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Alcohol Abstinence or Harm-Reduction? Parental Messages for College-Bound Light Drinkers

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Abstract

Parental communications about alcohol can have a significant impact on college students' alcohol use; however, it is unclear what types of communication may be most beneficial for reducing alcohol risk, particularly among students who have already initiated alcohol use. The present research examines differences in alcohol use and employment of drinking protective behavioral strategies between pre-college matriculation high school seniors receiving predominantly abstinence parent messaging and students primarily receiving harm-reduction parent messaging. Students who identified as light drinkers were recruited during their last month in high school and completed an online assessment of alcohol use and parent alcohol communication. Analyses revealed that, in comparison to light drinkers who primarily received harm-reduction messaging from parents, light drinkers who received more abstinence messaging reported less frequent alcohol use, lower peak alcohol consumption, and greater use of protective drinking strategies aimed at changing the way they drank and avoiding serious hazards associated with drinking. Findings from this study underscore the utility of messages related to abstinence even for parents aware that their children have had previous experiences with alcohol and highlights the need for longitudinal research assessing additional mechanisms associated with message efficacy among light, moderate and heavy drinking students transitioning to college.

Keywords

Parent communication; Alcohol use; Pre-college alcohol involvement

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Statement 2: Contributors

Joseph LaBrie, Sarah Boyle, and Lucy Napper have each contributed significantly to the preparation of the manuscript. Specifically, Joe LaBrie outlined the paper, advised analyses, and contributed to final versions of the introduction and conclusions sections. Sarah Boyle conducted all statistical analyses wrote the initial draft of the manuscript in its entirety. Lucy Napper wrote the abstract and edited all sections of the manuscript.

Statement 3: Conflict of Interest

All authors declare that they have no conflicts of interest.

1. Introduction

Research over the past decade has established the importance of parent–teen alcohol communication in preventing alcohol-related problems and begun to examine many of the critical how and why questions essential for informing alcohol-specific parenting practices (see Suchman, Pajulo, & Mayes, 2013). A growing alcohol communication literature seeks to elucidate which type of alcohol message should be communicated to teens and emerging adults for the greatest benefit. Alcohol abstinence messages emphasize disapproval for any underage drinking. In contrast, harm reduction messages focus on promoting safer-drinking practices and moderation in alcohol consumption (Witkiewitz & Alan Marlatt, 2006). The type of alcohol messages best communicated to high school and college students, who vary along a continuum of alcohol experience, is not yet empirically clear and remains a topic of heated debate among both parents and social scientists (Abar, Morgan, Small, & Maggs, 2012; Reimuller, Hussong, & Ennett, 2011).

Parental abstinence messages when in the form of clear and consistent disapproval have been found to be effective in inhibiting or delaying the onset of alcohol use among alcohol inexperienced youth (e.g. Abar, Abar, & Turrisi, 2009; Wood, Read, Mitchell, & Brand, 2004). Meanwhile, there is an abundance of evidence demonstrating that safer-drinking and harm-reduction messages administered by schools, colleges, and treatment centers effectively bolster safer-drinking practices and reduce negative consequences among alcohol experienced, older adolescents (e.g. Baer, Baer, Marlatt, & McMahon, 1993; Cronin, 1996; Dimeff, Baer, Kivlahan, & Marlatt, 1999). Findings from one recent study, however, suggest that parental abstinence messages may be more effective in decreasing alcohol related negative consequences among undergraduate drinkers than are messages actually focused on harm reduction (Abar et al., 2012).

Although not a group that has received explicit focus in the parent-teen alcohol communication literature, recent high school graduates who describe themselves to be “light drinkers” during the summer before college have been identified as one high-risk group for college drinking escalation as a consequence of their pre-college consumption tendencies (Testa & Hoffman, 2012). In fact, one recent prospective study found that 41% of the recent high school graduates who consumed just a few weekly drinks during the summer prior to college advanced to moderate or heavy drinking once on campus (Stapleton, Turrisi, Cleveland, Ray, & Lu, 2013). Identification of the alcohol messaging strategy most effective for pre-college light drinkers may critically aid parents in preventing drinking escalation.

