

Washington University School of Medicine

Digital Commons@Becker

---

Posters

2006: Alcohol and Tobacco Dependence: from  
Bench to Bedside

---

2006

## Stage of change and mood state in alcohol dependent drinkers exposed to VR alcohol cues

Amy C. Traylor  
*University of Georgia*

Hilary L. Copp  
*University of Georgia*

Patrick S. Bordnick  
*University of Georgia*

Follow this and additional works at: <https://digitalcommons.wustl.edu/guzeposter2006>



Part of the [Medicine and Health Sciences Commons](#)

---

### Recommended Citation

Traylor, Amy C.; Copp, Hilary L.; and Bordnick, Patrick S., "Stage of change and mood state in alcohol dependent drinkers exposed to VR alcohol cues" (2006). *Posters*. Paper 6 Samuel B. Guze Symposium on Alcoholism.

<https://digitalcommons.wustl.edu/guzeposter2006/6>

This Poster is brought to you for free and open access by the 2006: Alcohol and Tobacco Dependence: from Bench to Bedside at Digital Commons@Becker. It has been accepted for inclusion in Posters by an authorized administrator of Digital Commons@Becker. For more information, please contact [vanam@wustl.edu](mailto:vanam@wustl.edu).

# Stage of Change and Mood State in Alcohol Dependent Drinkers Exposed to VR Alcohol Cues



Amy C. Traylor, MSW, Hilary L. Copp, MSW, & Patrick S. Bordnick, Ph.D., *University of Georgia*

## Objective

To determine the effect of VR alcohol cues on positive and negative mood in non-treatment-seeking alcohol abusers at different baseline stages of change

## Participants

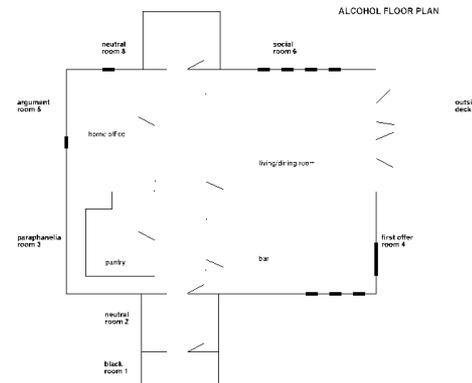
- ✦ 39 non-treatment-seeking current alcohol drinkers recruited via newspaper ads
- Inclusion criteria:
  - ✓ Age 21-65
  - ✓ Consumed at least 2 standard drinks per day
  - ✓ Met DSM-IV-TR criteria for alcohol abuse or dependence
  - ✓ No concurrent DSM diagnoses except for nicotine dependence
  - ✓ Otherwise in good health

## Methods

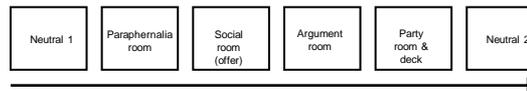
- ✦ Participants completed self-report mood and stage of change assessments
- Mood measure:
  - ✓ Modification of Diener & Emmons's Mood Form (1984)
  - ✓ 10-item Likert-type self-report questionnaire
  - ✓ Independently assesses positive and negative moods
  - ✓ Administered pre and post VR cue exposure
- Stage of change measure:
  - ✓ Readiness to Change Questionnaire (Heather, Gold, & Rollnick, 1991)
  - ✓ 12-item Likert-type self-report questionnaire
  - ✓ Assesses participant's baseline readiness to change
  - ✓ Classifies participants by stage of change (Precontemplation, Contemplation, or Action; Prochaska & DiClemente, 1983)
  - ✓ Administered pre VR cue exposure

## VR Alcohol Cue Environment

Participants were exposed to a 40-minute VR alcohol cue exposure consisting of 4 alcohol-related and 2 neutral virtual rooms (see screenshots, floor plan, and sample path diagrams below)



## Sample VR Path



This research was supported by NIAA grant #R41-AA014312-01-A1.

Portions of these data have been submitted for publication.

## Results

Effect of VR alcohol cues on positive mood state (Positive) and negative mood state (Negative) were evaluated

✦ Main effects found to be significant

Two-way repeated-measures ANOVA				
	Wilks's $\Lambda$	F	p-value	partial $\eta^2$
Positive	.21	141.59	.01	.79
Negative	.89	4.79	.05	.11
Pos x Neg	.94	2.36	n.s.	

Significant main effects were further investigated with paired-samples *t* tests

- ✦ Significant difference found for Negative from pre to post exposure,  $t(38) = 2.65, p = .012$
- ✦ No significant difference found for Positive from pre to post exposure

## Conclusions

A small but statistically significant change in both positive and negative mood state was found after exposure to VR alcohol cues. Mood changes of this magnitude, while statistically significant, may not be clinically significant.

The effect of stage of change on mood was not found to be statistically significant, perhaps due to unusually high number of borderline profiles yielded by the RTCQ measure.

The impact of VR alcohol cues on mood has important implications for implementation of more effective substance abuse interventions. It may be possible to incorporate such data into development of treatment protocols that better match protocols to the needs of individual clients. Further research of mood and stage of change with additional instruments and larger samples is needed.

## References

- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47*(5), 1105-1117.
- Heather, N., Gold, R., & Rollnick, S. (1991). *Readiness to Change Questionnaire: User's manual (Technical report 15)*. Kensington, Australia: National Drug and Alcohol Research Centre, University of New South Wales.
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*(3), 390-395.