The Use of Parent-Based Normative Feedback Interventions to Reduce College Alcohol Risk

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Overview

- Do parents still matter during emerging adulthood?
- Social norms and parents' attitudes and behaviors
- Developing norms-based parent interventions
  - Web-based intervention
  - In-person intervention
- Discussion and Questions

Do Parents Still Matter?

- Relatively few studies examine parenting during emerging adulthood (Padilla-Walker, Nelson, Madsen, & Barry, 2008)

- Salience and influence of parents declines (Ham & Hope, 2003; Kandel & Andrews, 1987; Windle, 2000; Wood et al., 2001)

- Growing body of research suggests parents do matter (Boyle & Boekeloo, 2006; Abar & Turrisi, 2008; Padilla-Walker et al., 2008; Small, Morgan, Abar & Maggs, 2011; Turrisi et al., 2000)

Do Parents Still Matter?

- ↑ Parental monitoring =
  - Less approving student attitudes
  - Less student substance use

- ↑ Parent permissiveness =
  - More approving student attitudes
  - More frequent student substance use

(Abar & Turrisi, 2008; Napper et al., 2014; Varvil-Weld et al., 2012; Walls et al., 2009)

Parent Communication

- Alcohol-specific communication (Booth-Butterfield & Sidelinger, 1998; Boyle et al., 2009; Napper et al., 2013; Turrisi et al., 2000)

  - 69% decrease in alcohol-specific communication after transition to college (Cremeens et al., 2008)

  - Misperceptions of student alcohol use (Bylund et al., 2005; Hummer et al., 2013)

  - Communication becomes more permissive (Miller-Day, 2008; Reimuller et al., 2011)

Parent Based Interventions (PBIs)

- Emergence of college PBIs:

  – Multicomponent mailed handbooks (e.g., Turrisi et al., 2001)

- When parents participate in PBIs, students report:

  – Greater alcohol-related communication (Testa, Hoffman, Livingston, & Turrisi, 2010)

  – Less risky alcohol use (Ichiyama et al., 2009; Turrisi et al., 2001)

Social Norms Approach

- Attitudes and behaviors are often shaped by:
  - perceived behaviors of social group
  - perceived attitudes of social group
- Perceptions of others are often inaccurate

(Berkowitz, 2004; Cialdini, Reno, & Kallgren, 1990; Neighbors, Lee, Lewis, Fossos, & Larimer, 2007; Perkins, 2002; Prentice, 2008; Prentice & Miller, 1993)

85%
OF TUMWATER HS STUDENTS
DO NOT USE
TOBACCO

THESE STATS CAME FROM YOU! In 2009, 342 Tumwater High School students took an anonymous survey. Fifty-one surveys were thrown out because people lied. The remaining surveys gave us this data.

If you choose to drink, know this: 7 out of 10 Fresno State students consume 0-3 drinks, if at all*

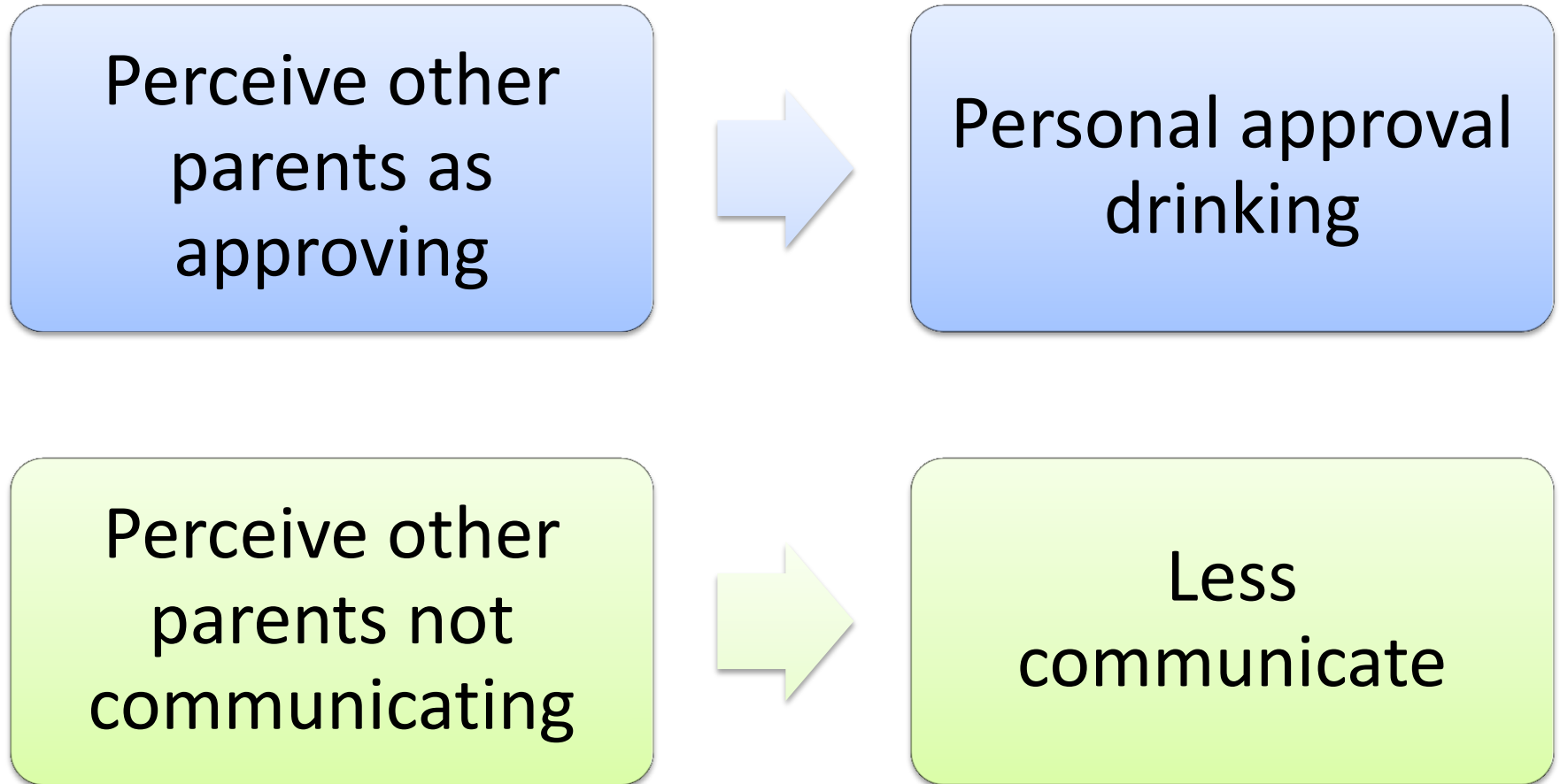*Based on a survey of 1,028 randomly selected Fresno State students (Spring 2009).