While the summer prior to college matriculation has been flagged as a particularly significant period for parent-child alcohol communication, with communications during this period potentially influencing drinking behavior throughout the student's college years (Turrisi et al., 2013; Turrisi & Ray, 2010), parents of light-drinking students may be at a communication crossroads of sorts. Data demonstrates that parents more frequently speak about alcohol abstinence and deliver negative alcohol messages during their adolescent's middle school and early high school years (Jackson, Henriksen, & Dickinson, 1999). Then, as students graduate high school and enter college, some parents shift focus to more

permissive harm-reduction messages (Miller-Day, 2008), while other parents retain the abstinence strategy (Reimuller et al., 2011). It is plausible that some parents of light drinkers may be motivated to increase harm-reduction messaging during the transition to college due to concerns about the ubiquity of alcohol use on college campuses (NIAAA, 2007). Further, while abstinence messages have found to be effective in delaying alcohol initiation (Abar, Abar, & Turrisi, 2009; Wood, Read, Mitchell, & Brand, 2004), their efficacy for preventing escalations in alcohol use is unclear among students who are already drinking.

The current study sought to identify the types of parental alcohol messages most effective for self-identified light drinking students during the transition into college. In keeping with previous research, we hypothesized that light drinkers whose parents focused messages on alcohol abstinence would exhibit less extreme peak drinking and use alcohol less frequently than light drinkers with parents focused on harm-reduction messaging. In an effort to build on recent findings by Abar and colleagues (2012), we also tested whether light drinkers receiving alcohol abstinence messages would report greater use of drinking protective harm-reduction strategies than did those receiving harm-reduction messages.

2. Method

2.1. Participants and Procedure

In the initial phase of a larger longitudinal alcohol intervention study, members of the incoming freshman class ($N = 1233$) at a mid-sized university on the west coast were invited to complete a screening survey online during May and June before their college matriculation. Potential participants were emailed and mailed invitation letters that outlined the study purpose, procedures, compensation, and contained a URL and PIN for accessing an online consent form and screening survey. Participants ages 18 years and older consented electronically and parental consent was obtained for students under the age 18. Of those invited, 767 students (62%) completed the initial screening survey. Based on the criteria for the larger alcohol study, to be eligible to receive the baseline survey students had to be single (i.e., not married), under the age of 21, residing with at least one parent or guardian, and planning to attend a college summer orientation with a parent. In total, 534 eligible participants completed the baseline survey for which they received \$30. Based on self-report, 26% had never tried alcohol, 27% were current abstainers, 31.6% were light drinkers, and 15.4% were moderate/heavy drinkers. As we were interested in the influence of parent communication among light drinkers, the final sample was 168 students (60.4% female, Mean age = 17.75 ($SD = 0.48$)) who self-identified as light drinkers and whose ethnic/racial makeup was similar to campus demographics (59.9% Caucasian, 16.6% Hispanic, 8.3% Asian, 7.2% African American, and 8% multiracial/other).

2.2. Measures

2.2.1. Parents' primary alcohol message type—Participants indicated how often their parents communicated with them about four alcohol abstinence/disapproving related topics (e.g., “Choosing friends that do not use alcohol; $\alpha = .89$) and four safe-drinking/harm reduction related topics (e.g., “The benefits of determining, in advance, not to exceed a set number of drinks”; $\alpha = .83$) during the past 3 months. Response options representing

increasing communication frequencies ranged from *Never* (1) to *10 or more times* (7). Frequencies of the four abstinence messages and the four safe-drinking messages were averaged and compared. A new variable, Primary Message Type, was created to indicate whether participants more frequently received alcohol abstinence ($n = 84$) or safe-drinking ($n = 84$) messages from their parents. The dichotomous Primary Message Type variable was found ideal for analysis as it was not confounded by overall frequency of parental alcohol communication, which has been associated with student alcohol use cross-sectionally among proactive parents aware of their students increased alcohol use (Abar, Fernandez, & Wood, 2012). Frequency of parental alcohol communication is measured separately for statistical control purposes.

2.2.2. Frequency of parental alcohol communication—Participants were asked, “How often have your parents initiated a conversation about alcohol with you during the past 3 months?” Response options representing increasing communication frequencies ranged from *Never* (1) to *More than once a week* (7).

2.2.3. Frequency and peak alcohol use—Participants were asked, “What is the maximum number of drinks you drank during any one drinking occasion during the past month?” A second question asked participants to indicate how often they consumed alcohol during the past year.

2.2.4. Protective behavioral strategies—The Protective Behavioral Strategies Scale (PBSS; Martens et al., 2005) was used to assess participants’ use of cognitive-behavioral strategies to reduce risky alcohol consumption. Participants used a 5-point response scale ranging from 1 (never) to 5 (always) to indicate how often they engage in 15 specific behaviors when using alcohol or ‘partying’. This measure is divided into the three subscales: Stopping/Limiting Drinking ($\alpha = .82$; e.g., “Determine not to exceed a set number of drinks”), Manner of Drinking ($\alpha = .68$; e.g., “Avoid mixing different types of alcohol”), and Serious Negative Consequences ($\alpha = .80$; e.g., “Know where your drink has been at all times”).

