

Washington University School of Medicine

Digital Commons@Becker

---

Posters

2009: Translating Basic Science Findings to  
Guide Prevention Efforts

---

2009

## Do changes in drinking motives mediate the relation between personality change and "maturing out" of problem drinking?

Andrew K. Littlefield

*University of Missouri - Columbia*

Kenneth J. Sher

*University of Missouri - Columbia*

Phillip K. Wood

*University of Missouri - Columbia*

Follow this and additional works at: <https://digitalcommons.wustl.edu/guzeposter2009>



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

---

### Recommended Citation

Littlefield, Andrew K.; Sher, Kenneth J.; and Wood, Phillip K., "Do changes in drinking motives mediate the relation between personality change and "maturing out" of problem drinking?" (2009). *Posters*. Paper 13 Samuel B. Guze Symposium on Alcoholism.  
<https://digitalcommons.wustl.edu/guzeposter2009/13>

This Poster is brought to you for free and open access by the 2009: Translating Basic Science Findings to Guide Prevention Efforts 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).



# DO CHANGES IN DRINKING MOTIVES MEDIATE THE RELATION BETWEEN PERSONALITY CHANGE AND “MATURING OUT” OF PROBLEM DRINKING?

Andrew K. Littlefield, Kenneth J. Sher, & Phillip K. Wood

University of Missouri and the Midwest Alcoholism Research Center

The present research was supported by NIH grants T32 AA13526, AA13987 and KO5AA017242 to Kenneth J. Sher and P50 AA11998 to Andrew Heath.



## Introduction

- Recent research has indicated that developmental changes in the personality traits of neuroticism and impulsivity correlate with changes in problem drinking during emerging and young adulthood (Littlefield, Sher, & Wood, in press).
- However, it remains unclear what potential mechanisms, or mediators, could account for this correlated change.
- Drinking motives (i.e., drinking to cope and drinking for enhancement) have been posited as mediators of the relation between personality and alcohol involvement (Kuntsche et al., 2005; 2006).
- Recent work indicates the change in drinking motives track with changes in alcohol involvement from adolescence to young adulthood (e.g., Cooper et al., 2008), though the relation between changes in drinking motives and personality has not been established.

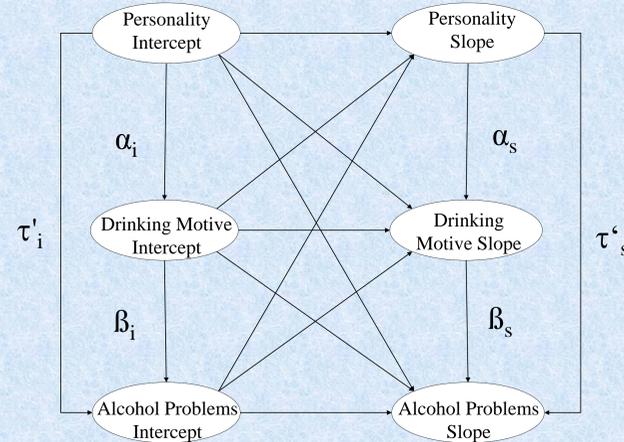
## Present Study

- The current study examined changes in drinking to cope and drinking for enhancement as potential mediators of the relation between changes in personality (i.e., impulsivity and neuroticism) and changes in problematic alcohol involvement.

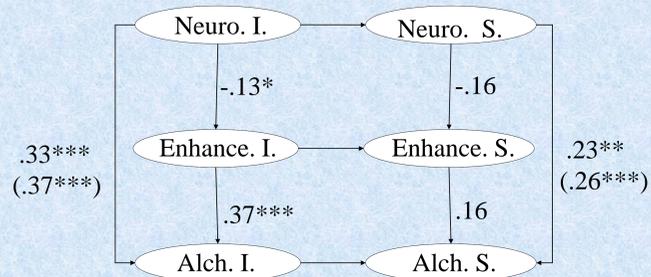
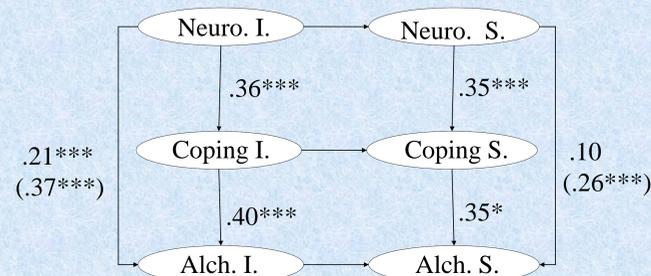
## Method

