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DRINKING MOTIVES AND CONTINUING TO DRINK IN ADOLESCENT TWIN BOYS:

INVESTIGATING THE MODERATING EFFECTS OF ANXIETY SENSITIVITY

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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 <u>aim</u> 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 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
- <u>Independent Variables</u>:
 - Anxiety Sensitivity (ordinal variable, interquartile ranges:
 - 0: 0-25% tile
 - 1: 25th -50th% tile
 - 2: 50th-75th% tile
 - 3: >75% tile
 - Drinking Motives (EM, CM, PM, SM; binary variables):
 - $-0:0-50^{\text{th}}\%$ tile-low
 - -1:>50th%tile-high
 - Anxiety Sensitivity X Drinking Motives

Prevalence % (n=675)

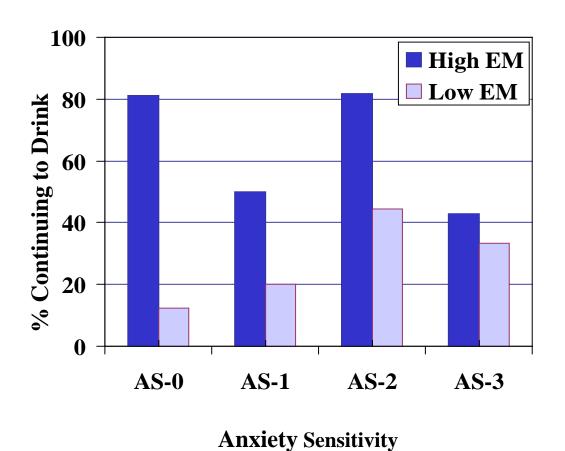
| Had 1 full drink | 10.9 |
|----------------------------|-------------|
| Had a full drink 3+ times: | |
| Whole sample Experimenters | 5.6 50.7 |

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

| | Continuing to Drink Beyond Experimentation |
|---------------------------------|--|
| Anxiety Sensitivity | n.s. |
| Enhancement Motives (EM) | 5.1 (1.6-16.6) |
| Coping Motives (CM) | 3.7 (1.2-11.5) |
| Conformity Motives (PM) | n.s. |
| Social Motives (SM) | 2.9 (1.04-7.9) |
| Anxiety Sensitivity X EM | .34 (.1298) |

% 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 result are preliminary, descriptively they suggest that lower levels of anxiety sensitivity coupled with low enhancement motives for drinking are significantly protective against continuing to drinking 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.

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