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Assessment of perceived and actual alcohol norms in varying contexts: Exploring Social Impact Theory among college students

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Abstract

The social norms approach to college drinking suggests that students misperceive the drinking behavior and attitudes of their peers. While much is known about these misperceptions, research is sparse regarding the context in which perceived and actual norms are assessed. As social influence is pronounced in college, the principles of Social Impact Theory may contribute to differences between assessments performed individually and those completed when surrounded by members of one's salient reference group. The current study examines 284 members of campus organizations in two contexts (online and group) to determine if individuals endorse different responses to questions of perceived and actual drinking norms across contexts. All participants endorsed higher responses on questions of actual and perceived group behavior and of perceived group attitudes towards drinking during the group assessment. Men and students in Greek organizations may be more influenced by the proximity of their peers when presented with questions regarding perceived alcohol use. These results suggest that context of assessment needs to be considered when collecting self-report data from college students.

Keywords

Social norms; College drinking; Greek students; Social Impact Theory

1. Introduction

The social norms approach (Berkowitz, 2004; Perkins & Berkowitz, 1986) has gained widespread attention among researchers seeking to reduce heavy college student drinking. The approach posits that misperceptions of how members of one's social group think and act (incorrectly perceived norms) influence behavior. During college, peers serve as a major means of support and guidance for most college students (Berkowitz & Perkins, 1986; Borsari & Carey, 2001) and can influence alcohol use both directly (i.e., pressuring a person to drink; offering them a drink) and indirectly (i.e., perceived norms). Indirect influences

include both descriptive (what people actually do; behavior) and injunctive (what people feel is correct; attitudes) norms (see review by Borsari & Carey, 2003). These social influences have been found to be among the strongest and most consistent predictors of heavy drinking in the college environment (Borsari & Carey, 2003; Neighbors, Fossos, & Niel, 2006b; Perkins, 2003; Wood, Read, Palfai, & Stevenson, 2001).

Several studies indicate students overestimate heavy drinking behavior among their peers (Baer & Carney, 1993; Baer, Stacy, & Larimer, 1991; Neighbors, Dillard, Lewis, Bergstrom, & Neil, 2006a; Perkins, Meilman, Leichliter, Cashin, & Presley, 1999; Perkins & Berkowitz, 1986; Perkins, Haines, & Rice, 2005). Additionally, students believe others are more accepting of heavy drinking than they themselves are (Alva, 1998; Perkins & Berkowitz, 1986; Prentice & Miller, 1993), and overestimate the degree of approval of heavy drinking (Larimer, Irvine, Kilmer, & Marlatt, 1997). These misperceptions of behaviors and attitudes predict drinking behavior and associated drinking-related problems (Clapp & McDonnell, 2000; Korcuska & Thombs, 2003; Neighbors et al., 2006b; Page, Scanlan, & Gilbert, 1999; Thombs, Wolcott, & Farkash, 1997).

1.1. Social Impact Theory

While the research around the social norms approach is still growing, much is known about the influence of peers on behavior and the perceptions of peers' attitudes and behaviors by individuals. However, research is sparse regarding how the social context in which perceptions are assessed influence assessment. This is especially important in the college context where social influence is ever present. Concerns about being compared to others can emerge and influence behavior. Social Impact Theory (Latane, 1981) suggests that an individual's feelings, attitudes, and behavior can be influenced by the presence of others. Closeness to the group (in proximity), how important the group is to oneself (connectedness), and size of the group all combine to influence individuals. The closer one is in proximity to peers in the group, the more connected he feels to his group, and the larger size of the group all combine to impact social influence. In a review of social norms research, Borsari and Carey (2003) concluded that larger discrepancies exist between perceptions and behavior the further away the individual is from the reference group. For example, a student would have greater misperceptions about "a typical student at your school" than he would about "a close friend". However, the misperception of proximal reference groups, albeit it smaller than the misperception of distal reference groups, is more likely to influence drinking behavior (Borsari & Carey, 2003; Korcuska & Thombs, 2003; Lewis & Neighbors, 2004). Thus, aspects of Social Impact Theory may combine to influence students' responses during assessments of behaviors and attitudes.

