Effects of a Brief Motivational Intervention to Reduce College Student Drinking

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Thanks to:

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Study design

- *Students randomly assigned to*
  - no intervention or
  - intervention focused on:
    - reducing alcohol risk behavior, or
    - reducing HIV risk behavior, or
    - reducing both alcohol and HIV risk behavior.

Original goal

- *Test whether efforts to reduce risky sexual behavior would be enhanced by adding a component aimed at reducing drinking*

  - Answer was no!

Today's presentation:

- *Examine effects of the drinking-focused intervention*

- *Compared with no intervention control group*

Data for outcome evaluation

- *90-day TLFBs: retrospective, day-by-day assessments of alcohol use and sexual behavior at:*
  - Intake
  - 3-, 6-, 9-, 12-, 15-month follow-ups

Why Use Motivational Interviewing In This Study?

- *Individual-focused MI-based interventions are efficacious in reducing drinking among college students*

How Was Motivational Interviewing Used?

- *In this study:*
  - **Two face-to-face sessions with masters-level counselor**
  - **Included personalized feedback**

Participant recruitment

- *Students at colleges and universities in the Buffalo, NY, metropolitan area*
- *Classroom screenings, flyers, newspaper advertisements*
  - "study on drinking and college-related experiences"

Participant eligibility

- *At least five (men) or four (women) drinks at least once in past two weeks*
- *At behavioral risk for HIV/STD infection*
  - repeated recent sex w/o condoms
  - untested or multiple partners
- *18 to 30 years of age (M = 20.7, SD = 2.0)*
- *Unmarried*
- *Recent heterosexual intercourse (two bisexual women)*
- *No need for more intensive intervention*

Participant college level

- *First through sixth years of college*
  - 25.3% first
  - 21.4% second
  - 26.6% third
  - 26.6% fourth or higher

Participant race/ethnicity

- *86.4% White*
- *5.2% Hispanic*
- *3.9% African-American*
- *3.9% Asian-American*
- *0.6% American Indian*

Drug use (any during prior three months)

- *Marijuana: 64.9%*
- *Hallucinogen: 20.8%*
- *Cocaine: 9.1%*
- *Opiate: 7.1%*

First session

- *Assessment conducted by intervention counselor*
- *Random assignment during questionnaire completion*
- *Feedback preparation (if intervention condition)*
- *Inform participant of random assignment*
  - Control (n = 40): scheduled for 3-month follow-up
  - Intervention (n = 39): began counseling session

Intervention goals

- *Create awareness of need for change*
- *Increase participants' motivation to make a change*
- *Discuss plans for change*

Intervention style (MI)

- *Ask open questions*
- *Offer reflections*
- *Affirm the participant*
- *Summarize periodically*

Intervention procedures (Session 1)

- *45 minutes*
- *Elicit and reflect thoughts and concerns about drinking*
  - What the participant likes and doesn't like about drinking
  - Ask about drinking patterns, drinking games, perceptions of peer norms, and values/goals relevant to alcohol use
  - For lighter drinkers, elicit reasons for not drinking heavily

Intervention procedures (Session 1)

- *Elicit reactions to personalized feedback on alcohol use and risk status, including:*
  - Standard drinks/week and percentile ranking compared to same-sex American college students
  - Estimated BAC peaks - typical week and heavier day
  - Levels of risk associated with tolerance (BAC peaks), other drug use, and family history
  - Levels of lifetime and recent consequences (YAAPST)
  - Thoughts about cutting down (Readiness to Change Questionnaire)

Intervention procedures (Session 1)

- *Elicit thoughts and feelings regarding costs and benefits:*
  - of making a change
  - of not changing
- *Ask open-ended key questions*
  - Eliciting decision to change
- *Elicit information about possible steps toward change*

Intervention procedures (Session 1)

- *Participant leaves session with:*
  - Personal Feedback Report and explanatory booklet
  - Decisional Balance Sheet (if completed)
  - Change Plan Worksheet (if completed)
  - Strategies and sources of support booklet (9 pages)
    - Suggestions for setting goals, self-monitoring, drinking moderation strategies, alternatives to drinking
    - List of counseling services, websites, etc.

