



Drinking norms, readiness to change, and gender as moderators of a combined alcohol intervention for first-year college students[☆]



Joel R. Grossbard^{a,*}, Nadine R. Mastroleo^b, Irene Markman Geisner^c, David Atkins^c, Anne E. Ray^d, Jason R. Kilmer^c, Kimberly Mallett^e, Mary E. Larimer^c, Rob Turrisi^e

^a Veterans Affairs/University of Washington, Department of Health Services, 1100 Olive Way, Suite 1400, Seattle, WA 98108, United States

^b Brown University, Center for Alcohol and Addiction Studies, Box G-S121-5, Providence RI 02912, United States

^c University of Washington, Department of Psychiatry and Behavioral Sciences, 1100 NE 45th Street, Suite 300, Seattle, WA 98105, United States

^d Rutgers, The State University of New Jersey, Center of Alcohol Studies, 607 Allison Road, Piscataway, NJ 08854, United States

^e The Pennsylvania State University, Biobehavioral Health and Prevention Center, 210 Biobehavioral Health Building, University Park, PA 16802, United States

HIGHLIGHTS

- Combining parent and peer interventions shows promise in reducing student drinking.
- We examine readiness to change, norms, gender as moderators of intervention efficacy.
- Significant two-way and three-way interactions were found.

ARTICLE INFO

Article history:

Received 24 January 2015

Received in revised form 11 June 2015

Accepted 27 July 2015

Available online 29 July 2015

Keywords:

Alcohol intervention

College students

Moderators

Readiness to change

Norms

ABSTRACT

Introduction: Alcohol interventions targeting college students and their parents have been shown to be efficacious. Little research has examined moderators of intervention efficacy to help tailor interventions for subgroups of students.

Method: This study is a secondary data analysis of readiness to change, drinking norms, and gender as moderators of an efficacious peer- and parent-based intervention (Turrisi et al., 2009). Students ($n = 680$) were randomized to the combined peer and parent intervention ($n = 342$) or assessment-only control ($n = 338$).

Results: The combined intervention reduced peak blood alcohol content (BAC) compared to control. Gender and norms did not moderate the relationship between the intervention and drinking. Significant interactions were found between gender, precontemplation, and intervention. Students in the combined condition with higher precontemplation had lower weekly drinking compared to those with lower precontemplation. This pattern was also found among men for peak BAC and alcohol-related consequences but not among women, indicating a three-way interaction.

Conclusion: Interventions may need to consider readiness to change and gender to optimize effectiveness.

Published by Elsevier Ltd.

1. Introduction

Heavy drinking and alcohol-related consequences continue to be significant public health problems for college students across the United States. To combat this problem, nationwide efforts have focused on the development and implementation of evidence-based alcohol interventions (American College Health Association, 2007; Turrisi, Mallett, Mastroleo, & Larimer, 2006), which have been tested within a

variety of college student populations and settings (for reviews see (Larimer & Cronce, 2002); (Larimer & Cronce, 2007a, 2007b)). For example, both the Brief Alcohol Screening and Intervention for College Students (BASICS; Dimeff, Baer, Kivlahan, & Marlatt, 1999), a brief motivational intervention, and parent-based interventions (PBI; Dumas, Turrisi, Ray, Esp, & Curtis-Schaeffer, 2013; Turrisi and Wiersma, 1999) in the form of a handbook on communication with incoming college students about alcohol have been evaluated in randomized control trials designed to reduce risky drinking with successful results (Baer et al., 2003; Dumas et al., 2013; Larimer et al., 2001; Marlatt et al., 1998; Turrisi, Abar, Mallett & Jaccard, 2009; Turrisi, Jaccard, Taki, Dunnam, & Grimes, 2001; Turrisi, Larimer, et al., 2009; Wood, Capone, Laforge, Erickson, & Brand, 2007; Wood, Read, Mitchell, & Brand, 2004; Wood et al., 2010).