1.2. Hypotheses

The present study uses three time points (two online assessments and one group assessment) to determine if individuals respond differently in varying contexts to questions assessing their own drinking behaviors and attitudes, as well as their perceptions of a salient reference group's drinking behaviors and attitudes. Salient reference groups included the fraternities, sororities, and non-Greek service organizations where participants held membership. Time points included a baseline online assessment completed alone (Time 1), an online

assessment completed alone 60 days after baseline (Time 2), and a group assessment seven days after Time 2 (Time 3). It is hypothesized that, based on Social Impact Theory, reports of individual drinking behaviors and attitudes, as well as questions assessing perceptions of group-specific drinking behaviors and attitudes, will differ between the Time 2 online assessment and the group assessment at Time 3. No differences in reported behaviors, attitudes, and perceptions are expected between the two online assessments at Times 1 and 2. More specifically, we hypothesize that the three aspects of Social Impact Theory – proximity to group, connectedness to the group, and size of the group – will all influence reports of actual individual drinking behaviors and attitudes. Participants assessed in groups with their peers, those who feel more connected to their group peers, and those in groups with larger numbers of students are anticipated to endorse higher estimates of actual and perceived behavior compared to when assessed individually online. An examination of the moderating effect of gender and Greek status (Greek versus non-Greek service organization) on differences in responses across contexts will also be included.

2. Methods

2.1. Participants

As part of a larger intervention study targeting students involved in campus organizations, 645 male and female members of campus fraternities, sororities, and non-Greek service organizations were sent an online survey to their campus email accounts. These participants were assigned to the assessment-only control group of the larger parent study. Assessment points served to determine intervention effectiveness. As participants in the current study are from the control group, changes over assessment times are not a function of the intervention.

Each organization had between 42 and 152 members. Presidents of these organizations were contacted and offered monetary incentives for their organization if at least 80% of their members completed this initial survey. Depending on the size of the group, incentives ranged from \$100 to \$250 per organization if this mark was met. Eight campus organizations (two fraternities, three sororities, three non-Greek service organizations) participated and each organization had at least 80% completion at each of the three time points. Overall, 565 participants completed all least one of the three phases of the project, while 284 completed all three phases of the project in its entirety without any missing values. In order to determine how responses changed across formats, we included only these 284 participants in analyses. This final sample consisted of 35.9% males and 64.1% females. Participants had a mean age of 19.79 (SD=1.13) and there were 22.3% freshmen, 30.7% sophomores, 29.7% juniors, and 17.3% seniors. Ethnic make-up of participants included 69.7% Caucasian, 9.2% Hispanic/Latino, 7.0% Asian/Pacific Islander, 7.7% “Mixed Ethnicity,” 1.4% African American/Black, 3.9% “Other,” and 1.1% “declined to state”. Eighty-seven percent of participants were from Greek organizations (28.9% fraternity, 57.7% sorority), while the remaining 13.4% were from non-Greek service organizations.

2.2. Design and procedure

All participants were assigned an arbitrary sequence number to track their progress throughout the study. Participants were sent an online assessment survey to their campus

email addresses (Time 1). As online means of collecting data from participants are becoming increasingly common, Miller et al. (2002) found no differences between web-based assessment of alcohol use and traditional paper and pencil reports. Before entering the survey, participants had to electronically “sign” the university IRB-approved consent form. The survey began with demographic questions about age, sex, race, campus organization, and class year.

2.2.1. Injunctive norms—Next, participants were asked two injunctive norms questions (Larimer, 1992) about their individual perceptions of the attitudes of their specific group (i.e., men from fraternity *X* were asked about the attitudes of a typical member of fraternity *X*). The two injunctive norms questions were “How acceptable does a typical member of [specific group *X*] think it is to become intoxicated at a party” and “How acceptable does a typical member of [specific group *X*] think it is miss a class because of a hangover”. Response options ranged from “1— not acceptable” to “9 — very acceptable”. These questions were repeated to assess actual individual attitudes (e.g., “How acceptable is it for *you* to become intoxicated at a party”). These two questions were correlated at $r=.45, p<.001$ for perceived group attitude norms and at $r=.34, p<.001$ for actual individual attitudes.

