

2003

## Drinking motives and continuing to drink in adolescent twin boys: Investigating the moderating effects of anxiety sensitivity

Michele L. Pergadia

*Washington University School of Medicine in St. Louis*

Andrew C. Heath

*Washington University School of Medicine in St. Louis*

Kathleen K. Bucholz

*Washington University School of Medicine in St. Louis*

Collins Lewis

*Washington University School of Medicine in St. Louis*

Pamela A. Madden

*Washington University School of Medicine in St. Louis*

Follow this and additional works at: <https://digitalcommons.wustl.edu/guzeposter2003>



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

---

### Recommended Citation

Pergadia, Michele L.; Heath, Andrew C.; Bucholz, Kathleen K.; Lewis, Collins; and Madden, Pamela A., "Drinking motives and continuing to drink in adolescent twin boys: Investigating the moderating effects of anxiety sensitivity" (2003). *Posters*. Paper 9 Samuel B. Guze Symposium on Alcoholism. <https://digitalcommons.wustl.edu/guzeposter2003/9>

This Poster is brought to you for free and open access by the 2003: Drinking and the High School Student 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).

**DRINKING MOTIVES AND CONTINUING TO  
DRINK IN ADOLESCENT TWIN BOYS:  
INVESTIGATING THE MODERATING  
EFFECTS OF ANXIETY SENSITIVITY**

Michele L. Pergadia, Andrew C. Heath, Kathleen K. Bucholz,  
Collins Lewis & Pamela A. F. Madden

Washington University School of Medicine, St.Louis

# Introduction

- Adolescents drink alcohol for a variety of reasons
  - excitement and fun (enhancement)
  - pressure from peers to drink (conformity)
  - to manage negative mood (coping)
  - to help them socialize (social; Cooper, 1994).
- Different personality dispositions (e.g., anxiety sensitive), may tend to drink for very particular reasons, perhaps less for social reasons and more for coping related reasons (Stewart, Samoluk, & MacDonald, 1999).

# Introduction

- Anxiety Sensitivity (AS) is a personality disposition involving a specific fear of anxiety-related bodily sensations (McNally, 1996).
- Many studies have found a relation between AS and alcohol use (Stewart et al., 1995, 2001) , and between AS and coping (Stewart, Samoluk, & MacDonald, 1999) and conformity (Stewart, Zvolensky, & Eifert, in press) motives for alcohol use
  - individuals higher in AS might expect alcohol use to take away fear of bodily sensation, or the actual sensations
- However, the extent to which AS interacts, or moderates the effects of drinking motives on actual alcohol drinking behavior remains to be explored in young adolescents.

# Aim

- The aim of this study is to examine the extent to which AS would moderate the effects of drinking motives (social, coping, enhancement, conformity) on continuing to drink beyond experimentation (CDrk).

# Sample

Population-based cohorts of like-sex male twins, 11-20 years of age (born 1982-1991) were ascertained through Missouri Birth Records, and new cohorts of 11-year old pairs continue to be recruited. To date, 76% of families identified from birth records have been successfully contacted, and 91% of those successfully contacted have been enrolled in this study (parent usually the mother, completed a brief screening interview). A diagnostic interview has been completed with a least one twin from 810 families and in 85% of these families interviews with both twins were completed. The sample for this poster included only the younger twins, those 11-14 years of age (N=675 individuals) for whom Questionnaire data containing AS are now available.

# Lifetime Drinking Measure

- **Continuing to Drink (CDrk):** beyond experimentation
  - **0:** has never had a full drink of alcohol or just experimented (1-2 times), but has not continued to drink beyond experimentation
  - **1:** has had a full drink more than 3 times

# Self-Reported Drinking Motives

(20 item Drinking Motives Questionnaire; Cooper, 1994;  
scaled from never=0 to almost always=5)

- **Enhancement Motives (EM):** e.g., “How often do you drink because it’s exciting?”, “How often do you drink to get high?”
- **Coping Motives (CM):** e.g. “How often do you drink because it helps you when you feel depressed or nervous?”, “How often do you drink to forget your worries?”
- **Conformity Motives (PM):** e.g. “How often do you drink because your friends pressure you to drink?”, “How often do you drink to be liked?”
- **Social Motives (SM):** “How often do you drink because it helps you enjoy a party?”, “How often would you say you drink to be sociable?”