Health Promotion and Wellness Services

1 OUT OF 4 MU students never used alcohol.
LEARN MORE AT
millersville.edu/chep/socialnorms

Health Education & Promotion
MAKE SMART CHOICES
Millersville University
SEIZE THE OPPORTUNITY

Influence of Other Parents

Perceive other parents as approving	→	Personal approval drinking
Perceive other parents not communicating	→	Less communicate

(Linkenback et al., 2003 ; LaBrie etal., 2011; Napper et al., 2014)

Parent Social Norms Campaign

Developing social norms interventions for college parents

- Parents can have a significant impact on their students' substance use behaviors
  - Perceived approval
  - Communication
- Perceptions of other parents may impact parents' own behavior and attitudes
- Correcting misperceptions and reinforcing communication norms may be beneficial

Overview

- Study 1
  - Pilot study examining the effects of a web-based norms
- Study 2
  - Web-based personalized normative feedback (PNF) PBI
  - Randomized control design study
  - Parent-student dyads
- Study 3
  - In-person group normative feedback PBI
  - Randomized control design study
  - Parent-student dyads

Pilot Study 1

- Examines the effects of a web-based social norms intervention on parents':

  - Intentions to talk to their student about alcohol

  - Perceived norms

Participants (N = 144)

- Mean age = 50.8 years
- 77.8% Female
- 60.4% White

- Parents' reported frequency of seeing or talking to their child

Measures

- Intentions
  - "I intend to speak with my child about their alcohol use in the next month"

- Perceived student alcohol use
  - The Drinking Norms Rating Form (Baer, Stacy, & Larimer, 1991)

- Perceived and actual approval of alcohol-related behaviors
 - 4 items (Lewis et al., 2010)

Normative Feedback

1. Perceived student alcohol use and approval

- 85% of parent underestimate their own student's alcohol use
- 70% of parents underestimate how acceptable their own student believes it is to engage in various drinking behaviors

2. Perceived other parental approval

- Other parents were generally less approving than they were perceived to be
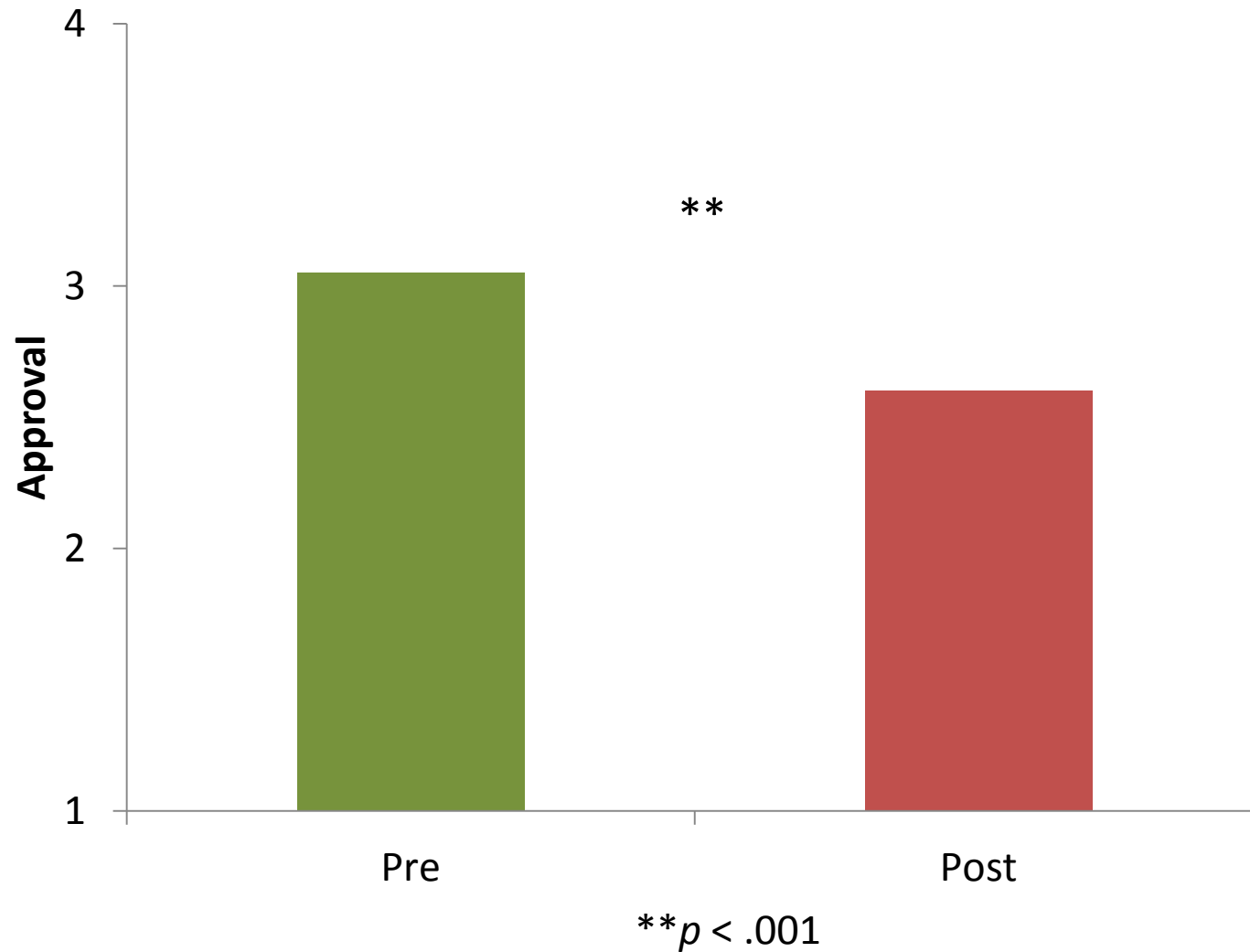
Results: Changes post-feedback
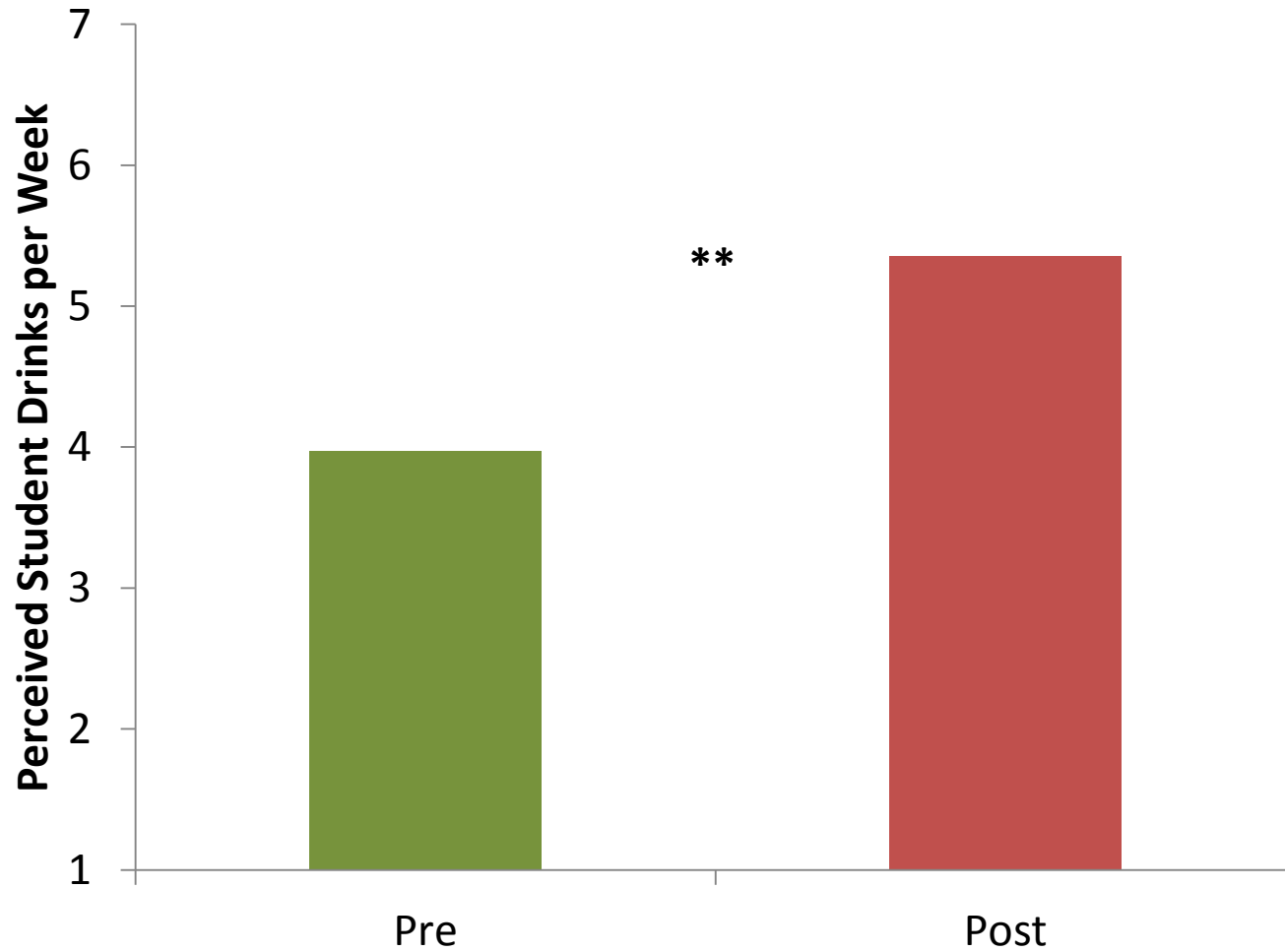
**p < .001