2.2.2. Descriptive norms—After the injunctive norms, participants were given five descriptive norms questions based on scales from one through nine. Questions included “How often does a typical member of [specific group *X*] consume alcohol” (response option “1 — never to six times a year” to “9 — everyday”), “How many drinks on average does a typical member of [specific group *X*] drink during a typical drinking occasion” (response options “1 — none” to “9 — 13 or more drinks”), “How many drinks per week does a typical member of [specific group *X*] drink” (response options “1 — none” to “9 — 22 or more”), “In the past 30 days, how many drinks did a typical member of [specific group *X*] consume on the occasion where they drank the most” (response options “1 — none” to “9 — 22 or more”), and finally, “How many times in the past two weeks has a typical member of [specific group *X*] had 5/4 (five for men, 4 for women) or more drinks in a two hour period” (response option “1 — none” to “9 — 10 or more times”). These questions were repeated for actual individual behavior (e.g., “How often do *you* consume alcohol”). Reliability estimates for the five descriptive questions were $\alpha=.87$ for perceived group drinking norms and $\alpha=.93$ for actual drinking behavior.

2.2.3. Group connectedness measure—Included in the Time 1 online survey was the Group Attitudes Scale (Evans & Jarvis, 1986) — a measure of an individual’s attraction to their specific group. This 20-item scale, reflected connectedness to one’s group, and revealed a reliability estimate of $\alpha=.93$.

2.2.4. Time 2 and Time 3 surveys—Sixty days after participants completed the initial survey, they were sent a follow-up survey to their email addresses (Time 2). This survey contained the same questions from the initial survey, excluding the demographic questions, to assess if changes were evident in perceived norms or actual behavior and attitudes after 60 days. Participants were instructed to complete the survey immediately and again were offered an incentive for completing the survey and attending a group session seven days

after receiving the follow-up survey. Incentives again ranged by organization and each was offered between 100 dollars and 250 dollars if 80% or more of group participants completed both the follow-up survey and attended the group session.

Seven days after receiving the follow-up questionnaire (67 days after completing the initial survey), participants attended a group session with the members of their organization (Time 3). During this group presentation, participants were asked the same two injunctive norms questions assessing their perceptions of the group's attitudes, as well as their own attitudes, and the five descriptive norms questions assessing their perceptions of their group's specific drinking norm, as well as their own behavior, from the initial and follow-up surveys. Participants sat in an auditorium with the members of their group and used an individual, handheld portable electronic device to record answers to the questions while a facilitator presented them on an overhead screen. These devices had been shown to perform similarly to traditional pencil and paper means of collecting data (LaBrie, Earleywine, Lamb, & Shelesky, 2006). Participants were assured that no individual responses would be revealed to their group members nor would their names be attached to their data. Participants were also urged not to share their responses with other members of the group during assessment.

3. Results

3.1. Analyses plan

We created composite scores for actual individual behavior and attitudes, as well as for injunctive and descriptive norms responses, to condense analyses for parsimonious presentation of findings. Individual responses from the five descriptive norms questions (frequency of alcohol use, average quantity, drinks per week, maximum drinks at one time, binge drinking episodes) asking about individual behavior were averaged together to form an individual drinking behavior composite. Individual responses for the two injunctive attitudes (intoxicated at a party, miss a class due to a hangover) were also averaged together to form an individual drinking attitude composite. Similarly the five perceived descriptive norms questions asked of "a typical member of your group" were averaged to form a perceived group drinking behavior composite variable, as were the two perceived injunctive norms questions averaged together to form a perceived group drinking attitude composite. These composite scores were calculated during the online assessment at baseline (Time 1), the online assessment 60 days after baseline (Time 2), and the group assessment 67 days after baseline (Time 3).

