

# A BRIEF MINDFULNESS INTERVENTION TO DECREASE BINGE DRINKING AMONG COLLEGE STUDENTS: A CONTROLLED STUDY

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# Background: College Alcohol Use and Mindfulness-Based Strategies

- Binge Drinking among College Students:
  - High Prevalence
  - Array of Negative Consequences
  - Interventions have small effects
- Need for Novel Approaches
  - Mindfulness as an intervention strategy?



(Baer, 2002; Bowen et al., 2007; 2011; Carey et al., 2007; Charles, 2011; Kabat-Zinn, 1994; Wechsler & Nelson, 2008)



# Overview of the Current Study

- Primary Aim:
  - To assess the impact of a brief mindfulness intervention on subsequent patterns of alcohol use among college students who report binge drinking
- Participant Recruitment
  - Inclusion/Exclusion Criteria





# Research Objectives and Hypotheses

- Assess for feasibility and participant satisfaction.
  - No formal hypotheses made.
- Assess the impact of a brief mindfulness intervention on alcohol related behaviors in the four weeks following the intervention.
  - It was hypothesized that the Mindfulness Group would report:
    - Fewer Binge Episodes (*Hypothesis 1a*)
    - Less Consequences of Alcohol Use (*Hypothesis 1b*)





# Participant Characteristics

- N = 76 undergraduate students
- Mean Age: 19.05 (SD = 1.19)
- 50% Female
- 54% Freshmen
- Primarily Caucasian (91%)
- Alcohol Use at baseline (past 4 weeks assessed):
  - Mean: 5.12 binge episodes
  - Range: 1-16 binge episodes







# Measures

- Alcohol Timeline Followback Method (Sobell & Sobell, 1993)
  - Semi-structured interview to assess daily alcohol use
  - Assessed at baseline and weekly for four weeks
- Rutgers Alcohol Problem Index (White & Labouvie, 1989)
  - Consequences of Alcohol Use
  - Assessed at initial and 5<sup>th</sup> Session
- Participant Rating Form
  - Mindfulness Group only
  - Assessed comprehension, interest, perceived helpfulness and intention to use skills
  - Assessed after each part of the Mindfulness Intervention



# Session Procedures

- Participants were randomly assigned to a Mindfulness Group or a Control Group
- Assessments: conducted weekly for five weeks
- Control Group:
  - Assessment Only
- Mindfulness Group:
  - Initial Session: 40 minute Brief Mindfulness Intervention
  - 3<sup>rd</sup> Session: 25 minute “booster” Mindfulness Practice
  - 60 minutes of out-of-session mindfulness meditation practice for four weeks
- Participant Compensation



# Brief Mindfulness Intervention

- N=38
- Initial Session:
  - General Guiding Principles of Intervention
  - Mindfulness Handout
  - Mindfulness Instructions and Breathing Exercise (UCLA, MARC, 2009)
  - Urge Surfing Exercise (MBRP, 2011; Marlatt, 1994)
- Third Session:
  - Mindfulness Meditation for Awareness of Emotions (Goldstein & Goldstein, 2008)
- Out-of-session practice





# Results



- Feasibility supported by:
  - Low attrition and few missed sessions
  - Compliance with out-of-session mindfulness practice
  - High participant ratings of Interest, Comprehension and Perceived Helpfulness



