



# College Binge Drinking from the Natural Drinking Group Perspective

## Abstract

College students tend to drink within small groups of people who are bonded by friendship or other personal relationship. The goal of this study was to explore the role of relationships within and social identity to natural drinking groups (NDGs) on college student drinking. Students (N=414) participated in a web-based survey with questions pertaining to their last drinking occasion. Two statistical interactions were found on the dependent variable, drinking quantity: (1) presence of a romantic interest within the NDG and being in a committed relationship, and (2) conformity to perceived NDG drinking norms was moderated by participants' level of social identity with the group. Both findings demonstrate that relationships within NDGs may play an important role in the drinking behavior of college student.

## Background

College student drinking has been estimated to contribute to over 1,800 student deaths per year. Because it has become such a widely acknowledged problem, research has advanced on identifying factors that predict its occurrence. Personality, environmental, parental, cognitive, and genetic variables have explained at least a portion of the variance in drinking. Yet, little attention has been paid to the immediate social environment in which drinking occurs. College students tend to drink within small groups of people who are bonded by friendship or other personal relationship. These natural drinking groups (NDGs) may be a substantial influential force on the individuals within them; perhaps even more substantial than the more studied generic "peer" influence.

The literature suggests that the gender composition of a group affects the drinking of its members but the results are somewhat inconsistent (e.g. Van de Goor et al., 1990; Senchak et al., 1998). These studies did not take into account the impact that dating someone within the group may have on drinkers, nor the impact that committed relationships may have on drinking behavior.

Further, the influence of drinking norms on an individual's drinking behavior has been well established among college students' drinking (Borsari and Carey 2003; Perkins 2003). A common finding is that perceived norms for drinking are 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.

The goal of this study was to explore the roles of relationships within NDGs and social identity to these NDGs on college student drinking.

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## Method

This study was part of a larger online survey on alcohol & drug use conducted in Spring 2008 at a large university in the southwestern United States. The survey was sent to a sample of students randomly selected by the Registrar's office. 514 student drinkers participated in one of the tracks of this survey. Of those, 414 students reported participation, in the past 28 days, in a group in which at least one person was drinking (i.e., an NDG).

### Sample Characteristics

- N = 414 drinkers who reported going out with an NDG in the month prior to the survey
- Gender: 63% Female participants (n=261)
- Age: M = 22.04 (SD=3.32)
- Race: 67% were White

### Predictors

- Dating within the NDG: yes / no
- In a committed relationship: yes / no
- Caveat: Independence between these two factors was not obtained, as it often happens when looking at natural categories. Among those in a committed relationship (N = 184), 59% dated someone in the NDG; among those not in a committed relationship (N = 187) only 11% dated in the NDG.
- Descriptive drinking norm of the group members (i.e., average number of drinks consumed by fellow group members).
- Social Identity (Terry and Hogg 1996) (1-7 scales):
  1. To what extent do you feel strong bonds to the group?
  2. Think about who are. How important, using the scale provided, is the group to your sense of who are (your self-identity)
  3. How similar do you feel your attitudes and beliefs are those of individuals in the group?

### Outcome Measure

Drinking quantity during the night that the NDG's gathered was computed by summing the number of drinks reported for each location that the NDG went to. Six outliers whose total number of drinks was between 31 and 60 were excluded from the analysis. The valid values for this index ranged from 0 to 28 with 58 drinkers who declined to answer the questions related to number of drinks consumed. The final sample included 350 participants.

## Analyses

We conducted two separate analyses since our research questions were independent. First, we conducted an analysis of variance on the number of drinks consumed in the NDG with relationship commitment and dating in the NDG as independent variables, and with age and gender as covariates. Second, we tested a model predicting that the effect of a descriptive group norm on drinking behavior is moderated by social identity to the group.

## Results

There was a main effect of relationship commitment: Students who were in a committed relationship (M = 5.87, SD = .38) drank significantly less than those who were not in a committed relationship (M = 8.63, SD = .61, F [1,292] = 14.91, p < .001). There was also a trend for students who were dating in the NDG (M = 7.92, SD = .62) to drink more than those who were not dating in the NDG (M = 6.58, SD = .36, F[1,292] = 3.47, p < .07). These main effects were qualified by an interaction between dating and relationship commitment (F[1,292] = 6.10, p < .02; Figure 1).