# **Self-Reported Personality**

(CASI; Silverman, Fleisig, Rabian, & Peterson, 1991)

## **Childhood Anxiety Sensitivity Index**

- 18-item self-report measure, adapted from the Anxiety Sensitivity Index (ASI; Peterson & Reiss, 1992), examining reactivity to physical anxiety symptoms
- on a scale of none (0), some (1), or a lot (2) to questions such as “It scares me when my heart beats fast”

# Statistical Analysis

- *Logistic Regression*

- Dependent Variable: Continuing to drink beyond experimentation
  - Binary: 0: no, 1: yes
- Independent Variables:
  - Anxiety Sensitivity (ordinal variable, interquartile ranges):
    - 0: 0-25%tile
    - 1: 25<sup>th</sup> -50<sup>th</sup>%tile
    - 2: 50<sup>th</sup>-75<sup>th</sup>%tile
    - 3: >75%tile
  - Drinking Motives (EM, CM, PM, SM; binary variables):
    - 0: 0-50<sup>th</sup>%tile- low
    - 1: > 50<sup>th</sup>%tile-high
  - Anxiety Sensitivity X Drinking Motives

# Prevalence % (n=675)

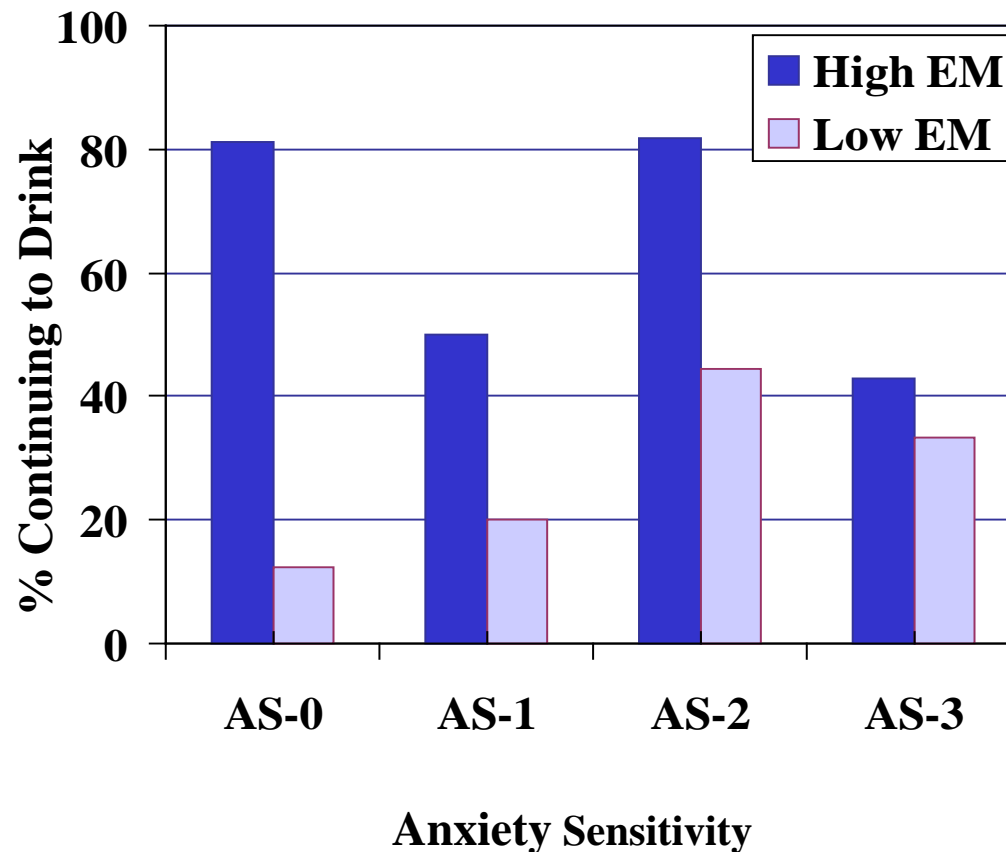
Had 1 full drink	10.9
Had a full drink 3+ times:	
Whole sample	5.6
Experimenters	50.7

## Associations with Continuing to Drink

Odds Ratios (and 95% Confidence Interval) with not continuing to drink as the comparison group, main effects & significant multivariate interaction effects, after controlling for AS and drinking motives

	<b>Continuing to Drink Beyond Experimentation</b>
<b>Anxiety Sensitivity</b>	n.s.
<b>Enhancement Motives (EM)</b>	<b>5.1</b> (1.6-16.6)
<b>Coping Motives (CM)</b>	<b>3.7</b> (1.2-11.5)
<b>Conformity Motives (PM)</b>	n.s.
<b>Social Motives (SM)</b>	<b>2.9</b> (1.04-7.9)
<b>Anxiety Sensitivity X EM</b>	<b>.34</b> (.12-.98)

# % Continuing to Drink by Interquartile levels of Anxiety Sensitivity: high vs. low enhancement drinking motives (EM)



# Discussion

- Preliminary results suggest that enhancement, coping and social motives for drinking all increase risk for drinking beyond experimentation in young adolescent twin boys.
- Anxiety Sensitivity appears to moderate the effects of enhancement motives on continuing to drink.
  - Although the results are preliminary, descriptively they suggest that lower levels of anxiety sensitivity coupled with low enhancement motives for drinking are significantly protective against continuing to drink beyond experimentation
  - In other words, a calm disposition is protective when the individual is not motivated to drink for excitement, but a risk factor if they do drink for enhancement purposes.

# Acknowledgements

The authors are thankful for Support from the following NIH Grants: DA12540 (PAFM), AA09022, AA11998, AA07728 (ACH), AA07580 (MLP). Thanks also to Bill Howells for his helpful analytical assistance.