Intervention procedures (between sessions)

- *Counselor mails handwritten note*
  - affirms participant
  - summarizes his or her statements
  - expresses optimism about change

Intervention procedures (Session 2)

- *Five weeks after first session*
- *30 minutes*
- *Review thoughts about and efforts to change*
- *Encourage initiation/continued use of risk-reduction strategies and resources*

Intervention monitoring

- *Audiotapes reviewed for adherence*
- *Individual and group supervision*

Results: Participation

- *Intervention-condition participants*
  - All attended Session 1
  - 79% attended Session 2
  - 85% provided complete drinking data in follow-up
- *Control-condition participants*
 - 98% provided complete drinking data in follow-up

Results: Drinking during follow-up (15 months)

- *Condition X Time ANCOVAs w/ baseline as covariate*
- *Compared to controls, alcohol MI participants:*
  - drank less frequently
    - averaged 2 fewer drinking days per month
  - drank fewer drinks per drinking day
    - averaged 1 less drink/drinking day
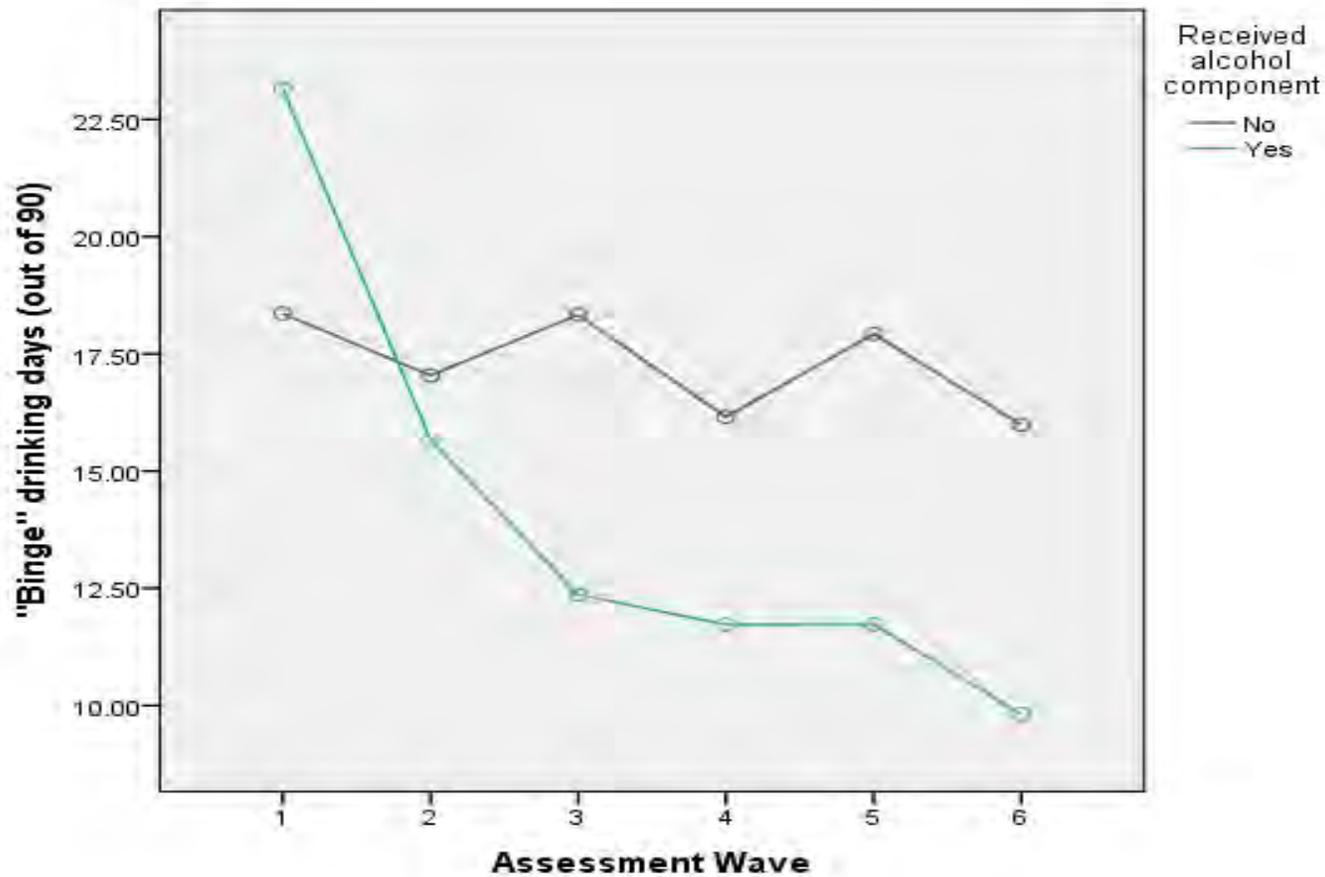- *No significant Condition X Time interactions*