- $N = 489$  first-year college students (Age = 18.2) at freshman year of college (53% women: 52% paternal history of alcoholism)
  - Six follow-up assessments at ages 19, 20, 21, 25, 29, and 35
- Personality
  - Assessed at ages 18, 25, 29, and 35
  - Neuroticism: Eysenck Personality Questionnaire (1975)
  - Impulsivity: items from the Tridimensional Personality Questionnaire (1995) and Eysenck Personality Inventory (1968)
- Motives
  - Assessed at ages 18, 19, 20, 21, 25, 29, and 35
  - Coping and enhancement motives were assessed using items adapted from those used by Cahalan, Cisin, and Crossley (1969).
    - Coping included four items (e.g., “I drink to forget my worries”).
    - Enhancement included one item (i.e., “I drink to get high”).
- Problematic Alcohol Involvement
  - Assessed at ages 18, 19, 20, 21, 25, 29, and 35
  - A sum of 27 items consisting of both negative consequences associated with drinking and symptoms related to alcohol dependence using criteria from the MAST
  - Family history of alcoholism (FH) assessed at baseline with Short Michigan Alcoholism Test (SMAST; Selzer, 1975) and the Family History-Research Diagnostic Criteria (FH-RDC; Endicott et al., 1978)
    - Participants diagnosed with a positive or negative FH

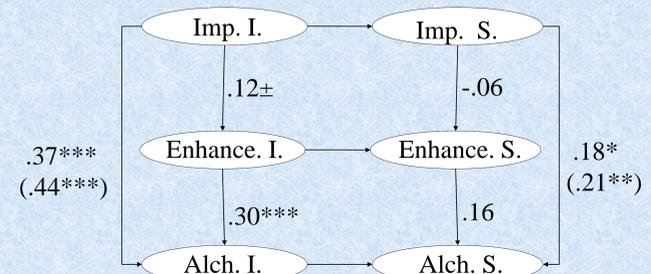
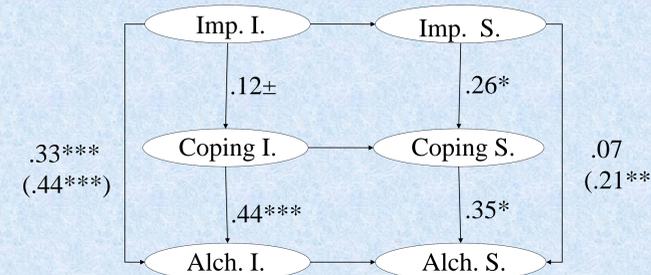
## Parallel Process LGM



### Neuroticism, Motives, & Alcohol Problems



### Impulsivity, Motives, & Alcohol Problems



## Analysis

- Parallel process latent growth modeling (LGM) was utilized to examine the potential mediating variables of changes in drinking motives intervening in the relation between the antecedent variables of changes in personality and the outcome variable of changes in alcohol involvement (see Parallel Process LGM).
- Mediational analyses were conducted separately for neuroticism and impulsivity.
- In order to assess specificity, the respective motive growth factors were controlled for the alternative motive growth factors.
- Family History and Sex were included as a control variables in all analyses.

## Results

### Neuroticism

- Coping motive slope was a significant mediator between neuroticism slope and alcohol involvement slope (Indirect Effect = .12, 95% CI = .01, .27).
- Conversely, enhancement slope was not a significant mediator between neuroticism slope and alcohol involvement slope (Indirect Effect = -.03, 95% CI = -.10, .02).

### Impulsivity

- Coping motive slope was not a statistically significant mediator between impulsivity slope and alcohol involvement slope (Indirect Effect = .09, 95% CI = .00, .23)
- However, changes in impulsivity significantly predicted changes in coping motives and the direct effect of changes in impulsivity on changes in alcohol involvement was significantly reduced.
- In contrast, enhancement motive slope was not a significant mediator between impulsivity slope and alcohol involvement slope (Indirect Effect = -.01, 95% CI = -.06, .03).

## Discussion

- Parallel process latent growth modeling indicated that change in coping (but not enhancement) motives mediated the relation between changes in neuroticism and alcohol involvement as well as the relation between changes in impulsivity and alcohol involvement.
  - Individuals who decreased in neuroticism and/or impulsivity were more likely to decrease in coping motives, and in turn were more likely to make decreases in problematic alcohol involvement
- Findings suggest that change in coping motives is an important mechanism in the relation between personality change and the “maturing out” of problematic alcohol involvement.