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## The Role of Self-Efficacy for Bystander Helping Behaviors in Risky Alcohol Situations

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### Abstract

We examined the role of self-efficacy in preventing bystander inaction in dangerous alcohol situations. Participants (N = 504) completed an online survey that assessed whether they had previously witnessed or intervened in alcohol-related emergencies, their self-efficacy for intervening, and their likelihood of intervening in the future. Previously intervening was positively associated with self-efficacy and likelihood of intervening in the future. Furthermore, self-efficacy mediated the association between previously intervening and likelihood of intervening in the future. In conclusion, self-efficacy for intervening in social situations is associated with intervening in alcohol-related emergencies and is an important factor to consider when designing bystander interventions.

The bystander effect, or diffusion of responsibility, refers to the phenomenon in which individuals are less likely to help others in emergency situations if other people are present (Latané & Darley, 1970). This effect is concerning in college environments because serious alcohol-related consequences are likely to occur in contexts where many students are present and drinking (e.g., parties, drinking games, and birthday celebrations; Neighbors, Foster, Fossos, & Lewis, 2012). The bystander effect may result in individuals' failure to intervene when their peers are engaged in hazardous alcohol consumption; thus, it is important to understand the factors associated with helping others and to develop strategies that reduce the bystander effect in alcohol-related emergencies. Research on bystander behaviors has focused on identifying barriers associated with the failure to intervene (e.g., Burn, 2009; Oster-Aaland, Lewis, Neighbors, Vangsness, & Larimer, 2009) and individual characteristics associated with helping others (e.g., Fischer et al., 2011; Kunstman & Plant, 2008). Few studies have specifically addressed bystander behavior in college alcohol-related situations (e.g., Guerette, Flexon, & Marquez, 2013; Oster-Aaland et al., 2009; White & Malkowski, 2014), suggesting a need for further understanding of what may influence bystander interventions in this context.

Intervention failure by bystanders is associated with failure to recognize the need for intervention (Oster-Aaland et al., 2009), failure to associate personal responsibility, and

insufficient skills to intervene (Burn, 2009). In addition, there are social factors that influence helping behaviors, including having a close relationship with the targeted individual (e.g., Levine, Prosser, Evans, & Reicher, 2005) and being a similar race and gender with the target (Kunstman & Plant, 2008). Social barriers of helping include the fear of negative evaluation by peers (e.g., Berkowitz, 2009). Finally, situations involving easily distinguishable risk (Fischer, Greitemeyer, Pollozek, & Frey, 2006), emergencies (Saucier, Miller, & Doucet, 2005), and the absence of the perpetrator and other bystanders (Fischer et al., 2011) increase helping behaviors. Self-efficacy has received limited attention and has the potential to overcome other barriers such as underestimation of ability, failure to take personal responsibility, and fear of negative evaluation (e.g., Gini, Albiero, Benelli, & Altoe, 2008).

## THE POTENTIAL ROLE OF SELF-EFFICACY

According to Bandura's (1986) social cognitive theory, having the skills necessary to intervene may not be sufficient if individuals do not have the self-efficacy to use those skills. *Self-efficacy* is defined as the confidence that an individual has in his/her ability to accomplish a specific task (Bandura, 1997). Among the key contributors to self-efficacy are successful past behavior (e.g., effectively intervened in the past), vicarious experience (e.g., observed others intervening in the past), verbal encouragement versus discouragement, and physiological and affect states at the time of the event (Bandura, 1997).

Bandura (1997) proposed that the decision to defend others is partly contingent on the witnesses' sense of efficacy. Latané and Darley (1970) found that bystanders were more likely to intervene if they felt capable and held the necessary resources to help. In addition, bystanders were less likely to intervene if they believed other witnesses were more competent than they were. Gini and colleagues (2008) found that high levels of social self-efficacy were associated with helping behavior. That is, successful intervention requires individuals to believe in their ability to intercede. Previous studies on bullying have also found bystander self-efficacy to be positively related to defender behavior (e.g., Pöyhönen, Juvonen, & Salmivalli, 2012).