Guided by the three theoretical constructs of Social Impact Theory, two sets of analyses were performed. In the first set, applying a three-way interaction, we examined how proximity to group members (within-subjects), group connectedness (between-subjects), and group size (between-subjects) influenced responses to both types of drinking attitudes and behaviors. For this purpose, a high–low median split was undertaken for group connectedness and group size. The second set of analyses tested whether the effect of proximity to group members (assessed online or in a group context)—our quasi-experimental factor—was moderated by one's gender and Greek status. All statistical interactions were analyzed and graphed according to procedures recommended by Aiken and West (1991).

3.2. Data reduction: Time 1 versus Time 2

Although participants were assessed at three time points, the two online assessments were compared to determine whether it was feasible to use only one of these online measurement points, therefore limiting the number of statistical tests. Table 1 contains the means and standard deviations of the composite variables from Time 1 and Time 2. As no systematic differences were exhibited between the two online assessments, suggesting that history and maturation artifacts (Cook & Campbell, 1979) were not responsible for driving these test-retest results, Time 2 was arbitrarily selected as the online comparison phase to Time 3's group assessment phase in all subsequent analyses. Consequently, this considerably reduced the number of analyses to be performed.

3.3. Testing Social Impact Theory

Next, we evaluated whether inter-relationships among the theoretical factors of Social Impact Theory were supported by the data. To this end, 2 (proximity: online assessment, group assessment) \times 2 (group connectedness: low, high) \times 2 (group size: small, large) repeated-measures ANOVA models were conducted on each of the four dependent measures of drinking attitudes (individual and perceived group) and behavior (individual and perceived group). A three-way interaction was found on perceived group drinking attitudes, $F(1280)=5.18, p<.05$. Upon closer examination of this result in Fig. 1, it was revealed that for small sized groups, high group connectedness produced higher perceptions of group drinking attitudes during the group assessment than during online assessment. However, for large size groups, low group connectedness resulted in higher perceptions of group drinking attitudes during the group assessment than online assessment.

Further, we observed a proximity \times group connectedness effect on perceived group drinking behavior, $F(1280)=5.24, p<.05$. This effect, decomposed in Fig. 2, shows that a difference between group connectedness levels on perceived group drinking behavior was present at the online assessment but not at the group assessment.

Proximity main effects were demonstrated for individual drinking behavior, with significantly higher means in the group assessment ($M=4.32, SD=1.69$) than online assessment ($M=3.54, SD=1.43$), $F(1280)=133.92, p<.001$; for perceived group drinking behavior, with higher means in the group assessment ($M=4.95, SD=1.24$) than online assessment ($M=4.21, SD=1.18$), $F(1280)=164.09, p<.001$; and for perceived group drinking attitudes, also with higher means in the group assessment ($M=3.98, SD=1.14$) than online assessment ($M=3.69, SD=1.29$), $F(1280)=11.83, p<.001$. Similarly, group size main effects were found for individual drinking behavior, with greater means from small groups ($M=4.31, SD=2.34$) than large groups ($M=3.69, SD=1.90$), $F(1280)=11.80, p<.001$; as well as for perceived group drinking behavior, with greater means from small groups ($M=4.78, SD=1.67$) than large groups ($M=4.29, SD=1.37$), $F(1280)=14.70, p<.001$. No group connectedness main effects were exhibited. All main effects should be qualified and interpreted in light of the higher order two-way and three-way interactions.

3.4. Gender and Greek status as moderators of proximity

In this next set of analyses, we sought to gain insight into whether gender and Greek status statistically moderated group proximity — the principal theoretical factor of interest in this paper. As such, repeated-measures ANOVA models evaluated whether the direct effect of proximity (online assessment, group assessment) on the dependent measures of drinking attitudes (individual, perceived group) and behavior (individual, perceived group) were moderated by both gender (male, female) and Greek status (Greek, non-Greek).

Results indicate a proximity×gender effect on perceived group drinking behavior, $F(1280)=3.94, p<.05$. This moderation effect is displayed in Fig. 3. Moreover, gender main effects reveal that males reported higher means than females on individual drinking behavior, perceived group drinking behavior, and perceived group drinking attitudes (Table 2).