3. Results & Conclusions

An omnibus MANCOVA adjusted for participant sex and parents overall communication frequency indicated that together, the five dependent variables (weekly drinks, peak drinking, PBS-stopping/limiting drinking, PBS-manner of drinking, and PBS-serious negative consequences) were significantly associated with primary alcohol message type, Wilk's Lambda = .901, $F(5,160) = 3.52$, $p = .005$, $\eta^2 = .09$. Univariate tests followed to examine the predictions that light drinkers receiving more abstinence messages from their parents would report less extreme peak drinking episodes during the past month, consume alcohol less frequently during the past year, and use more protective behavioral strategies while drinking than would light drinkers primarily receiving harm-reduction messages. Table 1 presents respective unadjusted means and standard deviations, as well as adjusted means and standard errors for each outcome variable as a function of parents’ primary alcohol message type. Table 2 presents the full results for each ANCOVA model.

Although all students in this study identified as “light drinkers” those receiving more frequent harm-reduction messages reported significantly greater numbers of drinks and drank marginally more often than did those receiving more alcohol abstinence and disapproving messages from their parents. Thus, in addition to delaying alcohol initiation among alcohol inexperienced students, results from study suggest that abstinence and disapproval-related alcohol messages may also be effective in reducing drinking among light drinking students. Given that 84.6 percent of our larger sample of recent graduates identified as current non-drinkers or light drinkers, this finding is particularly important. To the extent that our sample is proportionally representative of students during the transition to college, results suggest that messages focused on abstinence and disapproval may be the more efficacious message type for this population.

Further, light drinkers who received more harm-reduction messages from their parents also reported using fewer protective behavioral strategies related to the manner of drinking and avoiding negative consequences than did those who received more abstinence messages. These findings are especially concerning since these particular strategies appear to be the most beneficial for reducing alcohol risk (Napper, Kenney, Lac, Lewis, & Labrie, 2014). Overall, our results are consistent with findings by Abar and colleagues (2012) and contribute to a growing literature suggesting more permissive parental alcohol attitudes and perceived parental approval for alcohol use are associated with greater alcohol consumption and more alcohol-related consequences among young adults. Studies have found that the more accepting students perceive their parents to be of alcohol use, the more likely they are to drink more frequently (Abar et al., 2009), binge drink (Abar, Turrisi, & Mallett, 2014) experience alcohol related consequences (LaBrie, Hummer, Neighbors, & Larimer, 2010), and exhibit problem drinking (Boyle & Boekeloo, 2006).

Our method and analyses, although straight forward, were limited in scope and sophistication in three major ways. First, we lacked the statistical power to control for additional demographic variables or test logical interactions between predictors (e.g. Primary Message Type by Sex, etc.). Second, the scale items assessing frequencies of parents’ alcohol abstinence and harm-reduction messages were used for the first time in this study and had not been validated previously. Additionally, analyses were also focused only on the type of alcohol message participants reported their parents using more frequently. Thus, potential mixed messages from parents containing both abstinence and harm-reduction components were not examined in this study. Third, this study was cross-sectional, and thus directionality of relationships cannot be determined. More thoroughly tested, psychometrically-sound measures of parental alcohol-messages and a larger cohort of recent high school graduates would allow for a more sophisticated longitudinal investigation building on these preliminary findings. Prospective research which follows high school graduates through their first year of college and assesses additional familial factors potentially related to parental alcohol messages (e.g. parents’ alcohol use, communication style, etc.) may provide a more complete and nuanced understanding of the mechanisms by which parents’ alcohol abstinence and safe-drinking messages may influence light, as well as moderate, and heavy drinkers’ alcohol-related decisions as they navigate campus environments laden in potential alcohol-related risks and consequences.

Despite limitations, this study is the first to examine differences in alcohol consumption and the use of protective behavioral strategies as a function of parents' primary alcohol message strategy. Given that a substantial number of light drinkers transition to moderate or heavy drinking once in college (Stapleton et al., 2013), findings that may inform parents how best to communicate about alcohol with this population are needed. Indeed, the even split in parents' of light drinking students preferences for alcohol abstinence ($n = 84$) and harm-reduction ($n = 84$) messages suggests that parents may perceive a grey area with regard to the more efficacious alcohol communication strategy for the crucial period leading up to their child's college send-off. In contrast, among the pre-college moderate ($n=77$) and heavy ($n=5$) drinking students in the larger sample not of focus in this investigation, the majority ($n=63$) reported harm-reduction as their parents' primary alcohol message type. Findings from this study, underscore the utility of messages related to abstinence and disapproval even for parents aware that their children have had previous experiences with alcohol and encourage future research to examine the utility of alcohol abstinence messages for moderate and heavy drinking students during the transition to college.