## METHOD

We used a survey design to examine bystander behavior in alcohol-related experiences. Participants responded to questions assessing their self-efficacy for intervening, previous experiences, and likelihood of intervening in the future in alcohol-related situations. We hypothesized that:

1. Higher self-efficacy and previous intervention experience would be associated with greater likelihood of intervening.
2. Previous intervention in alcohol-related emergencies to be associated with increased self-efficacy for future intervening.
3. Self-efficacy would mediate the relationships between previously intervening in an alcohol-related emergency and likelihood of intervening in the future.

## Participants and Procedure

Undergraduate students from a large Southern university were recruited via e-mail for a 1-hour online survey assessing alcohol consumption and related behaviors. Student e-mail addresses were randomly selected from the registrar's list ( $N = 10,000$ ), and students were invited to participate. Of those invited, 1,095 consented to participate and completed the survey. Compensation was a \$25 gift card. Participants randomly received 1 of 2 surveys containing measures of drinking and health behaviors. Only Survey 2 contained the questions of interest, resulting in a sample of 508 undergraduate students included in the analysis. The mean age of the sample respondents was 20.6 years, and 60% were female. The study sample consisted of 21% freshmen, 23% sophomores, 31% juniors, and 25% seniors. Additionally, 27% of the sample identified as Hispanic, 37% White, 34% Asian, 19% multiracial or other, and 10% African American. This study was part of a larger project on alcohol consumption (for a detailed description of the methods see Rinker & Neighbors, 2013) and was approved by the university's institutional review board.

## Measures

Questions measuring witnessing, intervening, self-efficacy, and likelihood of intervening in the future were created for this research survey. Participants responded to items assessing past witnessing, past intervention, and likelihood of future intervention in alcohol-related emergencies. The emergencies studied were formulated for this research and included (a) "a friend showing signs of alcohol poisoning," (b) "a friend who was intoxicated while driving," and (c) "a friend who was coercing or pressuring someone to engage in a sexual activity against their will."

**Witnessing and Intervening**—Participants reported how many times they had witnessed and intervened in each of these situations in the past. Total witnessing and intervening scores were created by summing the responses across all three situations; however, due to the relatively low prevalence rates of witnessing and intervening, these variables were dichotomized for analysis as either never (0) or at least once (1).

**Self-Efficacy**—Participants were also asked to rate how confident they were in their ability to "intervene if they saw a very drunk person being brought upstairs to a bedroom by a group of people at a party," "ask a stranger who looks very upset at a party if they need help," and seek assistance if they heard "of an abusive relationship in their dorm or apartment." Responses were measured on an 11-point Likert-type scale from 0 (*Can't do*) to 10 (*Very certain*). A general self-efficacy score for intervening in social situations was created by averaging these items, Cronbach's  $\alpha = .79$ .

**Likelihood**—Finally, participants rated their likelihood of helping in future situations similar to those listed for witnessing on a Likert-type scale of 1 (*Very unlikely*) to 5 (*Very likely*), Cronbach's  $\alpha = .96$ .

## Analysis

Analyses were conducted by using SAS (version 9.3) statistical software. Correlation analyses were used to test general associations, and linear regression models were used to

assess direct associations between previous behavior, likelihood of future intervening, and self-efficacy. The mediation model was tested by using the PROCESS macro for SAS (Preacher & Hayes, 2004). Confidence intervals (CIs) for indirect effects were estimated with 10,000 bootstrapped samples.

## RESULTS

Results revealed that approximately half of the participants had witnessed at least one alcohol-related emergency and reported having previously intervened ( $n = 230$ , 51.5%). Previous witnessing and intervention were highly correlated (Table 1). The independent relationships between previous witnessing, intervening, and self-efficacy on likelihood of intervening in the future were tested by using linear regression analysis. Predictors were entered into the model simultaneously. Previous witnessing was not significantly associated with likelihood of intervening ( $\beta = -.01$ ,  $t = -0.93$ ,  $p > .05$ ). Given the high correlation between previous witnessing and previous intervention and the lack of effect of witnessing on likelihood of intervening, it was dropped from further analyses. Support was found for Hypothesis 1, as both self-efficacy for intervention ( $\beta = .13$ ,  $t = 3.07$ ,  $p < .001$ ) and previous intervening ( $\beta = .30$ ,  $t = 2.54$ ,  $p < .001$ ) were positively related to intervention likelihood. In addition, previous intervening was significantly positively associated with self-efficacy ( $\beta = .25$ ,  $t = 5.68$ ,  $p < .001$ ).