Changes post-feedback

Perceived Other Parent Approval

**$p < .001$

Changes post-feedback

Intentions to talk to student

**
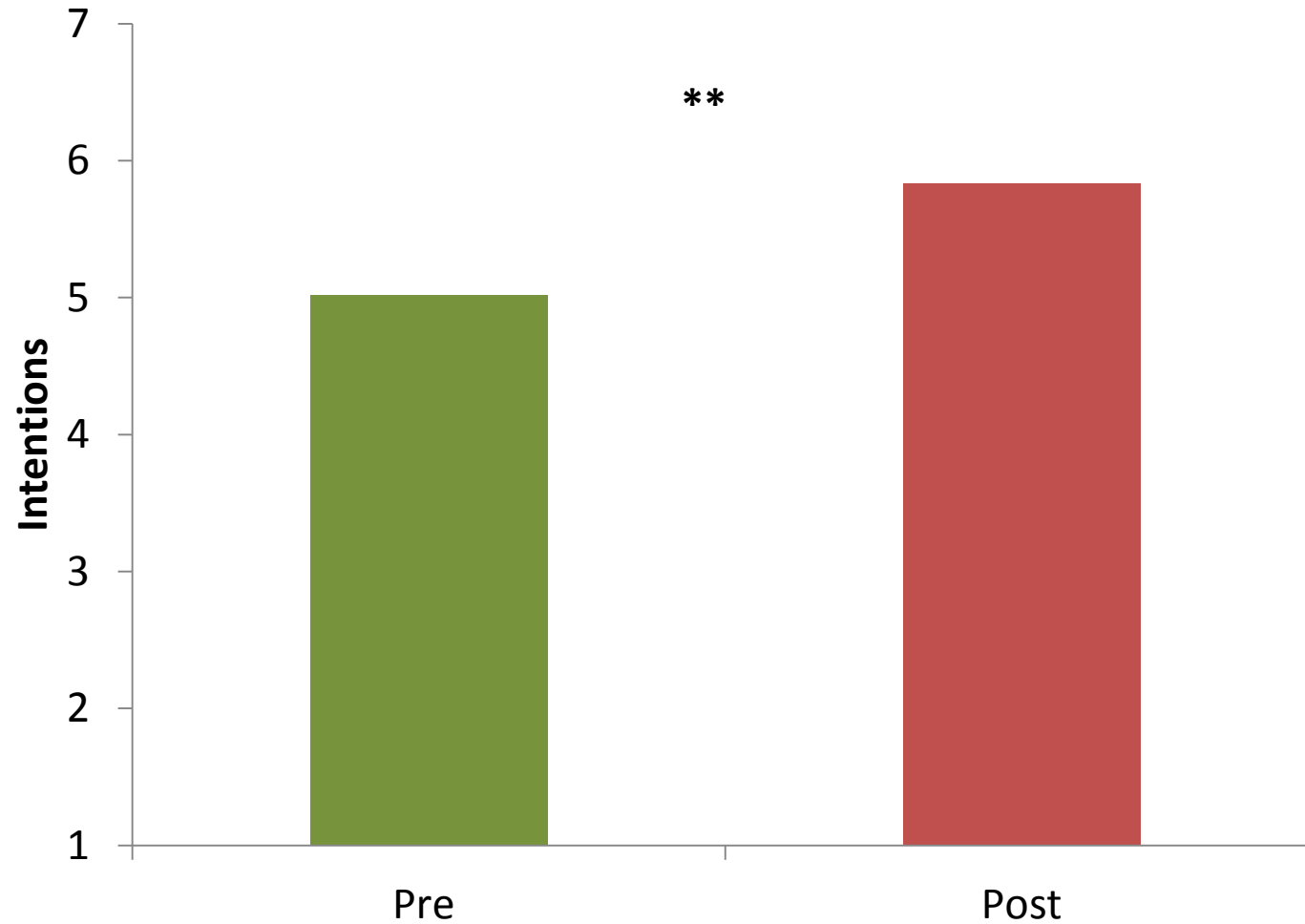
**p < .001

Qualitative Data

- **42.3%:** Motivated to have a conversation/discuss the statistics

- **22.5%:** Plan to ask child about his/her use of alcohol

- **18.3%:** Plan to find out more about child's alcohol attitudes

- **16.9%:** Plan to initiate more frequent conversations about alcohol

Study 1 Summary

- Conclusions:
  - Parents receptive to web-based normative feedback
  - Normative feedback associated with changes in beliefs about student drinking, beliefs about other parents' attitudes, and motivation to discuss alcohol
- Limitations:
  - No control group
  - No student outcomes

Study 2

- Randomized control design study

- Participants 403 parent-student dyads

  – Summer prior to college

- Assess student outcomes up to 6 months post intervention

- Does web-based PNF result in greater parent communication and reductions in student alcohol risk during the transition to college?