Furthermore, a proximity×Greek status effect was shown on perceived group drinking behavior $F(1, 282)=6.63, p<.01$, presented in Fig. 3. Greeks status main effects evidenced that Greeks in comparison to non-Greeks reported greater individual drinking behavior and perceived group drinking behavior (Table 2). Main effects should be considered in light of the higher order interactions.

4. Discussion

The present study reveals that actual individual alcohol behavior and perceptions of group-specific behaviors and attitudes differ when assessed individually versus when assessed in groups composed of peers from a salient reference group. Three time points were used to determine differences between administration styles (Time 1 = online baseline, Time 2 = online 60 days after baseline, Time 3 = group seven days after Time 2) for members of campus fraternity, sorority, and non-Greek service organizations. Behaviors, attitudes, and perceptions did not differ between the two online assessments, suggesting that the data were not confounded by time, and thus Time 2 was arbitrarily selected as the comparison point for Time 3. Participants endorsed significantly higher individual drinking behavior during the assessment with members of their organization than they did during the online individual assessment. Additionally, participants' perceptions of the behaviors and attitudes of the members of their organization were significantly higher during the group assessment than the online assessment. These observed differences between contexts on perceived group alcohol use were more pronounced for men and for Greek students. These effects were evident despite facilitator assurance that individual responses were anonymous and that other students in the group could not see their responses.

The findings observed may be partly explained by Social Impact Theory (Latane, 1981), which states that individual behavior and attitudes can be influenced by proximity to group, connectedness to group, and size of group. This is applied here to the assessment of these behaviors and attitudes and to the perception of behaviors and attitudes of peers. To examine the three factors of Social Impact Theory, we ran three way interaction (proximity×connectedness×size) models for the variables in question. Contrary to our hypotheses that students in larger groups would experience the most influence, results

revealed that participants in smaller groups who had high levels of connectedness to their groups had higher perceptions of group drinking attitudes during the group assessment than during online assessment. However, participants in large sized groups with low group connectedness had higher perceptions of group drinking attitudes during the group assessment than during the online assessment. In addition, a two way interaction with proximity and connectedness revealed that those with higher group connectedness levels increased their perceived group drinking behavior from the online assessment to the group assessment to a greater extent than those with low group connectedness. Main effects for group size revealed that those in smaller groups reported lower levels of individual and perceived group behavior than those in larger groups.

While much research supports the idea that peers influence the drinking behaviors and attitudes of college students (Borsari & Carey, 2001; Borsari & Carey, 2003; Perkins, 2003), the present study finds that the presence of peers during assessment may influence responses to questions posed about perceived and actual norms. Participants endorsed higher self-reports of individual alcohol behavior when others in their organization were immediately surrounding them. These findings are important to consider as context may impact individual reports of actual drinking behavior among college students. Additionally, as college students tend to overestimate the drinking behaviors and attitudes of their peers (Borsari & Carey, 2001; Korcuska & Thombs, 2003; Lewis & Neighbors, 2004), the presence of members of an individual's peer reference group may actually augment these overestimations.

Increases in perceptions from the online to the group assessment may be partially explained by participants' ability to identify and locate drinkers in their organization as prototypical referent group members. Perhaps filling out the assessment at home on the computer, it was difficult to imagine all the members of one's group and therefore difficult to think of a perceived norm. In the group assessment, students may focus on known heavy drinking members of their organization and therefore increase their perceived norm to factor in these outliers. Alternatively, individuals may focus more on themselves (self-focused attention) in the presence of others, and therefore are more concerned with how others may see them (Carver & Scheier, 1981; Duvall & Wicklund, 1972). This concern may help explain the increases in actual behavior observed during the group assessment. The observed differences between contexts for reports of actual behaviors suggest that students may have increased their own reported behavior to fit their own perceived norm of the group, despite being reassured their responses would not be seen by others. Students nevertheless may have believed that others around them in the auditorium would see what button on the keypad they endorsed and therefore fabricated their responses to avoid derision. Conversely, reports of actual behavior may have been more accurate in the group, as students were able to locate friends with whom they may typically drink. Actively seeing drinking buddies may have helped participants recall specific recent drinking occasions. In the current study, it is unknown whether the online assessment or the group assessment most accurately represents true behavior and attitudes.