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Research Highlights

Alcohol Abstinence or Harm-Reduction? Parental Messages for College-Bound Light Drinkers

- 1) We examine parental alcohol communications among pre-college light drinkers
- 2) Parents were evenly split in terms of primary alcohol communication strategy
- 3) Light drinkers receiving more abstinence messages drank less
- 4) Those receiving more harm-reduction messages used fewer protective strategies

Table 1

Differences in peak drinks consumed, past year frequency of alcohol consumption, and use of protective behavioral strategies as a function of parents' alcohol message type among self-identified "light" high school drinkers

| | Unadjusted M (SD) | | Adjusted ^a M (SE) | | M ^a Diff (SE) |
|----------------------------------|----------------------------------|------------------------------|----------------------------------|------------------------------|--------------------------|
| | Message Type | | Message Type | | |
| | Alcohol Abstinence <i>n</i> = 84 | Harm-Reduction <i>n</i> = 84 | Alcohol Abstinence <i>n</i> = 84 | Harm-Reduction <i>n</i> = 84 | |
| Alcohol Use Frequency | 3.36 (1.36) | 3.79 (1.58) | 3.35 (.16) | 3.80 (.16) | -0.45 (.23)* |
| Peak Drinks One Occasion | 3.96 (3.60) | 5.33 (3.84) | 4.05 (.41) | 5.24 (.41) | -1.18(.23)* |
| PBSS- Stopping/Limiting Drinking | 4.14 (1.04) | 4.00 (1.13) | 4.12 (.12) | 4.02 (.12) | 0.10 (.17) |
| PBSS- Manner of Drinking | 4.22 (.87) | 3.87 (.96) | 4.21 (.10) | 3.88 (.10) | 0.33 (.15)* |
| PBSS- Serious Harm Reduction | 5.64 (.72) | 5.23 (1.06) | 5.63 (.10) | 5.25 (.09) | 0.37 (.14)* |

^a Adjusted for participant sex and parents' overall alcohol communication frequency.

* *p* < .05.

Table 2

Analyses of Covariance for Peak Drinking, Frequency of Alcohol Use, and Protective Behavioral Strategies by Parents' Primary Alcohol Message Type Controlling for Participant Sex and Parents' Overall Alcohol Communication Frequency

| Model/Source | SS | df | MS | F | p |
|-------------------------------------|-----------|-----------|-----------|----------|----------|
| <i>Peak Drinks Consumed</i> | | | | | |
| Sex | 80.22 | 1 | 80.22 | 5.94 | .016 |
| Communication Frequency | 0.54 | 1 | 0.54 | 0.04 | .842 |
| Alcohol Message Type | 56.33 | 1 | 56.33 | 4.17 | .043 |
| Error | 2214.64 | 164 | 13.50 | | |
| Total | 6005.00 | 168 | | | |
| <i>Frequency of Alcohol Use</i> | | | | | |
| Sex | 1.54 | 1 | 1.54 | 0.69 | .405 |
| Communication Frequency | 1.79 | 1 | 1.79 | 0.82 | .368 |
| Alcohol Message Type | 8.18 | 1 | 8.18 | 3.71 | .056 |
| Error | 361.55 | 164 | 2.21 | | |
| Total | 2523.00 | 168 | | | |
| <i>PBSS- Limiting Drinking</i> | | | | | |
| Sex | 0.86 | 1 | 0.86 | 0.73 | .395 |
| Communication Frequency | 1.46 | 1 | 1.46 | 1.24 | .268 |
| Alcohol Message Type | 0.40 | 1 | 0.40 | 0.56 | .561 |
| Error | 194.49 | 164 | 1.19 | | |
| Total | 2978.66 | 168 | | | |
| <i>PBSS- Manner of Drinking</i> | | | | | |
| Sex | 2.53 | 1 | 2.53 | 2.99 | .086 |
| Communication Frequency | .01 | 1 | 0.01 | 0.01 | .906 |
| Alcohol Message Type | 4.39 | 1 | 4.39 | 5.21 | .024 |
| Error | 137.65 | 163 | 0.84 | 0.02 | |
| Total | 2880.28 | 167 | | | |
| <i>PBSS- Serious Harm Reduction</i> | | | | | |
| Sex | 3.83 | 1 | 3.83 | 0.03 | .031 |
| Communication Frequency | 0.27 | 1 | 0.27 | 0.56 | .564 |
| Alcohol Message Type | 5.49 | 1 | 5.49 | 6.79 | .010 |
| Error | 131.78 | 163 | 0.81 | | |
| Total | 5986.444 | 167 | | | |