Participants (*N* = 403 dyads)

- Demographics:
  - Student mean age = 17.8 yrs
    - 52.6% Female
    - 61.5% Caucasian
  - Parent mean age = 50.5 yrs
    - 79.2% Female
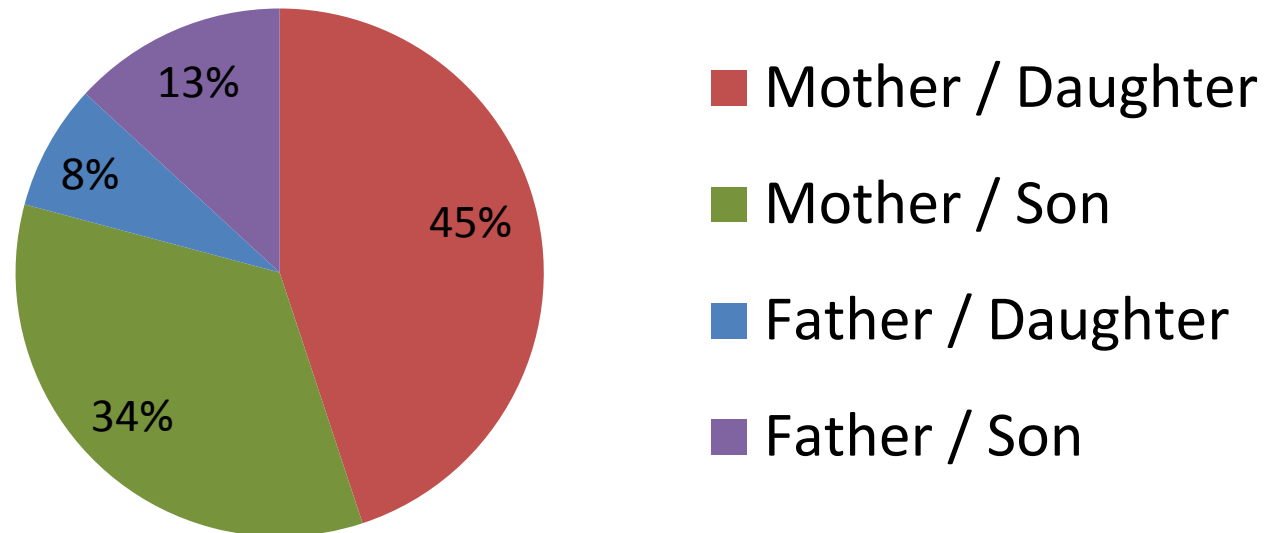
Procedure

1
- 8 weeks before school
- Students recruited by email and letter

2
- 4 weeks before school
- Dyads randomized to condition
- Parents complete survey and intervention

3
- 1 month after start of school
- Students complete 1st follow-up survey

4
- 6 months after start of school
- Students complete 2nd follow-up survey

Measures

- Parent outcomes:
  - Intentions to communicate
  - Perceptions of students' drinking in college

- Student outcomes:
  - Parent communication
    - 20 items (Yes / No format)
    - e.g., "How to handle offers of alcoholic drinks," "How alcohol might affect my goals."
  - Drinks per week (DDQ; Collins et al., 1985)

Parent Intervention Summary

- Personalized normative feedback (PNF):
  - Perceptions of own child's drinking and actual student norms
  - Own approval of student drinking, perceptions of other parents approval, actual norm
  - Own alcohol communication, perceptions of other parent's communication, actual norm
- Advice for discussing alcohol with student

Students' Alcohol Use

- You estimate that your daughter will drink **0 drinks** per week during her first year in college.

- The typical female student reports drinking **4.8 drinks** per week.
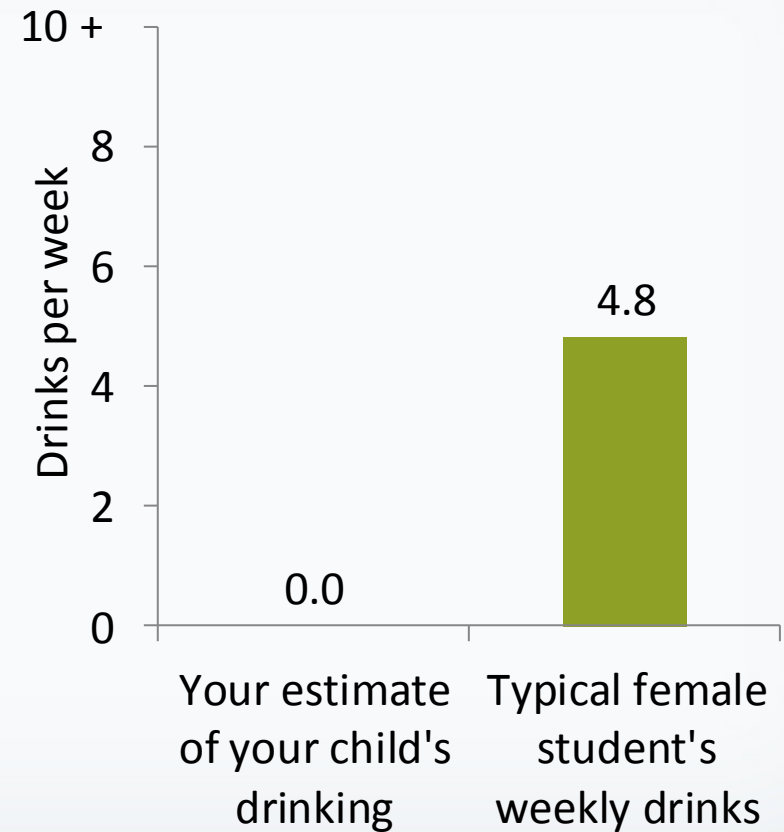
67% of parents underestimate how much their own daughter drinks on a typical week.

10% of female students drink 16 or more drinks per week.

How often is it acceptable for students to drink?

