

# Natural Drinking Groups: The Effect of Drinking Norms on Member's Drinking Depends on the Social Identity with that Group

## Abstract

The link between perceived drinking norms and an individual's actual drinking behavior has been well established, especially among college students. However, recent research has shown that social identity has an important influence on the relationship between social or group norms and drinking behaviors. The current study examines the impact of social identity and drinking norms as they relate to a specific group of friends or acquaintances with which participants recently gathered and had alcohol. 414 students reported on an event where they shared alcohol with friends or acquaintances in the past 30 days. Controlling for all other variables in the model, the group norm (the percentage of drinkers in the group) was significantly related to the number of drinks consumed by the participant during the event. As predicted, the interaction between strength of identity and the group norm for drinking was significant. Further examinations showed that the effect of group norm was only significant for participants who strongly or moderately identified with the group. The finding supports previous research indicating that the strength of identity with a group moderates the relationship between the group's drinking norm and an individual's drinking level.

## Background

The influence of drinking norms on an individual's drinking behavior has been well established (Borsari and Carey 2003; Perkins 2003), especially among college students' drinking; a population whose drinking style remains a problem even after years of research and prevention work (Wechsler and Toben 2008). Group pressure or normative influence is an aspect of several theories used in health research and prevention. In the Theory of Reasoned Action (TRA), norms are thought to influence behavior through a "motivation to comply" to the perceived norms of important individuals (Montano and Kasprzyk 2008). A common finding is that perceived norms for drinking are usually an over-estimate of the actual normative behavior. Social Identity Theory was offered to refine the description of the relationship between norms and behavior (Hogg and Abrams 1988). The strength of identity that a person feels towards the group will moderate the normative influence of the group on behavior (Hogg and Abrams 1988). In other words, only groups that people relate to and feel a strong part of will be influential.

Reed and colleagues (2007) recently reported that the strength of identity with friends, peers and fraternities/sororities moderated the relationship between perceived group-specific drinking norms and drinking behavior. Additional studies are needed, however, to support and validate these findings.

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This study examined the moderating effect of social identity on the relationship between drinking norms and individual's drinking among a natural drinking group (NDG) of college students and friends.

## Methods

### Participants

A random sample of students was drawn from those enrolled at a large public university in the Southwestern U.S. Only those participating in the survey who reported drinking in the past year were included in these analyses. Further:

- All had participated in a group in which at least one person was drinking in past 30 days
- Of the 594 students survey, 414 were included
- An additional 6 were removed as outliers (reported greater than 30 drinks)
- 64% were female
- 67% were white
- 18% were members of a Greek organization
- Mean age = 22 (sd=2.96)
- Mean number of drinks = 6.57 (sd=4.96)
- Mean percentage of drinkers per group = 88% (sd=18.771)

### Measures

Participants were asked to respond to a number of survey items that related to their most recent drinking event.

- Self-reported number of drinks during the event
- Their own gender
- Their own age
- Their own fraternity/sorority status
- Descriptive drinking norm of the group members (i.e., number of drinks consumed by fellow group members).
- Social Identity (Terry and Hogg 1996; Reed, Lange et al. 2007) (On a scale of 1 to 7):
  - To what extent do you feel strong bonds to the group?
  - Think about who are. How important, using the scale provided, is the group to your sense of who are (your self-identity)?
  - How much do you feel you identify with the group
  - How similar do you feel your attitudes and beliefs are those of individuals in the group?

