Introduction

- Distress tolerance is the ability of an individual to tolerate negative emotional states (Simon & Gaher, 2005).
- The symptoms of posttraumatic stress (PTS) are both intrusive and unpredictable and may be more difficult to withstand in those with low distress tolerance (Banducci et al., 2016).
- Potter and colleagues (2011) found that low distress tolerance accounted for the illicit drug use motives in trauma-exposed individuals with PTS symptoms.
- Previously, PTS symptoms have been linked to alcohol use as a coping motive when mediated by distress tolerance (Vujanovic et al., 2011).
- Moreover, gender differences have been documented in PTSD, substance use, and distress tolerance (Tull et al., 2013).
- The purpose of this study is to examine the indirect effects of distress tolerance on PTS symptoms and alcohol misuse, as well as the moderating effects of gender on those associations.

Hypothesis

- The relationship of posttraumatic stress on alcohol misuse mediated by distress tolerance will be moderated by gender.

Methods

- Data (N = 950) were collected from an undergraduate psychology participant pool (Mage = 19.3 years).
- The majority of participants were female (56.1%).
- For race/ethnicity, participants reported 51.2% Latinx/Hispanic, 23.9% White, and 10.2% African-American.
- Participants reported demographics and completed measures assessing PTS symptoms, distress tolerance, and alcohol misuse.

Instruments

- The PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013) measures posttraumatic stress symptom severity in the past month. Higher scores indicate more symptom severity.
- Distress Tolerance Scale (DTS; Simons & Gaher, 2005) measures an individuals' capacity to withstand negative emotions. Higher scores indicate more distress tolerance.
- The Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993) measures alcohol misuse with a cutoff score of 8 for men and 7 for women to indicate harmful drinking.
- The total score for each of the instruments was used in the analyses.

Results

Direct Effects
- The direct effects of PTS symptoms on distress tolerance was significant ($\beta = -0.34$, SE = 0.04, 95% CI = [-0.42, -0.25]), distress tolerance on alcohol misuse was significant ($\beta = 0.10$, SE = 0.05, 95% CI = [0.004, 0.19]) and PTS symptoms on alcohol misuse was significant ($\beta = 0.06$, SE = 0.009, 95% CI = [0.04, 0.08])

Indirect Effects
- The indirect effect of distress tolerance between PTS and alcohol misuse was not significant for women ($\beta = -0.01$, SE = 0.007, 95% CI = [-0.02, 0.002]), nor for men ($\beta = 0.004$, SE = 0.005, 95% CI = [-0.005, 0.015]).
- The interaction between PTS and gender on distress tolerance was significant ($\beta = 0.05$, SE = 0.03, $p < .05$).
- Gender significantly moderated the relationship between distress tolerance and alcohol misuse ($\beta = -0.06$, SE = 0.03, $p < .05$).

Discussion

- This study did not support the hypothesis that distress tolerance mediates the association between posttraumatic stress and alcohol misuse. This is likely due to sampling differences across studies. This study used a college sample; whereas, previous research used clinical samples of individuals with PTSD or probable PTSD.
- In this study, more distress tolerance was related to more alcohol misuse. This is in direct contradiction with previous research that found more distress tolerance related to less alcohol misuse (see Simons & Gaher, 2005 with college students and Holliday et al., 2016 with a clinical sample).
- These results are not consistent with previous findings that found distress tolerance to be a significant mediator between PTS and alcohol use coping motives (Vujanovic et al., 2011) and probable PTSD and alcohol misuse (Holliday et al., 2016).
- However, these results did support previous findings of gender differences in these associations (Tull et al., 2013).
- Given these conflicting results, more research is required with more diverse samples.