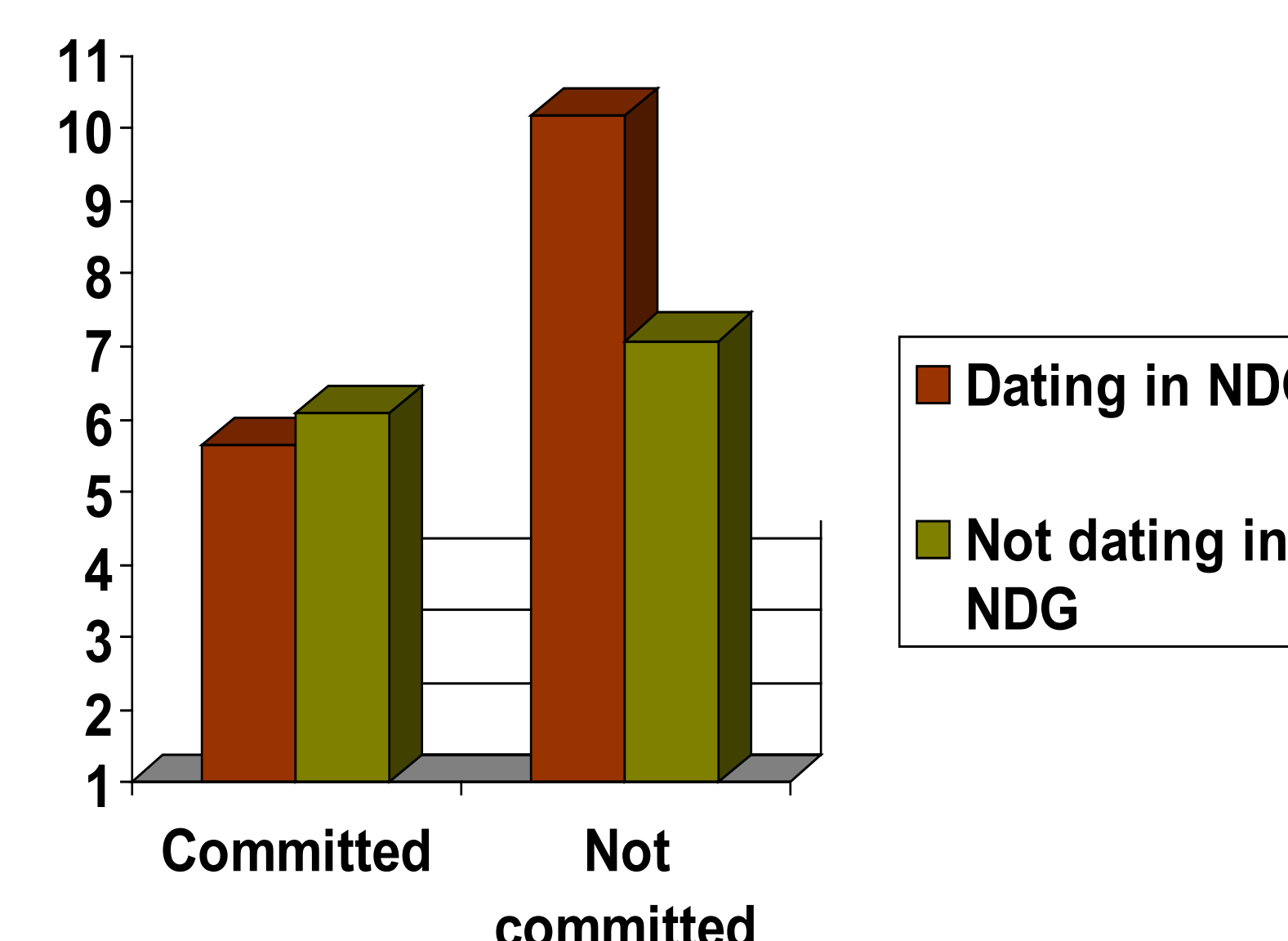


Figure 1. Interaction Between Dating and Commitment on the Number of Drinks Consumed in the NDG.

Among students not in a committed relationship, those dating in the group reported heavier drinking in the NDG than those not dating in the group (F[1,292] = 6.57, p < .02). Among those in committed relationships, the effect of dating someone in the NDG did not affect their drinking in the NDG (F[1,292] = .32, ns). The effect of relationship status was significant for participants who were dating in the NDG (F[1,292] = 13.31, p < .001) but not for those not dating in the NDG (F[1,292] = 1.98, ns). This interaction was not qualified by gender.

The model testing the interaction between the NDG drinking norm and the strength of the social identity to the NDG fit the data well (Chi-square [9] = 12.59, ns. CFI = .991. RMSEA = .027; Figure 2).

