	p	η^2
1. Drinks per drinking day	20.991	.000	.034
2. Max. drinks per occasion	22.015	.000	.036
3. Total drinks in a week	20.091	.000	.033

H2: In comparison to Whites, Blacks and Latinos reported higher alcohol use across all outcome variables.

Variable	F(3,585)	p	η^2	Bonferroni
1. Drinks per drinking day	8.055	.000	.039	White, Blacks < Latinos
2. Max. drinks per occasion	4.037	.007	.020	White, Blacks < Latinos
3. Total drinks in a week	1.950	.125	.010	

H3: The relationship between intent of injury and alcohol use was non-significant. However, results revealed differences on intent of injury across gender and ethnicity. Males reported higher rates of injuries caused by assault in comparison to females ($X^2(1, N = 586) = 19.231, p = .000$). Additionally, Whites reported higher rates of unintentional injuries in comparison to Blacks, Latinos, and others ($X^2(3, N = 586) = 44.349, p = .000$).

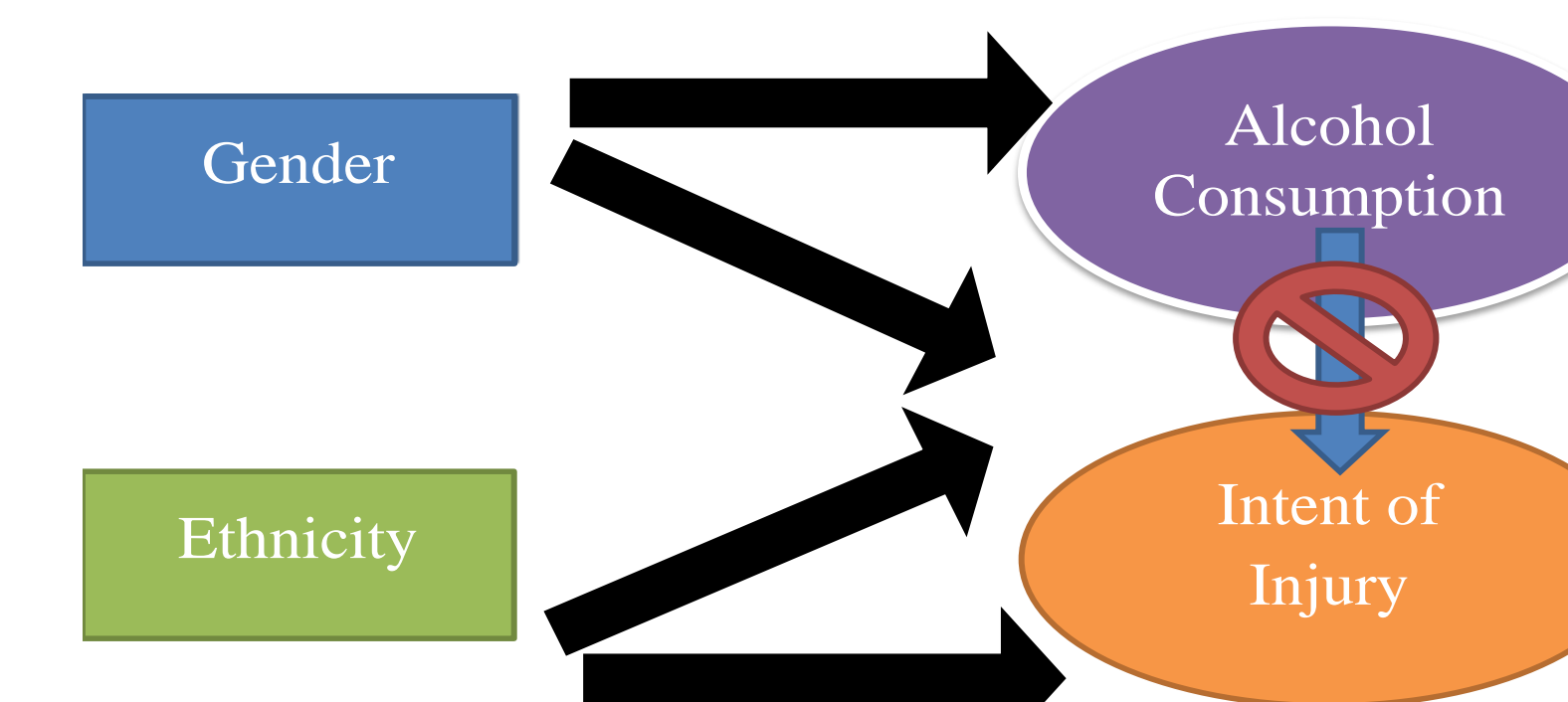


Discussion

Alcohol use is the third preventable cause of death in the United States. Our results indicate that gender has a direct effect on alcohol use. Moreover, our results indicated that males consume amounts of alcohol (higher maximum number of drinks per drinking day, higher maximum drinks per drinking day, and higher number of total drinks per drinking week) in comparison to females.

When examining ethnic differences, significant differences were found between Latinos in comparison to Whites, Blacks, and others, which is consistent with the findings by Lotfipour et al., 2015. Specifically, Latinos reported a higher number of drinks per drinking day and maximum drinks per drinking occasion.

Our results revealed that gender is a strong predictor of alcohol consumption as well as intent of injury. The findings suggest that ethnicity significantly related to alcohol consumption and intent of injury. However, alcohol consumption did not predict intent of injury, which is inconsistent with the literature (Sheehan, Rogers, Williams, & Boardman, 2013). Given this information future studies may want to further investigate how the interaction of gender, race, and injury contribute to alcohol use, which in turn can be applied to interventions.



References

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