- You believe it is acceptable for your daughter to drink alcohol **once a month.**

- You report that a typical parent believes is it acceptable for his or her daughter to drink **once a week.**

- According to parents surveyed, parents typically report that it is acceptable for their daughter to drink **4 to 6 times a year.**
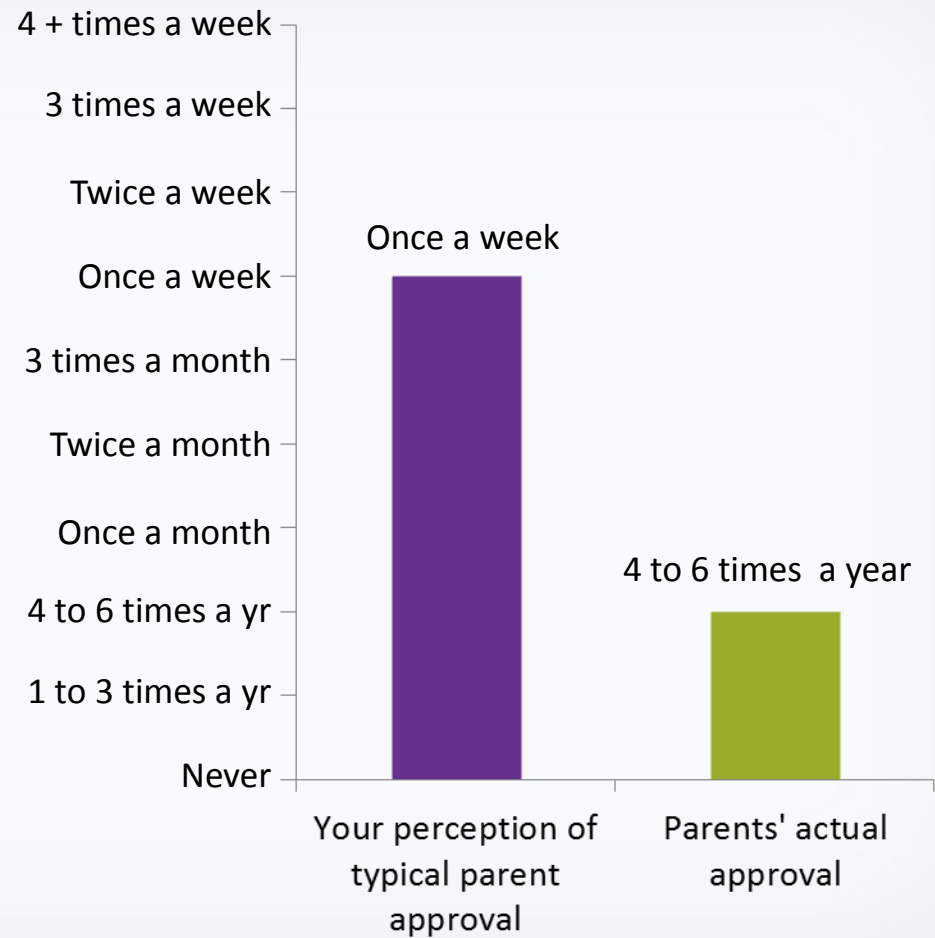
68% of parents overestimate how often other parents think it is acceptable for their own child to drink.

Before your child leaves for college:

- Avoid lecturing or telling your child what they should do and think. Instead listen to your student in a non-judgmental manner. Ask open-ended questions about their opinions toward alcohol use and how they plan to make decisions about alcohol in college.

- Ask your child how they might handle hypothetical alcohol situations. For example, if someone offers them a drink, or if their friends/roommates choose to frequently party.

Before your child leaves for college:

- Discuss how drinking can affect relationships and students' academic, career, athletic or personal goals. Bear in mind that although it is useful to talk about the risks and consequences of alcohol use, students may not respond well to fear tactics.

- If your child does drink, consider discussing strategies they might use to drink more safely, for example:
  - deciding not to go beyond a set number of drinks
  - drinking slowly and spacing out drinks over time
  - not drinking on an empty stomach

Once your child is at college:

- Stay in regular contact throughout the semester.
- Ask your child about their academic performance, what kind of social activities they are involved in, and alcohol use by their friends and roommates.

- Encourage your student to attend classes regularly and get involved in non-alcohol related social activities, such as community service.

Control Group

- Provided educational information about general health issues facing college students.
  - Guidelines for healthy lifestyle
  - Exercise norms
  - Diet norms
  - College resources for healthy lifestyle

Results: Alcohol Communication
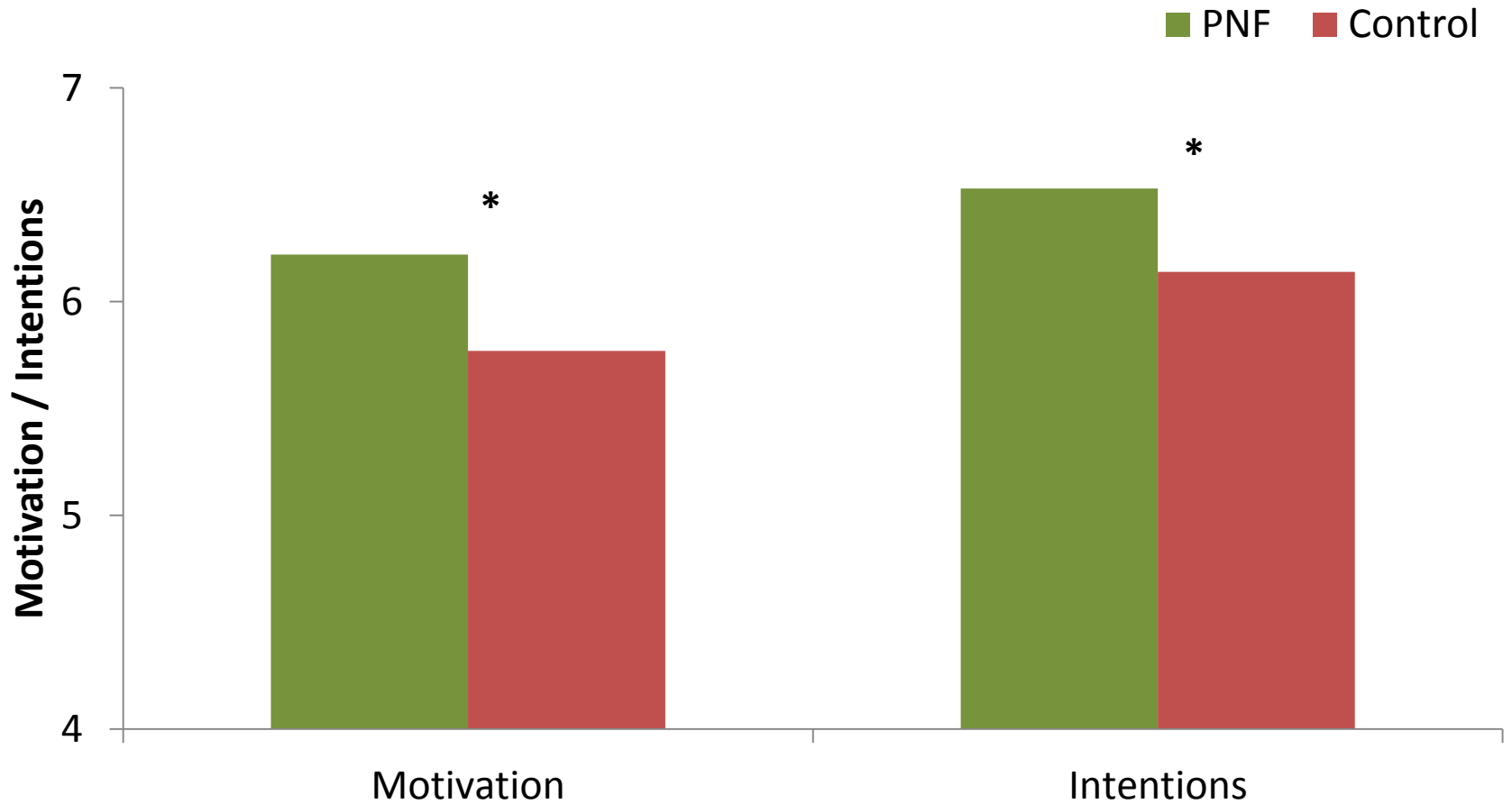
* $p < 0.05$

Student Outcomes

- Limited effects
  - No effects for students who were moderate to heavy drinkers before college.
  - Males reported greater parent communication post intervention
  - No differences in alcohol outcomes

Students' Perceptive

- More permissive communication common:
  - "To not drink too much. To be safe while drinking"
  - "Don't over do it."
  - "Be careful when drinking"
  - "She trusts me in making the right decisions"

- Control parents discussed alcohol.