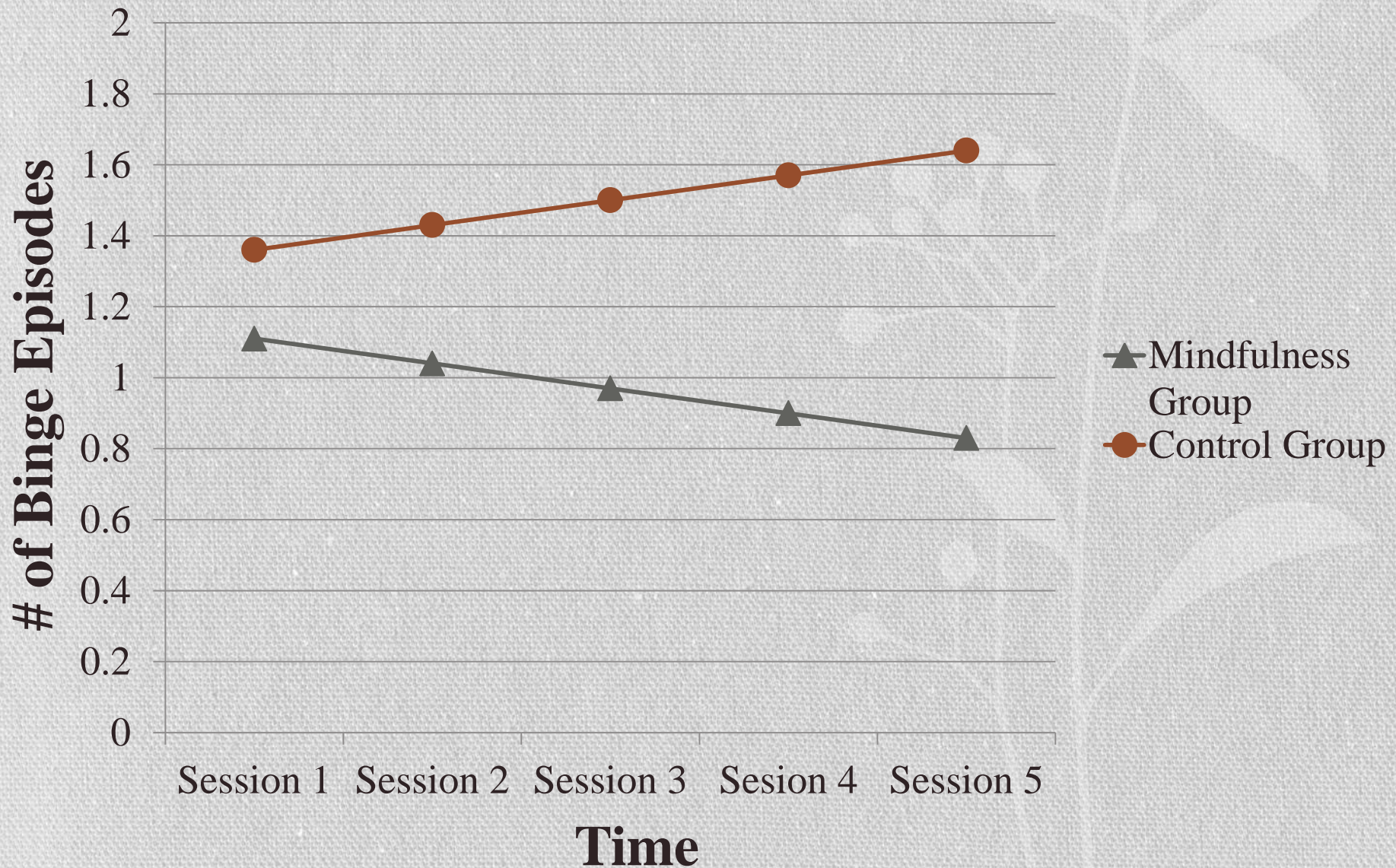


# Results

- Significant Group by Session Interaction for:
  - Binge Episodes
    - Linear Mixed Models used to estimate change in binge episodes over time by group
  - Consequences of Alcohol Use
    - Mixed Model ANOVA used to estimate consequences by group