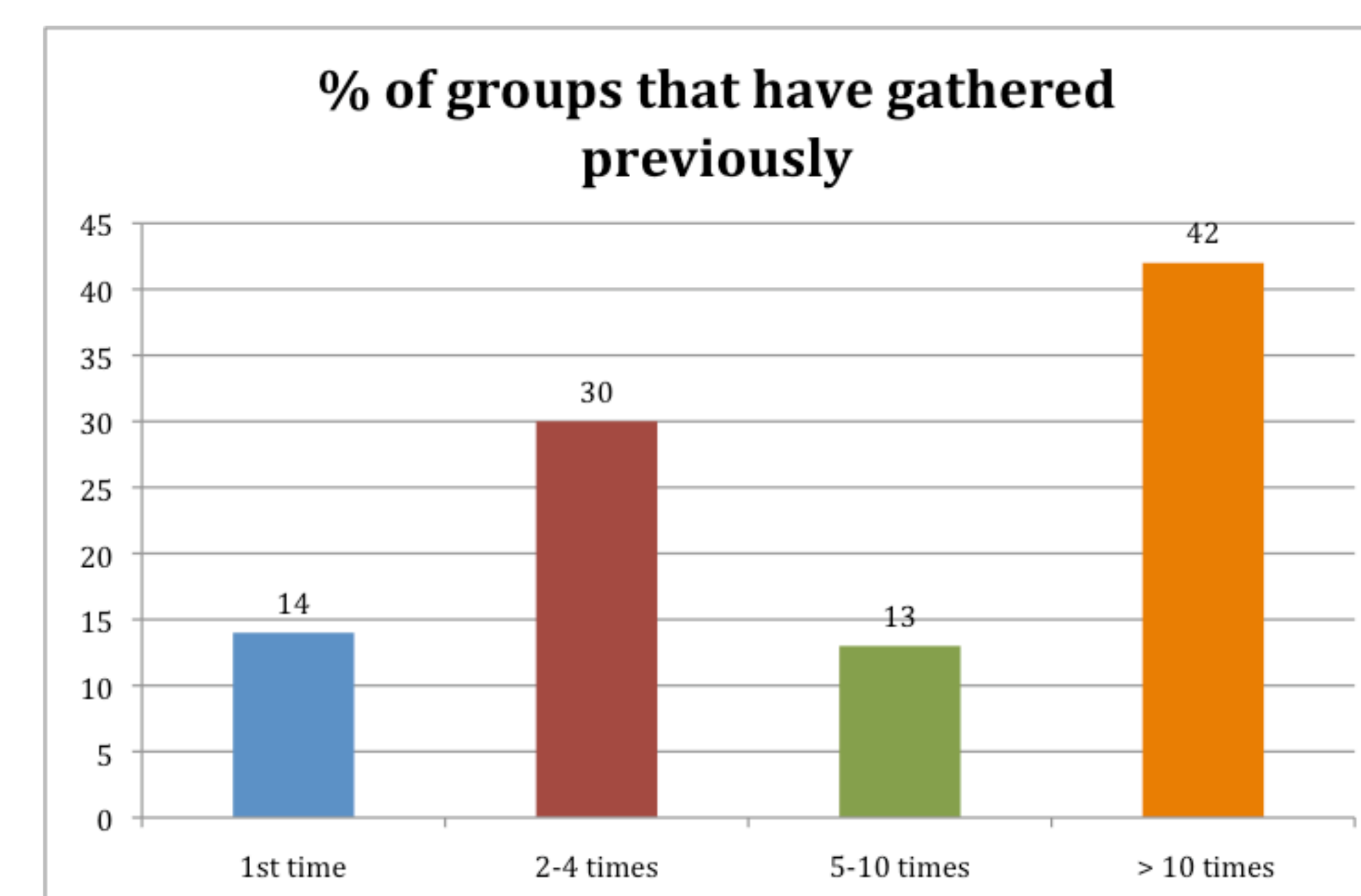


Figure 1. Number of times gathered with current group

### Analysis

Step 1: Assess collinearity and variable contribution  
Dependent variable: number of drinks

- Covariates: Age, fraternity status, class standing, ethnicity and gender were included with the drinking norm and social identity measures.
- Variables were centered (each value minus the mean).
- Age and class standing were significant covariates.
- Age and ethnicity were not significantly related to dependent variable.

Step 2: Run multivariate linear regression with interaction

- Age, Greek status, descriptive norm and social identity
- Interaction: social identity and descriptive norm
- All covariates centered
- Graphing software accessed at <http://www.people.ku.edu/~preacher/interact/mlr2.htm> (Preacher, Curran et al. 2006) used to test significance of slopes for low, moderate and high identity interaction (see Figure 2).

Table 1. Centered multivariate regression: Group influences on event drinking

n=414	B	Std Err	sig.
Age	-0.59	0.090	.516
Gender (0=m, 1=f)	-2.556	0.556	.000
Greek (1=no, 2=yes)	-2.630	0.724	.000
Descriptive Norm	0.039	0.014	.005
Social Identity	0.019	0.181	.916

Table 2. Moderating effect of Social identity on group drinking norms and event drinking

n=414	B	Std Err	sig.
Age	-0.042	0.089	.635
Gender (1=f vs 0=m)	-2.711	0.553	.000
Greek (1=yes, 2=no)	-2.593	0.716	.000
Descriptive Norm	0.037	0.014	.008
Social Identity	.008	0.179	.963
Interaction term (identity & norms)	0.022	0.008	.006