Summary

- Parents are amenable to web-based normative feedback

- Parents who received PNF report greater motivation to discuss alcohol

- Male students report discussing more alcohol topics with parents

- No post interventions differences in alcohol use

Study 3

- Examines the effects of an in person social norms parent intervention.

- Randomized control design study

- Assesses student outcomes up to 6 months post intervention

- Ongoing data collection

- Does an in-person norms intervention paired with tips on how to communicate result in greater parent communication and reductions in student alcohol risk during the transition to college?

Participants (*N* = 375 students)

- Student Demographics:
  - Mean age = 17.7 yrs
  - 60.3% Female
  - 62.7% Caucasian
  - 25.1% Non-drinkers
- Intervention Parent Demographics:
  - 66.6% Female

Procedure

1
- 3 weeks before summer orientation
- Students recruited by email and letter

2
- 7 to 9 weeks before school
- Parents attended 1 hour session during orientation

3
- 1 month after start of school
- Students complete 1st follow-up survey

4
- 6 months after start of school
- Students complete 1st follow-up survey

Intervention Content

- Interactive presentation
- Normative feedback
  - How much do you think the typical student drinks?
  - How much will your child drink?
  - How much do you think it is acceptable for your child to drink?
  - How much does a typical parent think it is acceptable for his or her child to drink?

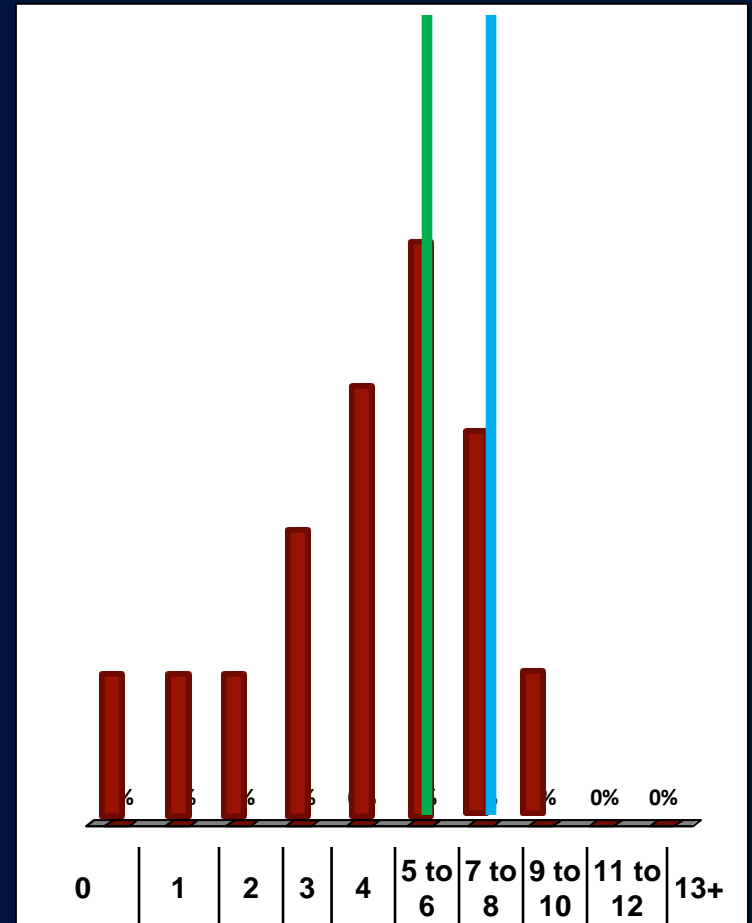# How many drinks per week do you think the **typical female student** consumes?

All women ~ **5 drinks per week**

Women who drink ~ **8 drinks per week**

17% of **female students** drink **10+ drinks per week**

How many drinks per week will **your daughter** consume in college?

All women ~ **5 drinks per week**

Women who drink ~ **8 drinks per week**

17% of **female students** drink **10 or more drinks per week**
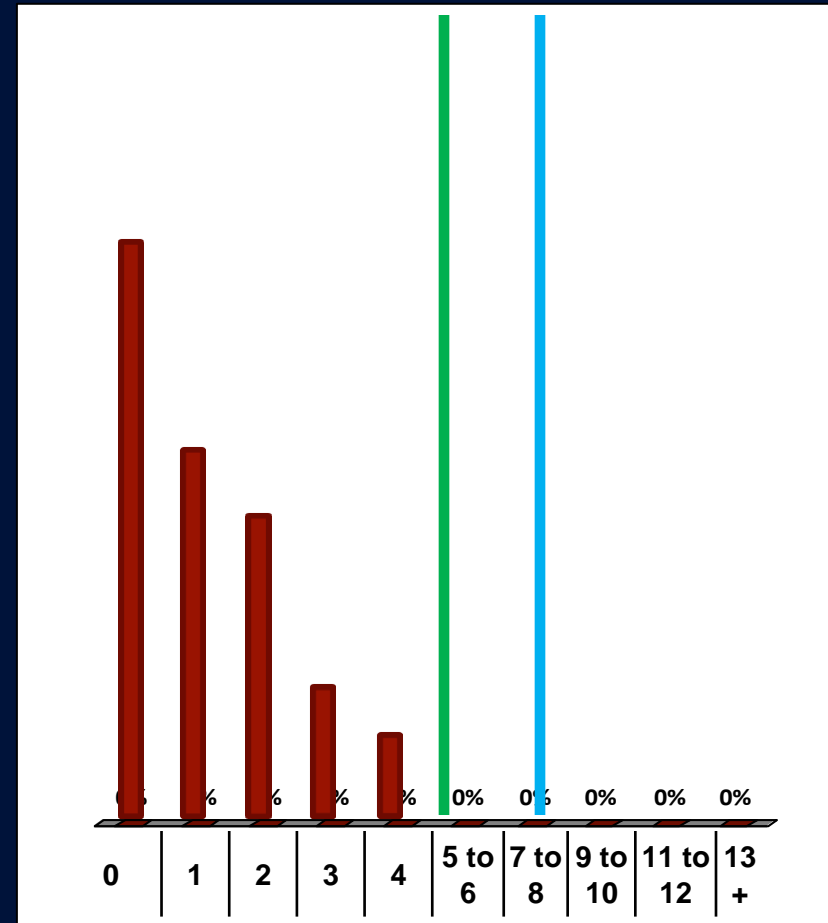
Key Points