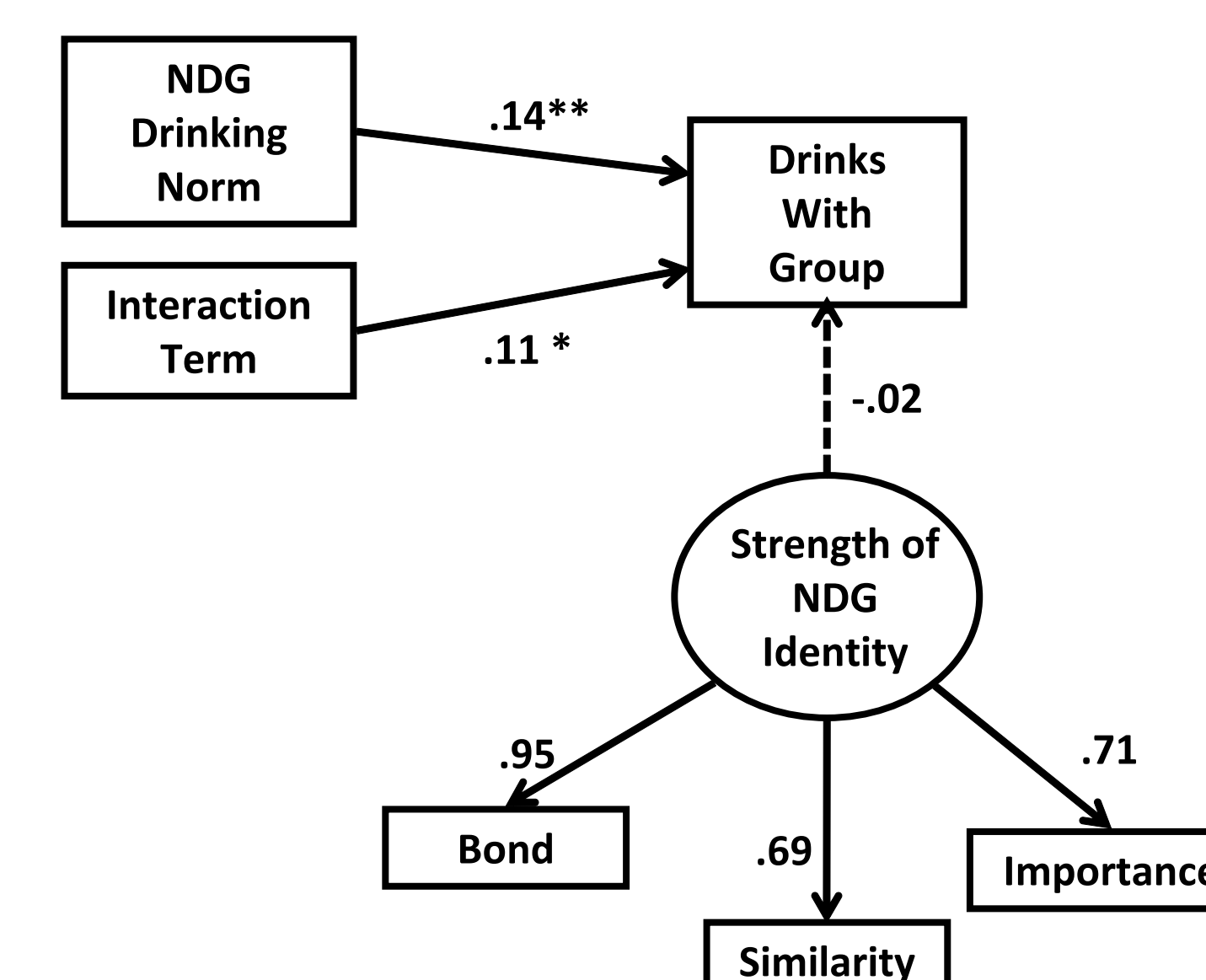


Figure 2. Structural Equation Modeling of the Impact of Group Norm and Social Identity on Drinks Consumed in the NDG.

In this model, the NDG drinking norm directly impacted participants' drinking such as the greater the percentage of drinkers in the groups, the more drinks the

participants reported drinking. This direct effect was qualified by an interaction with NDG social identity. Indeed, the direct effect of the norm was stronger for those who identified more with the group than for those who identified less (see Figure 3). These results support the role of social identity as a moderating factor between group drinking norms and drinking behavior.