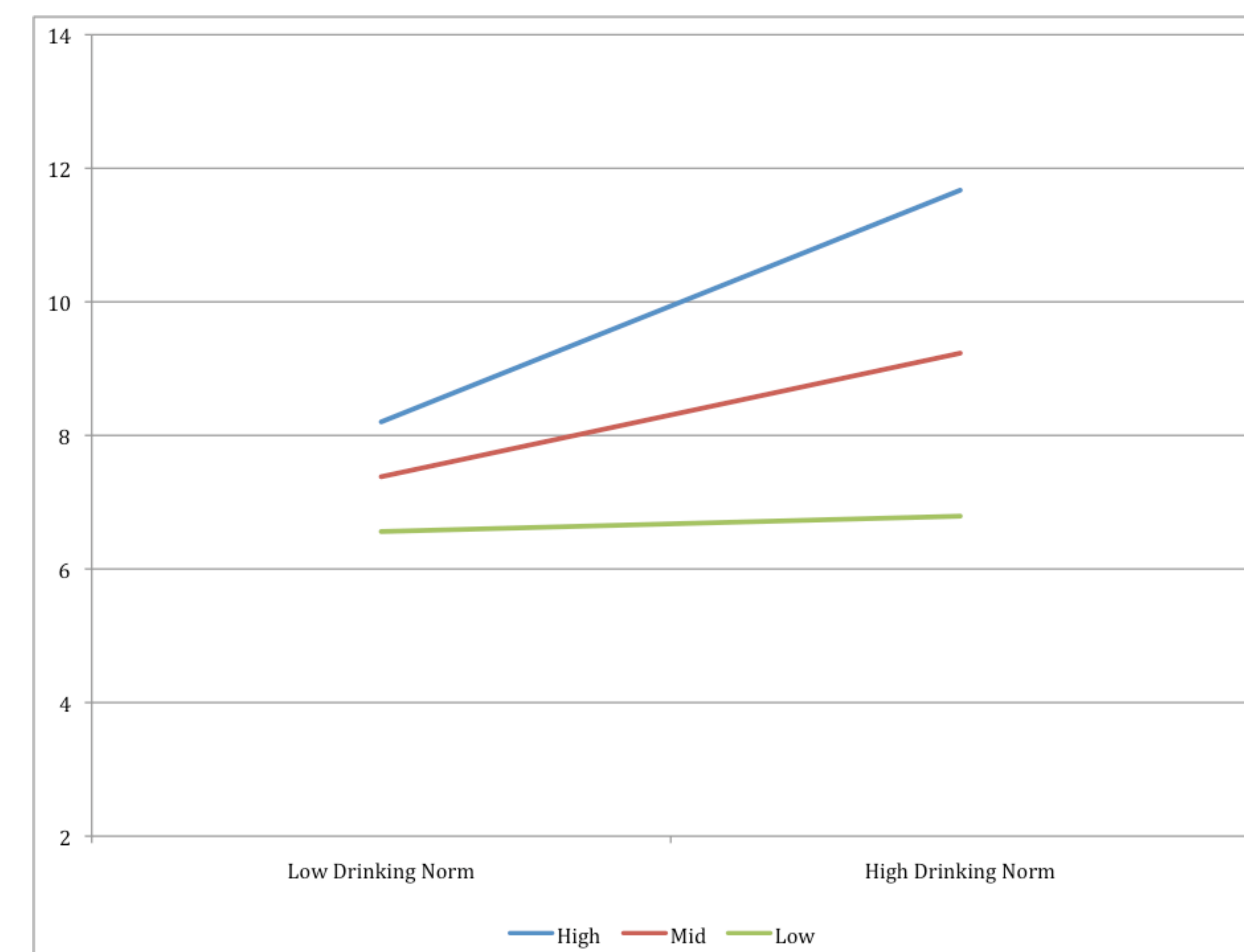


Figure 2. The relationship between norms and drinking, moderated by 3 levels of Social Identity

## Results

### Groups Description:

- Group size ranged 2 to 101 members
- 66% of groups were smaller than 6 people
- Nearly half (42%) had gone out with this group more than 10 times (Figure 1.)

For interaction analysis, see Tables 1 & 2, and Figure 2.

## Discussion

The results of this analysis support the role of social identity as a moderating factor between group drinking norms and drinking behavior. This study differs from previous research in two important ways: First, a descriptive norm was used instead of an injunctive norm, meaning that the groups actual drinking behavior, as opposed to their attitudes toward drinking, were related to individual drinking; Second, this relationship was moderated by the strength of identity with the group. But perhaps more importantly, this analysis is linked to a specific event with a specific group of people, indicating that the relationship exists in smaller groups (NDG) as well as larger more ambiguous groups such as friends, peers and greek organizations.

Implications of these findings include: (1) SNA based interventions' effects may be weakened by a lack of strong identification with the normative group of focus; (2) messages that target specific group norms or stereotypes are more likely to succeed than those that target general students; (3) groups that form around drinking or partying are important to consider when attempting to understand—and perhaps intervene upon—student drinking.

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