THE COUNTERINTUITIVE ALCOHOL-ACTIVITY ASSOCIATION: WHY ARE DRINKERS MORE ACTIVE THAN NON-DRINKERS?

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What Are My Research Interests?

- College Student Alcohol-Related Beliefs & Behaviors
- Transition of Student Service Members / Veterans to College
- Harm Reduction (PBS & Responsible Drinking)
- Why Is This a Contemporary College Drinking Issue?
- Establish a Research-Based Rationale for Action

Intersection of Mutual Research Interests

Associated Publications

Drinkers of all ages are more physically active than non-drinking peers.

Dose-response relationship between AC & PA

As drinking increases, so does physical activity.

Drinkers are MORE Active? Really?!?

True for youth (12-24), college students (18+), and general population (18+).

Challenged the claim that sufficient evidence exists to support the hypothesis that physical activity can be an effective intervention strategy to reduce hazardous drinking behaviors of college students.

Requires more than "evidence from 2 small trials"
Commentary

Cautioning against causal alcohol-cardiovascular assumptions

- Discuss the precarious foundation for the rationale supporting a causal association between alcohol and cardiovascular benefits
- Highlight ancillary explanations for why cardiovascular benefits are associated with alcohol

Cardiovascular benefits of alcohol

- Meta-analysis conclude: “the degree of protection from moderate doses of alcohol should be reconsidered” (Corrao et al., 200)
- General lack of control over confounding factors (i.e., BMI, family history, drinking operationalization, type of alcohol consumed).
- Currently no evidence supporting recommendations for non-drinkers to consume alcohol

But WHY Are Drinkers More Active?

- Thoughts?

- Drunkorexia might shed insights...
  - ABC News
  - Good Morning America – Health Segment (3:30)
  - New York Times
  - The Atlantic
  - Huffington Post
  - New York Daily News
  - MTV
Drunkorexia? What is that...

- Idiomatic/colloquial non-medical term primarily featured in lay-press*
  - Typically describes weight management behaviors drinkers employ to offset calories associated with drinking (Barry & Piazza-Gardner, 2012)
  - No systematic definition, but encompasses three behaviors:
    - Alcohol Consumption
    - Disordered Eating
    - Physical Activity

*Researchers & clinicians should discontinue use of this term (Piazza-Gardner & Barry, in press)

Scholarly Roots of Drunkorexia

- Disordered Eating & Alcohol Consumption
  - Disordered Eating Consistently link to:
    - Alcohol use/abuse (Dansky et al., 2000; Giles et al., 2009; O'Keane et al., 2001)
    - Alcohol-related consequences (Dansky et al., 2003; Anderson et al., 2004)
  - Disordered Eating & Physical Activity
    - Disordered eating consistently linked to:
      - Exercise preoccupation/excessive exercise (Ackard et al., 2002; Holm-Denoma et al., 2009)
      - 40-80% of patients with anorexia exercise excessively (Suck et al., 1997).
  - Alcohol Use & Physical Activity
    - Consistently documented relationship between physical activity & drinking (Dunn & Wang, 2003; French, 2009; Pete et al., 1999; Wenerney et al., 2004).

Scholarly Roots of Drunkorexia

- Even though physical activity relates to eating AND drinking behaviors, the literature fails to account for physical activity when assessing relationship between alcohol and:
  - Caloric restriction (Giles et al., 2009)
  - Diagnosed eating disorders (Dansky et al., 2003; Leary, 1995; Higuchi et al., 1993)
  - Disordered eating (Perez & Balakrishna, 2011; Stewin & Borchard, 1990)
  - Dietary restraint (Dansky et al., 2000; Buyan et al., 2004)
  - Purging (Anderson et al., 2003)
Binge drinkers significantly more likely to engage in physical activity (vigorous & strength) and disordered eating (vomited, used lax, used diet pills to lose weight)

Above and beyond confounding social (sex, race, year in college, Greek) and environmental (residence) factors

Provide inroads into understanding WHY drinkers are more physically active...

“Individuals who drink heavily may engage in frequent physical exercise to compensate for the extra calories gained through drinking or to counterbalance the negative effects of drinking”

Binge drinking college students exhibit greater weight concern (Vickers et al., 2004) and body dissatisfaction (Anderson et al., 2006)

Further Understanding Drunkorexia


Methods:Five distinct focus groups with undergraduate students (n=36)

Data Analysis: constant comparison model, classical content analysis, word count, and theoretical coding

Results: Weight-consciousness, characterized by guilt/worry from alcohol-related calories
**The Weight-Conscious Drinker**

![Diagram showing pre-alcohol consumption, drinking & unhealthy eating, and post-alcohol consumption behaviors related to weight-consciousness.]

**Pre-Alcohol Consumption**
- Preprovision Caloric Reduction
- Physical Activity
- Skipping meals

**Drinking & Unhealthy Eating**
- Postprovision Caloric Reduction
- Physical Activity
- Purging

**Post-Alcohol Consumption**

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**Towards the Future**

1. Measurement?
2. Prevalence?
3. Correlates?
   a) Men versus Women?
      - Weight loss behaviors positively associated with drinking for both female and male students — association stronger for females (Barry, Whiteman, Piazza-Gardner & Jensen, in review)
      - Males use exercise
      - Females use disordered eating
4. College issue only?