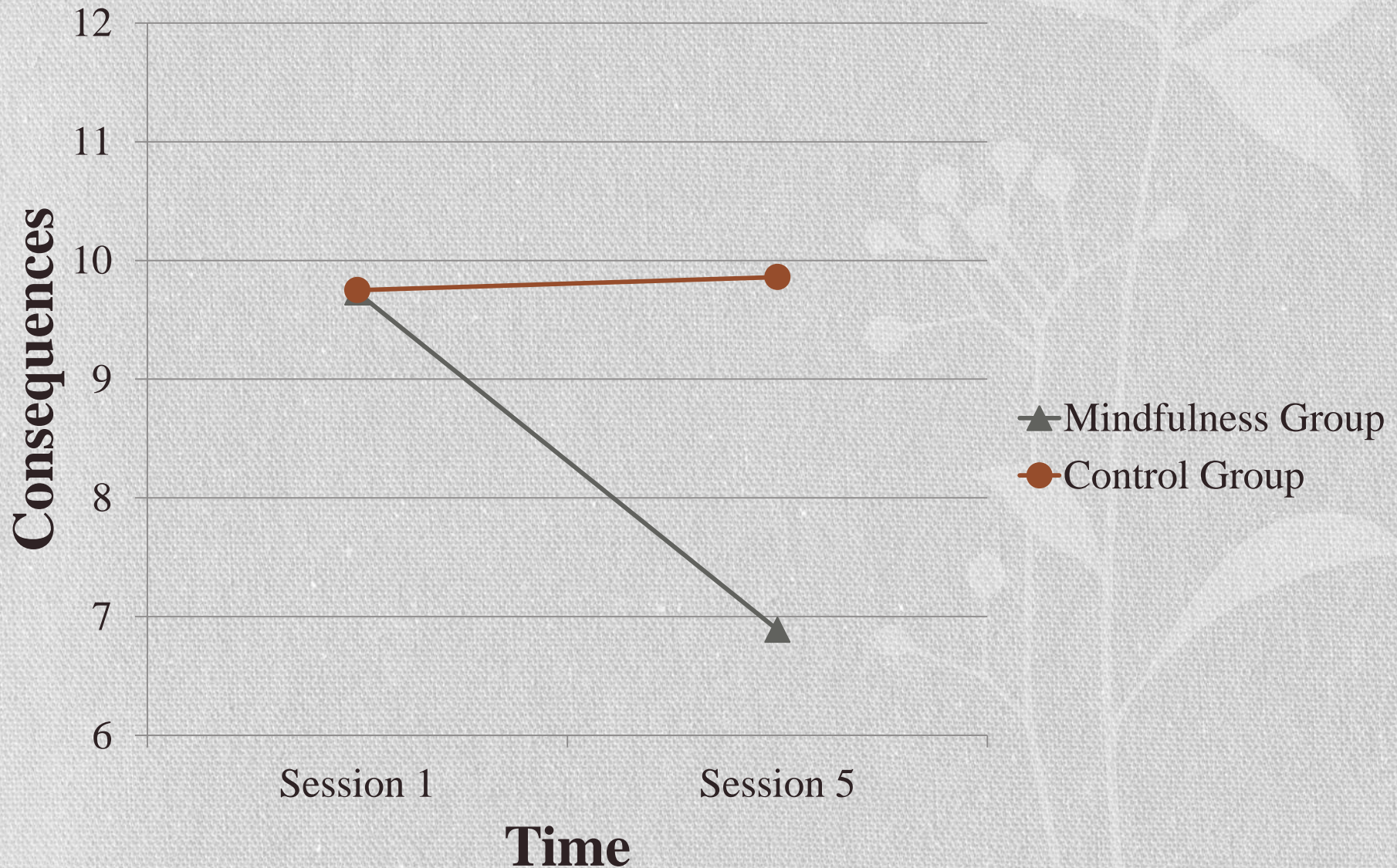


# Number of Binge Episodes by Group over Time





# Consequences of Alcohol Use by Group over Time







# Discussion

- 1<sup>st</sup> Study to apply Mindfulness-Based Strategies to a College Sample of Binge Drinkers
- Support for Feasibility and Participant Satisfaction
- Findings offer preliminary evidence for effectiveness
  - Decreased Frequency of Binge Episodes (Cohen's  $d = .86$ )
  - Fewer Consequences of Alcohol Use (Cohen's  $d = .49$ )
  - Offers support for harm reduction model





# Limitations and Future Directions

- ▶ Durability of effect?
  - Longer Follow-Up Period
- ▶ Control Group:
  - Comparison with Active Control Group
- ▶ Generalizability and Implications:
  - Replication among College Populations
  - Extension to clinical populations as a brief intervention
    - Time and Cost-Effective
    - Use as a strategy to prevent escalation of use







THANK YOU!  
QUESTIONS?