Finally, the role of self-efficacy was tested as a mediator of the relationship between previously intervening in an alcohol emergency and likelihood of intervening. Mediation tests the extent to which an indirect pathway between two variables ( $X$  and  $Y$ ) exists through another variable ( $M$ ); thus, we evaluated the extent to which previously intervening ( $X$ ) was associated with greater likelihood of intervening ( $Y$ ) through higher self-efficacy ( $M$ ). Mediation is tested by evaluating the significance of the indirect pathway from  $X$  to  $Y$  through  $M$ . A significant indirect effect was found of previous intervention on likelihood of future intervention through self-efficacy,  $\beta = .066$ ,  $SE = .023$ , 95% CI: [.023, .124]. In addition, there was a significant direct effect of previous intervention on intervention likelihood,  $\beta = .55$ ,  $SE = .087$ , 95% CI: [.376, .717]. These results suggest that self-efficacy for intervening in social contexts is a partial mediator of the association between previous and future intervening.

## DISCUSSION

### Summary

This research extends previous work on bystander behavior in the context of college drinking. Consistent with expectations, we found self-efficacy for intervening in social situations mediated the association between past intervention experience and likelihood of future intervention. We did not find any unique effects of witnessing alcohol-related emergencies on self-efficacy. It is noteworthy that witnessing an alcohol-related intervention and previously intervening were very highly correlated. This is consistent with previous conceptualizations of pluralistic ignorance and bystander effect research, which has found that helping behaviors require an individual to define an event as an emergency (Oster-Aaland et al., 2009). Thus, individuals who saw an event as an alcohol-related emergency

reported witnessing an emergency and intervening. Some participants may have witnessed an emergency, but because they did not define it as such, they did not report witnessing it, nor did they intervene.

A key finding is the association between self-efficacy and likelihood of intervention. This raises a practical question: How can we increase self-efficacy for intervention in these types of situations? Our results suggest that past intervention success is associated with greater self-efficacy and likelihood of intervention. While we cannot realistically duplicate successful intervention experiences, efforts to simulate alcohol-related emergencies and provide opportunities for practice in role-play scenarios might be worthwhile. The work of Cimini and colleagues (2009) on motivationally enhanced peer theater interventions may provide a foundation for the development of interactive theater or role-playing scenes. The addition of role-playing scenarios may positively affect current bystander interventions.

### Limitations

While this study has added to our understanding of helping behaviors in dangerous alcohol-related situations, it does have a few limitations: most notable is the lack of direct correspondence between the assessment of self-efficacy and the situations used in the other variables. While measures with more correspondence may be recommended for future studies (Weigel & Newman, 1976), the more general social situational measurement of self-efficacy used in this study does provide a broad indicator of intervention self-efficacy in social situations involving peers. Another limitation is that we did not assess whether participants had consumed alcohol on the occasions they had witnessed alcohol-related emergencies and/or intervened. Finally, these results represent one sample of students and replication in other samples is needed.

### CONCLUSION

The results of this study highlight (a) the potential usefulness of developing material that facilitates students' ability to identify dangerous alcohol-related situations and increase self-efficacy for intervening and (b) implementation of strategies such as role-playing that may enhance self-efficacy for intervening in alcohol-related emergencies. Research is needed on normative perceptions of helping behaviors in the context of risky drinking to elucidate its influence as normative perceptions may play a role in helping behaviors (Banyard & Moynihan, 2011). Further work using longitudinal and experimental approaches is needed to replicate and extend the present conclusions and to improve programs addressing bystander interventions in alcohol-related emergencies.

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**TABLE 1**

Correlations, Means, and Standard Deviations for Variables

Variable	Previous Witness	Previous Intervention	Self-Efficacy	Likelihood
Previous Witness	–			
Previous Intervention	0.89 <sup>*</sup>	–		
Self-Efficacy	0.21 <sup>*</sup>	0.25 <sup>*</sup>	–	
Likelihood	0.28 <sup>*</sup>	0.31 <sup>*</sup>	0.19 <sup>*</sup>	–
<i>M</i>	0.51	0.46	6.62	4.62
<i>SD</i>	0.50	0.50	2.57	2.53

<sup>\*</sup>  
 $p < .001$ .