[☆] Acknowledgments: This research was supported in part by a grant from the National Institute on Alcohol Abuse and Alcoholism R01 AA 12529 awarded to Rob Turrisi.

* Corresponding author at: VA Puget Sound Health Care System 1100 Olive Way, Suite 1400 Seattle, WA 98101, United States.

E-mail address: Joel.Grossbard@va.gov (J.R. Grossbard).

In an attempt to strengthen overall intervention effects, researchers have begun to examine the utility of combining interventions (e.g. Wood et al., 2010). For example, a parent-based intervention (PBI) delivered in conjunction with BASICS may be effective in reducing alcohol-related problems (Turrisi, Abar, et al. 2009; Turrisi, Larimer, et al., 2009). The variation in student responses to alcohol interventions necessitates evaluation of theoretically- and empirically-driven moderators of intervention efficacy, which has only recently been addressed in the literature (Borsari et al., in press; Carey, Carey, Maisto, & Henson, 2006; Dunn, Deroo, & Rivara, 2001; Geisner, Larimer, & Neighbors, 2004; Mallett et al., 2010, 2011). Past research has examined a number of moderators of the effectiveness of alcohol interventions on college student drinking with the majority focused on brief motivational interventions (BMI). Specifically, gender, readiness to change, and peer influences on drinking have been examined (see Borsari & Carey, 2000; Borsari, Murphy, & Barnett, 2007; Fromme & Corbin, 2004; Lee, Geisner, Lewis, Neighbors, & Larimer, 2007; Mastroleo, Murphy, Colby, Monti, & Barnett, 2011; Murphy et al., 2004; Neighbors, Larimer, & Lewis, 2004). Generally, results have been inconsistent leaving important unanswered questions about the role of these variables in predicting the impact of brief alcohol interventions on drinking behavior.

1.1. Gender

Past studies have found gender to be both a protective and risk factor as it relates to alcohol use in college students post-intervention (e.g., Borsari et al., in press; Mastroleo et al., 2011). Although several studies generally indicate women are more responsive to BMI compared to men (Blow et al., 2006; Carey, Scott-Sheldon, Elliott, Bolles, & Carey, 2009; Murphy et al., 2004), one study did not find gender moderation in drinking outcomes following BMI (Mun, von Eye, Bates, & Vaschillo, 2008). More recently, Mallett et al. (2010) examined moderators of a combined peer and parent intervention and found it worked especially well for early initiators (i.e., drank as early adolescents). Mastroleo et al. (2011) found gender significantly moderated the relationship between a booster condition and number of drinks per drinking day in the past month. Men who received a booster session reported significantly higher drinks per drinking day than men who did not receive a booster, while there was no effect for women. Finally, Borsari et al. (in press) found no moderating effect of gender when comparing BMI and Assessment-only conditions with mandated college students. These mixed results suggest continued exploration of the role gender may play in brief alcohol interventions with college students is warranted, and the way in which it may interact with additional moderators is an important next step towards identifying tailoring approaches for BMIs.

1.2. Readiness to change

An important catalyst for health behavior change is readiness to change (RTC) behavior. RTC has been conceptualized as a continuous process comprised of different stages of change that reflect one's level of motivation to change behavior (Miller & Rollnick, 2002; Prochaska & DiClemente, 1986; Prochaska & DiClemente, 1992a, 1992b). Brief alcohol interventions often target those who lack motivation to change their drinking (precontemplation), or those reporting ambivalence (contemplation), to support engagement in behaviors (action) consistent with changing their drinking. RTC has been recognized as a vital alcohol intervention target (Miller & Rollnick, 2002), and successful approaches aim to increase motivation to change alcohol use (Carey, Scott-Sheldon, Carey, & DeMartini, 2007; Kaysen, Lee, LaBrie, & Tollison, 2009; Larimer & Counce, 2007a, 2007b; Larimer, Counce, Lee, & Kilmer, 2004, 2005).

