# The DRAM, Vol. 9(12) - Drinking to cope: Stress, emotion, and cravings among heavy drinkers

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The holiday season is upon us with all its trappings, from cocoa and pumpkin pie to stress and depression. People react to stress in different ways. Some hunker down, some go for a run, and some reach for the bottle. Research suggests that women and men tend to react differently to stress, and that those different reactions might in turn have different effects on drinking behavior (Rubonis, Colby, Monti, Rohsenow et al., 1994). This week, the DRAM reviews a study that examined stress-induced alcohol craving and negative emotion among female and male heavy drinkers (Hartwell & Ray, 2013).

### **Methods**

- Researchers recruited a community sample of 64 heavy drinkers (i.e., <u>AUDIT</u> scores > 7).
- First, participants described two recent events in their lives—one stressful, unresolved event, and one neutral (non-stressful) event. At a second session, participants completed two guided imagery exercises, one hour apart, in which they listened to a description of each event.
- Participants completed the following questionnaires, before and after each guided imagery session:
  - Alcohol Urge Questionnaire (assessed alcohol craving with a 7point scale, with higher scores indicating stronger craving)
  - Differential Emotions Scale (assessed mood)
- Researchers ran a series of comparisons investigating how condition (stressful vs. neutral imagery) and sex (male vs. female) interact to predict changes in alcohol craving and mood.

## **Results**

 Both men and women demonstrated increases in alcohol craving from before to after they were exposed to stressful imagery, compared to neutral imagery. However, this effect was stronger among women (see Figure).

• For women more than men, increases in negative mood after being exposed to stressful images were predictive of increased craving.

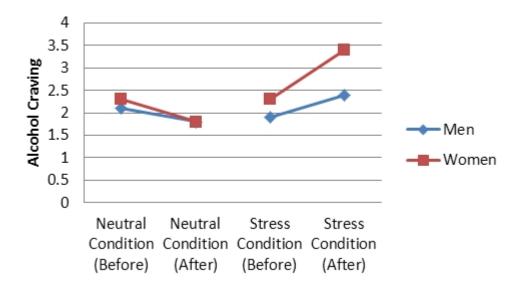


Figure. Alcohol Craving as a Function of Imagery Condition and Sex (adapted from Hartwell & Ray, 2013). Click image to enlarge.

### Limitations

- Because the study relied on self-report, it is possible that women are more prone to reporting mood fluctuations than men, which could account for the results.
- Because the study focuses on heavy drinkers only, it is not generalizable to other drinking populations. Heavy drinkers might have a longer and more complicated history of using alcohol to deal with difficult emotions and stress than light drinkers.
- The stressful imagery was generated by participants, and was different for everybody. Although this type of <u>idiographic procedure</u> has benefits, including increased realism and relevancy, it could be that women are better at coming up with stressful situations than men.

### **Conclusions**

This study suggests that among heavy drinkers, women are more reactive to stress than men and experience more negative emotion related to that stress, leading them to crave alcohol more strongly. In stressful situations, women who drink heavily might be more susceptible than men who drink heavily to developing alcohol-related cravings, which in turn could promote unhealthy

drinking behavior. Interventions for alcohol abuse and dependence might do well to target women dealing with stressful life events, and focus on improving coping mechanisms.

What do you think? Please use the comment link below to provide feedback on this article.

# **References**

Hartwell, E.E., Ray, L.A. (2013). Sex moderates stress reactivity in heavy drinkers. *Addictive Behaviors*, 38(11), 2643-2646.

Rubonis, A. V., Colby, S. M., Monti, P. M., Rohsenow, D. J., Gulliver, S. B., & Sirota, A. D. (1994). Alcohol cue reactivity and mood induction in male and female alcoholics. *Journal of Studies on Alcohol*, 55(4), 487–494.