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Introduction

- Posttraumatic Stress Disorder (PTSD) is a common outcome following combat trauma, and is characterized (in DSM-IV) by three symptom clusters: reexperiencing, avoidance, and hyperarousal
- Alcohol Use Disorder (AUD), often preceded by risky drinking (e.g. binge drinking), is also common following combat exposure.

AUD and PTSD comorbidity rates high in veteran populations
- -Supported by self-medication model
- Literature has not examined PTSD symptom clusters and risky drinking behaviors in the context of the self-medication model

Aims and Hypotheses

Aims:
1. Examine whether PTSD total symptom severity and each symptom cluster had significant main effects on alcohol use outcomes (total frequency, binge drinking, and risky drinking)
   - Hypothesis 1: PTSD symptom severity would be associated with alcohol use outcomes and that the hyperarousal symptom cluster would most strongly predict alcohol outcomes, as compared to other clusters
2. Determine whether drinking to cope moderates the relation between PTSD symptoms and alcohol use outcomes
   - Hypothesis 2: Drinking to cope would moderate the relationship between PTSD symptoms on alcohol use outcomes, such that those who reported greater drinking to cope motives would have greater likelihood of alcohol use problems

Methods

Sample:
- N = 211 (90.5% male, 70.1% white), age (M=30.4 years)
- Trauma-exposed subsample of individuals from a larger study of OIF/OEF veterans assessed for presence or absence of PTSD

Measures:
- Clinician-Administered-PTSD Scale for DSM-IV (CAPS)
  - -total symptom severity count and cluster scores
- Drinking to Cope subscale from the Drinking Motives Questionnaire (DMQ-Cope)
- Timeline Followback measure (TLFB) of past 30 days
  - - total number of binge days
  - -total number of drinks per month
  - -risky drinking status

Analyses and Results

Analyses:
- Series of separate hierarchical regression models:
  - -Step 1; PTSD severity scores (total and symptom cluster)
  - -Step 2; DMQ-Cope
  - -Step 3; interaction
- Linear regressions for continuous # of drinks/month
- Logistic regression for dichotomous risky drinker status
- Negative binomial regression for # of binge drinking days

Total Drinks/ Month Outcome:
- All PTSD severity scores were initially associated in Step 1 with total drinks/month (all ps <0.02)
- When DMQ-Cope was added in Step 2, they were no longer significant, but DMQ-Cope was (p < .001)
- In Step 3, DMQ-Cope showed main effects (all ps < 0.001)
- No significant interaction effects found (all ps > 0.15)

Risky Drinking and Binge Drinking Days:
- Both outcomes had the same pattern
- PTSD total and cluster scores were not associated with either outcome in any of the Steps (all ps > 0.35)
- DMQ-Cope showed a main effect in all models (all ps < 0.003)
- No interaction effects were found (all ps > 0.107).

Discussion/Conclusion

- Drinking to cope motives are stronger predictor of various alcohol use outcomes, above and beyond PTSD symptoms
- Contrary to hypothesis 1, hyperarousal symptoms were not specifically associated with alcohol use outcomes
- No moderations were found, suggesting

Limitations:
- Limited diversity in sample
- Non-clinical alcohol sample, so unclear if relationship would be found for AUD outcomes

Future Directions:
- Expand to civilian populations
- Determine if patterns hold with different types of traumas
- Examine other risky drinking behaviors, including diagnostic level AUD
- Look into patterns for other drinking motives

Results

Table 1
Models predicting alcohol use outcomes, only the final step of hierarchical models are presented

Predictors	Total Alcohol Frequency		Total Binge Days		Risky Drinker Status	
	β	SE B	OR	95% CI	OR	95% CI
Analysis 1: PCL total						
CAPS total	0.189*	0.110	0.995	0.971-1.019	1.000	0.987-1.013
DMQ-Cope	0.360***	1.050	1.202***	1.086-1.330	1.320***	1.148-1.519
CAPS total x DMQ-Cope	0.081	0.040	1.001	0.998-1.003	1.005	0.999-1.012
Analysis 2: Re-experiencing						
Re-Experiencing	0.167*	0.414	0.987	0.897-1.086	1.003	0.957-1.051
DMQ-Cope	0.367***	1.034	1.211***	1.106-1.326	1.305***	1.141-1.493
Re-experiencing x DMQ-Cope	0.052	0.160	1.002	0.992-1.012	1.009	0.987-1.032
Analysis 3: Avoidance						
Avoidance	0.191*	0.231	1.002	0.953-1.054	0.999	0.973-1.026
DMQ-Cope	0.358***	1.044	1.215***	1.113-1.326	1.316***	1.147-1.511
Avoidance x DMQ-Cope	0.073	0.082	1.001	0.995-1.006	1.010	0.997-1.023
Analysis 4: Arousal						
Arousal	0.165*	0.315	0.967	0.903-1.036	1.008	0.972-1.046
DMQ-Cope	0.367***	1.044	1.189**	1.061-1.332	1.321***	1.148-1.520
Arousal x DMQ-Cope	0.091	0.116	1.003	0.996-1.010	1.018*	1.001-1.036

Note: *** = p<.001, ** = p<.01, * = p<.05

Works Cited

Citations provided upon request. Contact Fatima Tariq at tariqfb@vcu.edu for citations.

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