Intervention effect on drinks per drinking day
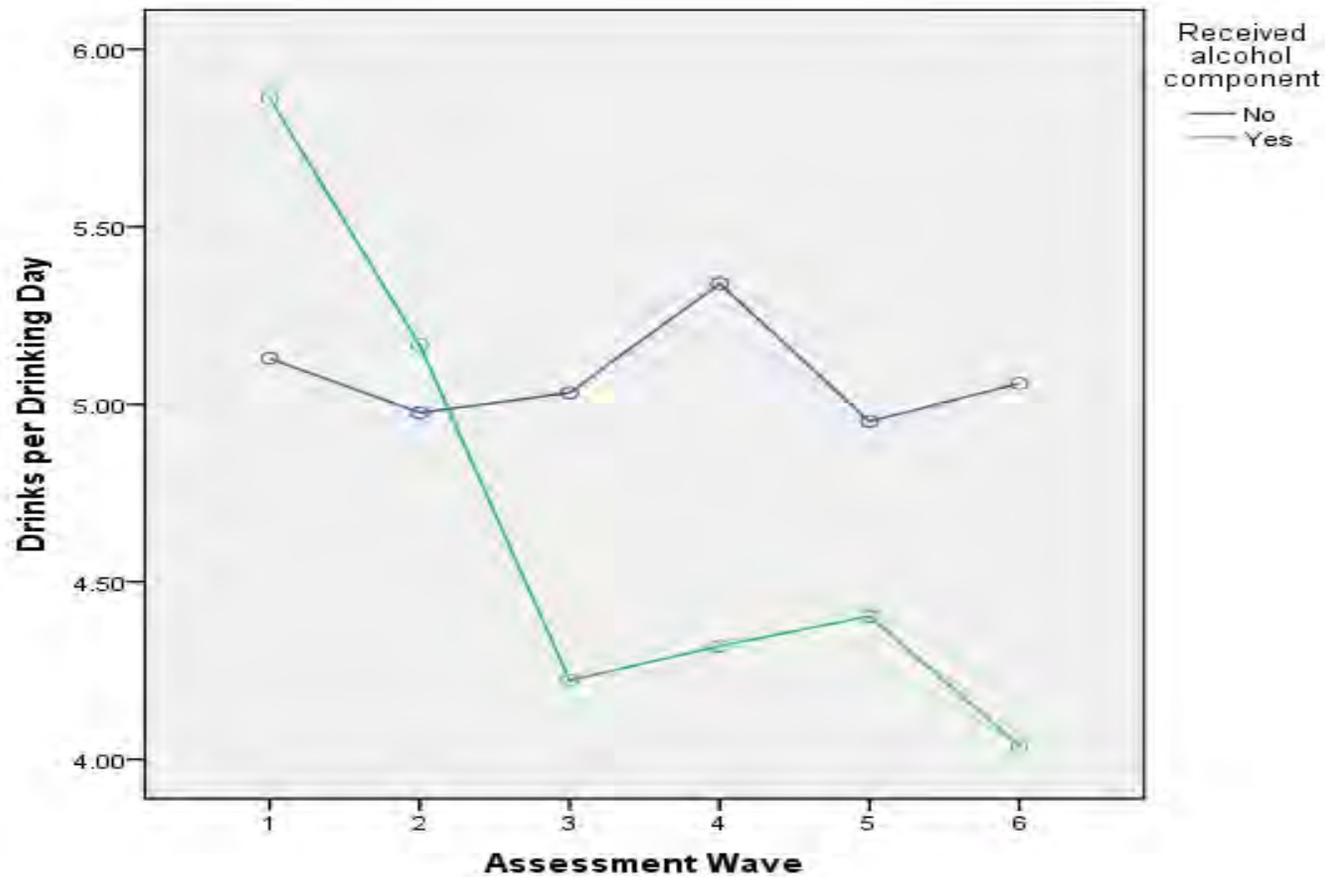
Intervention effect on drinking frequency
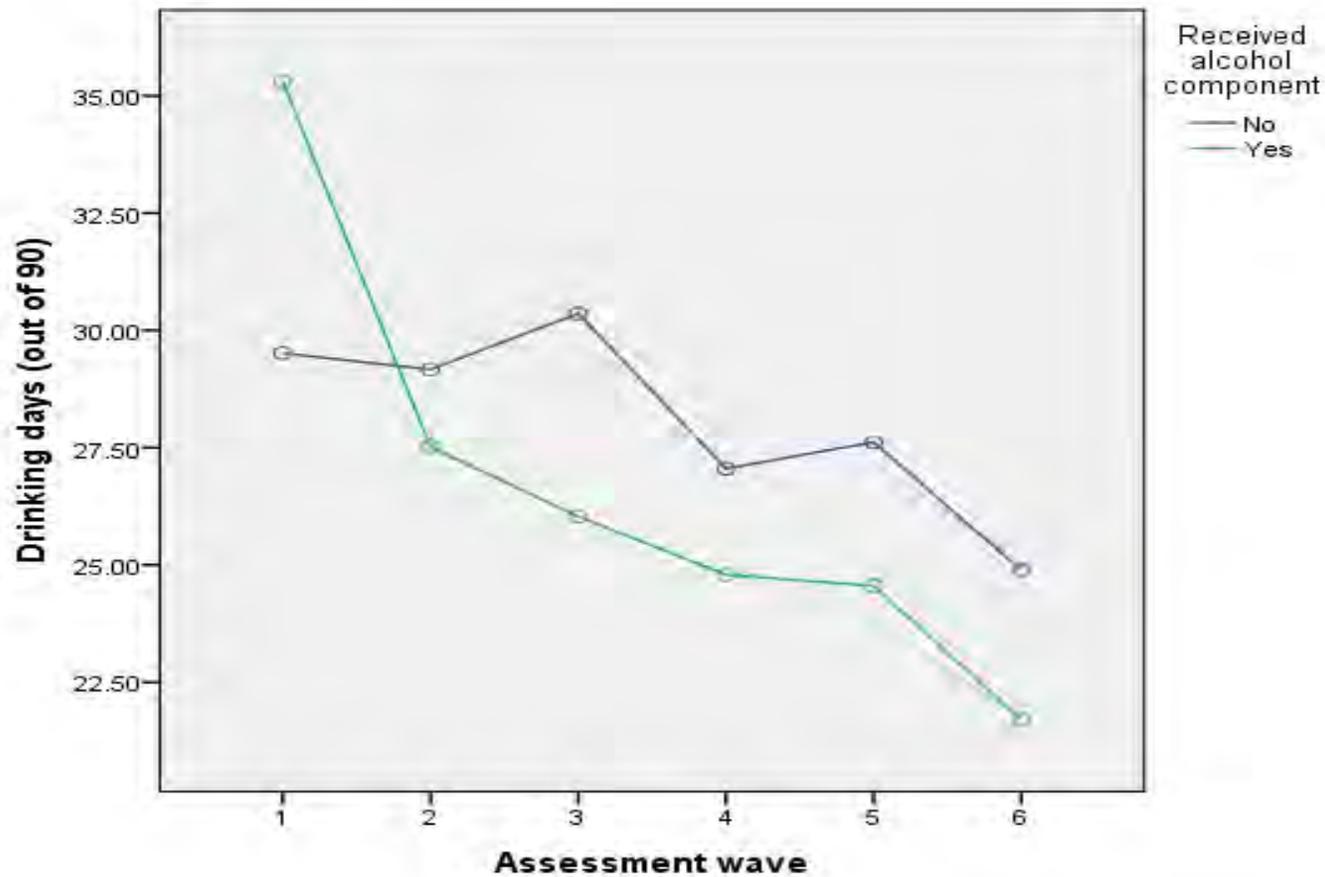
Intervention effect on "binge" drinking frequency

Conclusions

- *Intervention had small to moderate effects on alcohol use, consistent with similar studies with college students*
- *Intervention effects appeared to be stable over course of year*

Limitations

- *Relatively small sample size*
- *Men somewhat underrepresented*
- *Most participants were non-minority White*
- *Sample selected for both drinking and sexual risk behaviors*

Questions?

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