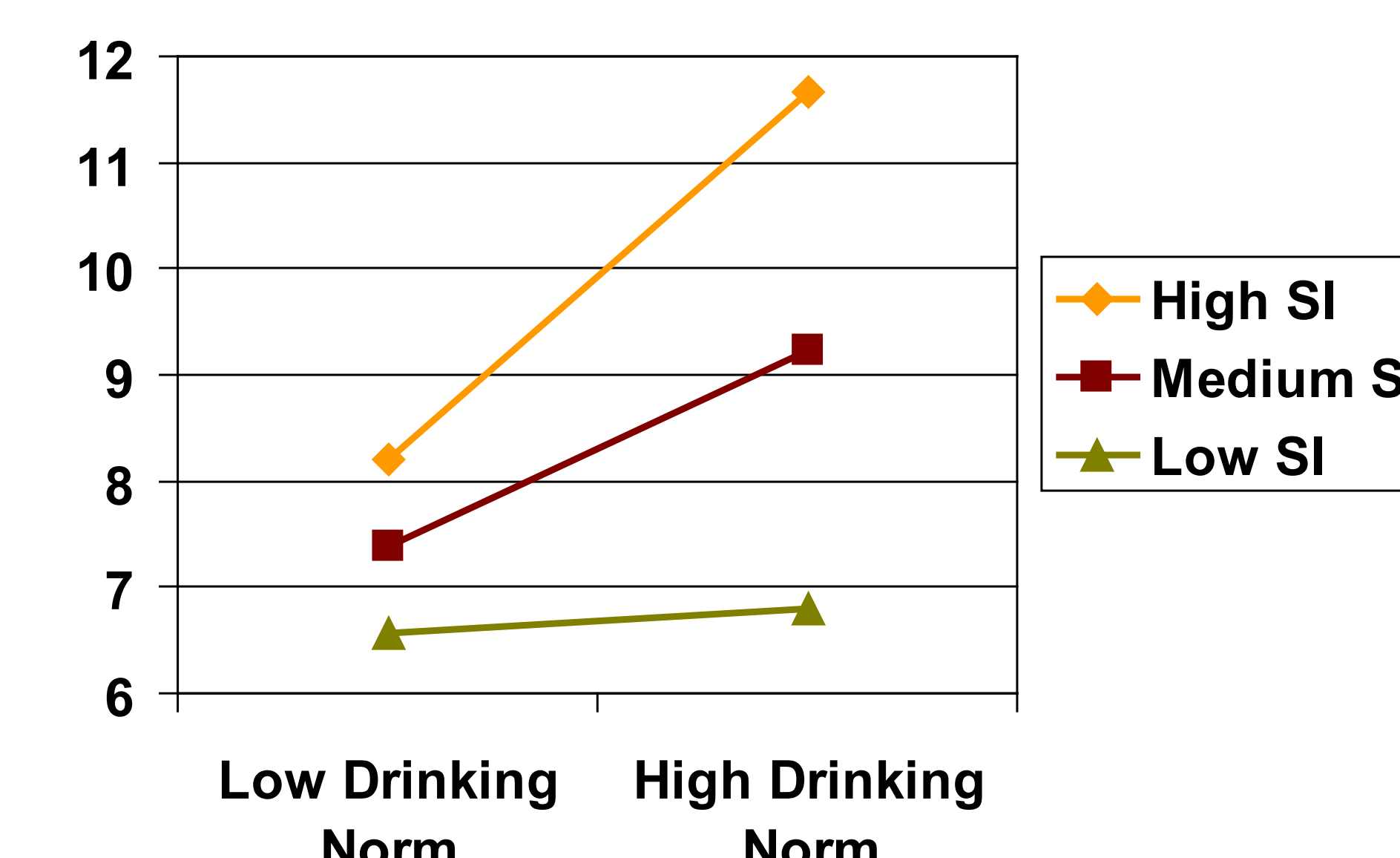


Figure 3. Interaction Between Drinking Norm and Social Identity (SI) Strength on Number of Drinks.

## Discussion

This study differs from previous research in important ways: (1) It looks at the specific relationships that drinkers have with their fellow drinkers within natural drinking groups. (2) The study examines how various types of romantic relationships affect drinking behavior. (3) We tested the role of a descriptive norm instead of an injunctive norm, meaning that the groups' actual drinking behavior, as opposed to their attitudes toward drinking, were related to individual drinking and this relationship was moderated by the strength of identity with the group. (4) Most importantly, these analyses are linked to a specific event with a specific group of people. In so doing, we can show that the relationships and norms existing within smaller groups (NDG) affect one's alcohol consumption while in the group. In conclusion, groups that form around drinking or partying are important to consider when attempting to understand—and perhaps intervene upon—student drinking.

### References

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