1. **Talk about drinking**
   - You are the expert
   - Starting a conversation
   - Testing assumptions

2. **Attitudes and Expectations**
   - Communicate expectations
   - More permissive attitudes associated with greater drinking

3. **Ongoing conversations**
   - Hypothetical situations
   - Parents matter

1 month Student Data

Abstainers
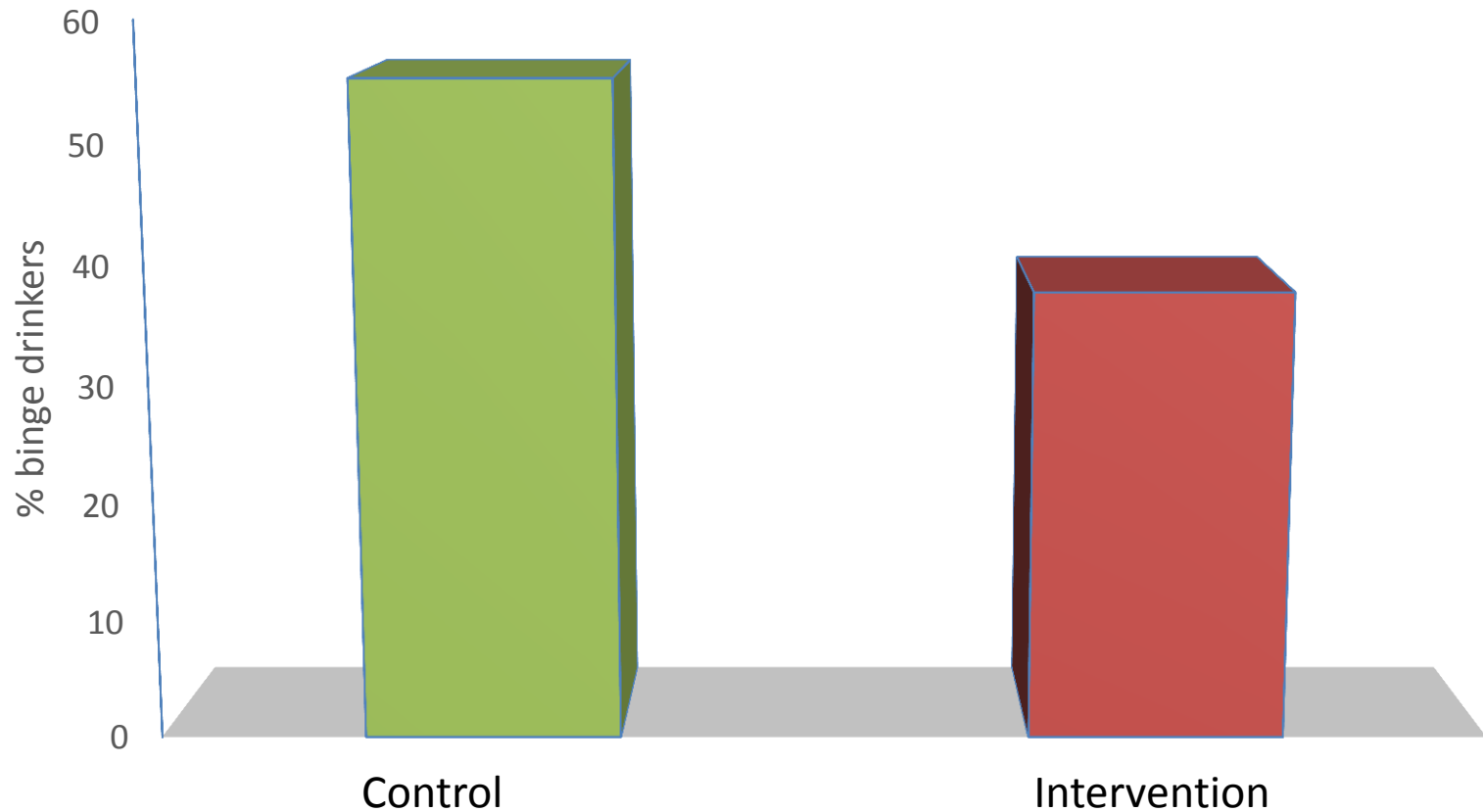
Summary

- Evidence of positive short-term effects
  - 6 month data
- Effects not due to increases in monitoring or communication.

Take Away

- Norms-based PBIs may be useful for motivating conversations, but may not be sufficient unless paired with information on content.
  - Encouraging less permissive communication may be beneficial.
- More research needed.

Thank you!

Questions?

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Common Parent Questions

- Should I talk about my own college drinking?

- Why do students drink?

- What about marijuana and other drugs?

References

Abar, C., & Turrisi, R. (2008). How important are parents during the college years? A longitudinal perspective of indirect influences parents yield on their college teens' alcohol use. *Addictive Behaviors, 33*, 1360-1368.

American College Health Association (ACHA). (2012). *National College Health Assessment, Fall 2012 Reference Group Data Report* http://www.acha-ncha.org/docs/ACHA-NCHA-II_ReferenceGroup_DataReport_Fall2012.pdf

Baer, J. S., Stacy, A., & Larimer, M. E. (1991). Biases in the perception of the drinking norms among college students. *Journal of Studies on Alcohol, 52*(6), 580-586.

Booth-Butterfield, M., & Sidelinger, R. (1998). The influence of family communication on the college-aged child: Openness, attitudes and actions about sex and alcohol. *Communication Quarterly, 46*(3), 295-308. doi: 10.1080/01463379809370103

Berkowitz, A. D. (2004). The social norms approach: Theory, research, and annotated bibliography. Retrieved from http://www.alanberkowitz.com/articles/social_norms.pdf

Boyle, J. R., & Boekeloo, B. O. (2006). Perceived parental approval of drinking and its impact on problem drinking behaviors among first-year college students. *Journal of American College Health, 54, 238–244.*doi:10.3200/JACH.54.4.238-244

Boyle, J. R., & Boekeloo, B. O. (2009). The association between parent communication and college freshmen's alcohol use. *Journal of Drug Education, 39*(2), 113-131. doi: Doi 10.2190/De.39.2.A

Bylund C. L., Imes R. S., & Baxter L. A. (2005). Accuracy of parents' perceptions of their college student children's health and health risk behaviors. *Journal of American College Health*, *54*(1), 31-37.

Cialdini, R. B, Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, *58*, 1015-1026.

Collins, R. L., Parks, G. A., & Marlatt, G. A. (1985). Social determinants of alcohol consumption: The effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology, 53*(2), 189-200.