Individual attitudes did not appear to be as affected by the presence of the individual's peer reference group as did actual behaviors or perceptions of group behaviors and attitudes. It

appears that students were willing to compromise reports of their own behavior to possibly fit a perceived acceptable norm, but were not willing to concede their personal beliefs about alcohol use. Additionally, students may not have been wary of other students seeing their responses to these questions of personal beliefs because they may have believed others were less likely to tease them about attitudes than actual behavior.

In general, our hypotheses regarding group proximity and group connectedness were supported, but group size was not. No main effect for the Group Attitudes Scale was found for all participants. Two ideas can be offered to explain why connectedness did not impact social influence more in the current study. For one, the Group Attitudes Scale may not have been the best measure of *connectedness* to the group, as it is cited by the authors as a measure of *attraction* to the group. Using another measure may have revealed differential findings. Secondly, groups were considerable large in size (range 42 to 152, $M=117.29$, $SD=36.39$) and students may have found it more difficult to identify with and feel connected to such large organizations. Interestingly, the three way interactions revealed that smaller groups with high group connectedness may have been most influenced to increase responses on perceived group attitudes. Regarding group size, Social Impact Theory speculates that social influence, albeit larger in larger groups, tends to level off after approximately six or seven members are present in a group (Latane, 1981; Pettijohn, 1992). In larger groups people can be lost in the crowd and therefore a very large group may have less influence over an individual's behavior and attitude. This study preliminarily supports this idea.

4.1. Limitations

Several factors limit the generalizability of the current study. For one, differences observed may have been a function of the methodological design and procedures and not an impact of peer influence. This is apparent more by the lack of a counterbalanced design, where half of participants would have received the online assessment first and the other half would have received the group assessment first. Future research may wish to consider such an approach, or better yet, an experimental approach in which participants are randomly assigned to different contexts.

Additionally, both online questionnaires (Miller et al., 2002) and the handheld devices utilized in the groups (LaBrie et al., 2006) have both been shown to be comparable to traditional paper and pencil self-report questionnaires. Nevertheless, there are no studies to date which directly compare online measurements of alcohol use and attitudes with the handheld device system. Similarly, we did not assess what role the facilitator played in influencing responses. While we attempted to be consistent in all groups and simply read each statement as it appeared on the overhead screen, the process of hearing someone read the question aloud may have influenced participants' understanding of the question. Students may have misinterpreted the questions when reading them on their computer screen at home. The potential for assessment location to also influence responses is an issue as well. Although students were assured confidentiality, participants may have been influenced by the belief that their responses were less anonymous in the group setting (i.e., where students were seen by group members and facilitators).

Finally, it is unknown if the results found would be as pronounced if individuals reported their responses using paper and pencil questionnaires, as opposed to personal handheld devices. Findings from LaBrie et al. (2006) suggest that the handheld devices and paper and pencil questionnaires are comparable, but studies that specifically compare this observed effect using both assessment measures are necessary. Regarding recruitment issues, a large number of students recruited for the study failed to complete data at all three time points. Given the longitudinal design, we examined only those who completed all three assessments. However, significant demographic differences between those who completed all three time points and those who did not make these findings applicable only to students willing to complete all three assessments, and therefore results may not be completely generalizable to all students.

5. Conclusion

This study highlights the discrepancy in reported behaviors, attitudes, and perceptions of group behavior and attitudes between an online assessment context and a group assessment context. Students tend to endorse higher responses during group assessments when surrounded by peer members of campus organizations. When reporting individual and mean responses of college samples, it may be important to consider the context in which assessment took place. Future researchers may wish to explore this effect further or attempt to determine which of the two assessment contexts better captures true drinking behavior and attitudes by collecting actual blood alcohol levels over the period assessed. