# Normative perceptions of alcohol-related consequences among college students

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## HIGHLIGHTS

- Alcohol-related consequence norms were examined in a sample of college students.
- Students overestimated the number of consequences others experienced.
- Students rated consequences as more acceptable for others than for themselves.

## ARTICLE INFO

## ABSTRACT

College students in the U.S. continue to drink in hazardous ways and experience a range of alcohol-related consequences. Personalized feedback interventions (PFIs), which often include normative components comparing personal drinking to that of similar peers, have been effective in reducing alcohol outcomes among college students. Though normative perceptions of the quantity and frequency of alcohol use have been examined in many studies, norms for alcohol-related consequences have received less attention. The current study examined self-other discrepancies (SODs) for alcohol-related consequences among college students. Participants overestimated how often alcohol-related consequences are experienced by other same-sex students on campus and rated consequences as more acceptable for others to experience than themselves. No differences in SODs were found between those who did and did not report alcohol use. Future studies should examine the efficacy of PFIs that incorporate normative feedback on alcohol-related consequences.

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## 1. Introduction

College drinking continues to be a serious problem throughout the United States. Between f and 2005, the number of students who engaged in heavy episodic drinking (HED; four/five or more drinks for women/men in one setting) in the past month increased by seven percent and driving under the influence of alcohol increased by nine percent (Hingson, Zha, & Weitzman, 2009). Recently, 39% of full-time college students reported engaging in HED within the past month (Substance Abuse and Mental Health Services Administration, 2014). Additionally, 11% of full-time college students reported experiencing an injury as a result of drinking, and 12% reported being physically assaulted by a college student who had been drinking within the past year (Hingson et al., 2009). As a result of these serious alcohol-related consequences, the literature on alcohol interventions for college students has continued to grow.

The importance of social norms in the context of college student drinking has received significant attention and support within the literature. According to the theory of social normative behavior, individuals typically overestimate the prevalence of drinking frequency among their peers as well as their peers' approval of drinking behaviors. As a result of this misperception, students are less likely to be concerned about their own drinking behavior, even at hazardous levels (Perkins, 2002).

Because college students are often living and interacting with other college students, students' perceptions of normative drinking are important for understanding college student alcohol use. Both descriptive norms, which indicate the quantity and frequency of a behavior, and injunctive norms, which indicate the perceived approval of that behavior, can help elicit self-other discrepancies (SODs) for college student drinking. Because peer approval and adherence to social norms are typically important within this age group (Neighbors, Lee, Lewis, Fossos, & Larimer, 2007), brief normative interventions are frequently used within this population (Carey, Scott-Sheldon, Carey, & DeMartini, 2007; Cronce & Larimer, 2011), and normative feedback is a common component of personalized feedback interventions (PFIs) for college

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student drinking (Miller et al., 2013). Although normative feedback interventions have been effective in reducing college student drinking and related consequences (Cronce & Larimer, 2011), many studies have demonstrated mixed results or shown only short-term effects (Lewis, Neighbors, Lee, & Oster-Aaland, 2008; Weitzel, Bernhardt, Usdan, Mays, & Glanz, 2007). Not only is normative feedback frequently effective, students themselves often express a preference for this kind of information (Miller & Leffingwell, 2013). Therefore, further evaluations of the intervention components that make normative feedback most effective are necessary.

Despite the importance of both consequences and descriptive and injunctive drinking norms for alcohol interventions among college students, consequence norms have rarely been examined, with several notable exceptions. Baer and Carney (1993) evaluated SODs in college students for both frequencies of consequences and the extent to which certain consequences were considered to be indicative of a problem. Participants perceived significantly greater frequency of consequences for others than for themselves and rated the extent to which consequences were considered a problem as higher for others than for themselves. Interestingly, these biases were unrelated to personal alcohol consumption. In a separate study, perceived peer norms, including consequence norms, were positively associated with alcohol use but were not directly related to experience of alcohol-related problems (Wood, Read, Palfai, & Stevenson, 2001). Given these conflicting results, additional research is needed to determine whether descriptive and injunctive consequence norms for alcohol use are related to personal consumption and consequences. More recently, research has suggested that students rate consequences as less acceptable for themselves than for their peers (DeMartini, Carey, Lao, & Luciano, 2011). Collectively, findings indicate that college students overestimate the frequency of consequences experienced by others and how acceptable consequences are for others, though little is known regarding how this discrepancy is related to alcohol use and related consequences. Because consequences of alcohol use are an important target for interventions (Hingson et al., 2009; Zeigler et al., 2005), continued examination of SODs for alcohol-related consequences is warranted.

The primary aim of the current study was to replicate previous research examining SODs for descriptive and injunctive consequence norms and to extend the research by comparing SODs of alcohol-related consequences between individuals who did and did not report alcohol use. Consistent with Social Norms Theory (Perkins, 2002), it was predicted that college students would overestimate the number of consequences their peers experience as well as their peers' approval of such consequences. Moreover, it was hypothesized that those who endorsed alcohol use would perceive lower rates of alcohol-related consequences among their peers and greater peer approval of consequences than nondrinkers. Results from this study are expected to inform personalized normative feedback interventions in how best to target discrepancies to reduce drinking and subsequent alcohol-related consequences among college students.

## 2. Method

### 2.1. Participants and procedure

Undergraduate students currently enrolled in an introductory course at a large, public, South Central university were recruited from a research participant pool to participate in the study in order to fulfill course research requirements. Eligible participants, who were at least 18 years old, were given the option to self-select into the study from a list of various other study options. Participants completed all measures remotely and anonymously via an online survey. All procedures were approved by the university's Institutional Review Board.

### 2.2. Measures

#### 2.2.1. Demographics

Participants completed demographics forms assessing participant gender, age, educational background, ethnicity, living situation, major/minor, GPA, Greek system involvement, and dating/marital status.

#### 2.2.2. Alcohol consumption

Participants reported typical weekly drinking via the Daily Drinking Questionnaire (DDQ; Collins, Parks, & Marlatt, 1985), a 4-item face-valid measure assessing drinking quantity and frequency during the past month. The DDQ has demonstrated moderate convergent validity with the Drinking Practices Questionnaire (Collins et al., 1985). In addition to the DDQ, participants completed the Frequency Quantity Questionnaire (FQQ; Dimeff, Baer, Kivlahan, & Marlatt, 1999), a 4-item measure assessing typical drinking, peak drinking, drinking to intoxication, and binge drinking.

#### 2.2.3. Alcohol-related negative consequences

The Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ; Kahler, Strong, & Read, 2005) was used to measure alcohol-related negative consequences experienced in the past month. The B-YAACQ consists of 24 items answered in a dichotomous (yes–no) format. The total number of positive (yes) responses was summed to calculate a total score, with higher scores indicating more problems resulting from drinking and greater problem severity. If an item was endorsed, participants were asked how many times in the past month they had experienced that particular consequence. This allowed for the calculation of two different scores: a score for frequency of each consequence throughout the month (an individual could experience a hangover multiple times) and a score for number of unique consequences experienced (could not exceed 24). The B-YAACQ is highly correlated with existing measures of consequences and has demonstrated strong reliability ($\alpha = .89$) among college student samples (Kahler et al., 2005; Kahler, Hustad, Barnett, Strong, & Borsari, 2008). In the current sample, Cronbach's alpha was .90.

#### 2.2.4. Descriptive normative perceptions of consequences

Following each item on the B-YAACQ, participants indicated how often in a typical month they believe the typical male and female at their college experiences each consequence ("Consider a typical month during the last year. On how many days in a typical month does a typical female/male student at your college *say or do embarrassing things as a result of their drinking*?"). Two different scores were calculated for this measure. First, a 'unique' occurrence score was calculated to reflect participants' belief (yes or no) that the typical student on campus experiences each consequence in a typical month. This variable allowed for direct comparisons to the actual norms as traditionally scored in the B-YAACQ. A 'total' frequency score was also calculated to indicate perceptions of how often the typical same-sex student experiences each consequence in a typical month.

#### 2.2.5. Injunctive normative perceptions of consequences

Participants then indicated how acceptable they believed a typical student would find each consequence ("To the typical college student, how acceptable is it to *say or do embarrassing things as a result of drinking*?") on a 7-point Likert scale ranging from −3 (completely unacceptable) to +3 (completely acceptable). Responses to these items were summed to create a 'perceived injunctive norm' total score, which was then scaled (total score/24 items) for interpretation purposes. Participants also rated how acceptable they actually find each consequence ("For *you*, how acceptable is it to *say or do embarrassing things as a result of drinking*?") on a 7-point Likert scale ranging from −3 (completely unacceptable) to +3 (completely acceptable). Responses to these items were summed to create an 'actual acceptability' total score, which was also scaled (total score/24 items) for interpretability. The