Cremeens, J. L., Usdan, S. L., Brock-Martin, A., Martin, R. J., & Watkins, K. (2008). Parent-child communication to reduce heavy alcohol use among first-year college students. *College Student Journal, 42*(1), 152-163.

Ham, L. S., & Hope, D. A. (2003). College students and problematic drinking: A review of the literature. *Clinical Psychology, 23*, 719-759.

Hingson, R. W., Zha, W., & Weitzman, E. R. (2009). Magnitude of and trends in alcohol-related mortality and morbidity among U.S. college students ages 18-24, 1998-2005. *Journal of Studies on Alcohol and Drugs, 70*(16), 12-20.

Hummer, J. F., LaBrie, J. W., & Ehret, P. J. (2013). Do as I say, not as you perceive: Examining the roles of perceived parental knowledge and perceived parental approval in college students' alcohol-related approval and behavior, *Parenting: Science and Practice, 13*(3), 196-212.

Ichiyama, M. A., Fairlie, A. M., Wood, M. D., Turrisi, R., Francis, D. P., Ray, A. E., & Stanger, L. A. (2009). A randomized trial of a parent-based intervention on drinking behavior among incoming college freshman. *Journal of Studies on Alcohol and Drugs, 16*, 67-76.

Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2008). *Monitoring the future national results on adolescent drug use: Overview of key findings, 2007* (NIH Publication No. 08-6418). Bethesda, MD: National Institute on Drug Abuse.

Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2012). *Monitoring the Future national survey results on drug use, 1975-2011: Volume II, College students and adults 19-50*

Kandel, D. B., & Andrews, K. (1987). Processes of adolescent socialization by parents and peers. *International Journal of the Addictions, 22*(4), 319-342.

LaBrie, J. W., Hummer, J. F., Lac, A., Ehret, P. J., & Kenney, S. R. (2011). Parents know best, but are they accurate? Parental normative misperceptions and their relationship to students' alcohol-related outcomes. *Journal of Studies on Alcohol and Drugs, 72*(4), 521-529.

Lewis, M. A., Neighbors, C., Geisner, I. M., Lee, C. M., Kilmer, J. R., & Atkins, D. C. (2010). Examining the associations among severity of injunctive drinking norms, alcohol consumption, and alcohol-related negative consequences: The moderating roles of alcohol consumption and identity. *Psychology of Addictive Behaviors, 24*(2), 177-189. doi: 10.1037/a0018302

Linkenbach, J. W., Perkins, H. W., & DeJong, W. (2003). Parent's perception of parenting norms: Using the social norms approach to reinforce effective parenting. In H. W. Perkins (Ed.), *The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians* (pp. 247-258). San Francisco, CA: Jossey-Bass.

Mallett, K. A., Ray, A. E., Turrisi, R., Belden, C., Bachrach, R. L., & Larimer, M. E. (2010). Age of drinking onset as a moderator of the efficacy of parent-based, brief motivational, and combined intervention approaches to reduce drinking and consequences among college students. *Alcoholism: Clinical and Experimental Research, 34*(7), 1154-1161.

Miller-Day, M. (2008). Talking to youth about drugs: What do late adolescents say about parental strategies? *Family Relations, 57*(1), 1-12.

Miller-Day, M., & Kam, J. A. (2010). More than just openness: Developing and validating a measure of targeted parent-child communication about alcohol. *Health Communication, 25*(4), 293-302. doi: 10.1080/10410231003698952

Napper, L. E., Grimaldi, E. M., & LaBrie, J. W. (in press). Parents' and students' perceptions of college alcohol risk: The role of parental risk perception in intentions to communicate about alcohol. *Addictive Behaviors*.

Napper, L. E., Hummer, J. F., Chithambo, T. P., & LaBrie, J. W. (2014). Perceived parent and peer marijuana norms: The moderating effect of parental monitoring during college. *Prevention Science.* Advanced online publication.

Napper, L. E., Hummer, J. F., Lac, A., & LaBrie, J. W. (2013). What are other parents saying? Perceived parental communication norms and the relationship between alcohol-specific parental communication and college student drinking. *Psychology of Addictive Behaviors*.

Neighbors, C., Lee, C. M., Lewis, M. A., Fossos, N., & Larimer, M. E. (2007). Are social norms the best predictor of outcomes almong heavy-drinking college students. *Journal of Studies on Alcohol and Drug*, *68*(4), 556-565.

Padilla-Walker, L. M., Nelson, L. J., Madsen, S., & Barry, C. M. (2008). The role of perceived parental knowledge on emerging adults' risk behaviors. *Journal of Youth and Adolescence, 37, 847– 859. doi:* 10.1007/s10964-007-9268-1

Perkins, H. W. (2002). Surveying the damage: A review of research on consequences of alcohol misuse in college populations. *Journal of Studies on Alcohol, 14*, 91-100.

Prentice, D. A. (2008). Mobilizing and weakening peer influence as mechanisms for changing behavior: Implications for alcohol intervention programs. In M. J. Prinstein & K. A. Dodge (Eds.), *Understanding peer influence in children and adolescents* (pp. 161-180). New York: Guilford Press.

Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology, 64*(2), 243-256.

Reimuller, A., Hussong, A., & Ennett, S. T. (2011). The influence of alcohol-specific communication on adolescent alcohol use and alcohol-related consequences. *Prevention Science, 12*(4), 389-400. doi: 10.1007/s11121-011-0227-4

Small, M. L., Morgan, N. R., Abar, C. C., & Maggs, J. L. (2011). Protective effects of parent-college student communication during the first semester of college. *Journal of American College Health, 59*(6), 547-554.

Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*(4), 1072-1085.

Testa, M., Hoffman, J. H., Livingston, J. A., & Turrisi, R. (2010). Preventing college women's sexual victimization through parent based intervention: A randomized controlled trial. *Prevention Science, 11*(3), 308-318. doi: 10.1007/s11121-010-0168-3

Turrisi, R., Jaccard, J., Taki, R., Dunnam, H., & Grimes, J. (2001). Examination of the short-term efficacy of a parent intervention to reduce college student drinking tendencies. *Psychology of Addictive Behaviors, 15*(4), 366-372. doi: 10.1037/0893-164X.15.4.366

Turrisi, R., Wiersma, K. A., & Hughes, K. K. (2000). Binge-drinking related consequences in college students: Role of drinking beliefs and mother-teen communications. *Psychology of Addictive Behaviors, 14,* 342–355. doi:10.1037/0893-164X.14.4.342

Walls, T. A., Fairlie, A. M., & Wood, M. D. (2009). Parents do matter: A longitudinal two-part mixed model of early college alcohol participation and intensity. *Journal of Studies on Alcohol, 70*(6), 908-918.

Windle, M. (2000). Parental, sibling, and peer influences on adolescent substance use and alcohol problems. *Applied Developmental Science*, *4,* 98-110.

Wood, M. D., Read, J. P., Palfai, T. P., & Stevenson, J. F. (2001). Social influence processes and college student drinking: The meditational role of alcohol outcome expectations. *Journal of Studies on Alcohol, 62*, 32-43.