Although pretreatment levels of RTC have commonly been examined as a moderator of alcohol intervention effectiveness, results have been mixed (e.g., Carey et al., 2007; Fromme & Corbin, 2004; Maisto,

Pollock, Lynch, Martin, & Ammerman, 2001; Mastroleo et al., 2011; Monti et al., 1999). Although most studies examining RTC assess an overall level of RTC, limited research has examined specific subscales—precontemplation, contemplation, action—embedded within the readiness to change questionnaire (RTC subscales as documented in: Heather, Rollnick, & Bell (1993)). In one recent study, individuals completing a BASICS session after referral due to a campus alcohol violation were used to examine the role of specific stage designation in post-intervention drinking outcomes (Shealy, Murphy, Borsari, & Correia, 2007). Results indicated participants in precontemplation reported less weekly drinking and fewer heavy drinking episodes and alcohol related consequences than individuals in either the contemplation or action stages. However, little is known about the role different stages of change hold for incoming college students in predicting alcohol use and related harm during their first year. Given the centrality of RTC in BMIs, such as BASICS, evaluating whether individual components of RTC moderate intervention effects on drinking among first-year students may inform future intervention development and refinement.

1.3. Normative perceptions of alcohol use

Given the social context of college student drinking, normative perceptions of alcohol use have also been identified as key predictors of drinking behaviors. Normative perceptions of other's drinking are often associated with individuals' personal alcohol use, and specific interventions have targeted these beliefs in an effort to reduce problem drinking among college students (Collins, Carey, & Sliwinski, 2002; Larimer, & Counce, 2007a, 2007b; Murphy et al., 2004; Neighbors, Lewis, Bergstrom, & Larimer, 2006; Neighbors et al., 2004; Perkins, 2002; Walters, 2000; Walters, Bennett, & Miller, 2000; Walters & Neighbors, 2005; White, 2006). Fewer studies have examined pre-college descriptive norms (Read, Wood, & Capone, 2005; Sher & Rutledge, 2007; Stappenbeck, Quinn, Wetherill, & Fromme, 2010), but results suggest similar links to increased drinking.

As a central element of the BASICS intervention, studies have examined the mediational role of descriptive norms in predicting drinking behaviors (e.g., Borsari, Murphy, & Carey, 2009; Carey et al., 2007; Turrisi, Abar, et al. 2009; Turrisi, Larimer, et al., 2009; Wood et al., 2010). Yet, there is a lack of research that investigates whether pretreatment descriptive norms moderate intervention effects on subsequent alcohol use. It is possible that interventions designed to correct misperceptions might be more effective for students who report greater misperceptions of drinking norms prior to receiving a BMI. As perceived descriptive norms are significantly correlated with first-year college student alcohol use, determining whether they also moderate interventions with students as they transition to college is essential in identifying potential intervention targets (e.g., Hartzler & Fromme, 2003; Perkins & Craig, 2006; Read, Wood, Davidoff, McLacken, & Campbell, 2002; Werner, Walker, & Greene, 1993; Wood et al., 2004).

1.4. Gender, normative perceptions, and alcohol use

What has yet to be examined is how gender and normative perceptions interact among first year college students and the potential implications post-intervention. As noted, given methodological limitations and inconsistencies of findings from prior studies, further examination of gender, RTC and normative perceptions of drinking among first-year college students is needed. The current study is a planned secondary analysis of moderators on the efficacy of a combined (BASICS + PBI) intervention compared to an assessment-only control condition. Based on previous research and the findings of the main outcomes paper (see Turrisi, Abar, et al. 2009; Turrisi, Larimer, et al., 2009), we expect that baseline levels of 1) readiness to change – precontemplation, contemplation, action – will moderate intervention effects such that those with lower levels of precontemplation, and higher levels of contemplation and action – will benefit greater from the combined intervention,

Download English Version:

<https://daneshyari.com/en/article/898617>

Download Persian Version:

<https://daneshyari.com/article/898617>

[Daneshyari.com](https://daneshyari.com)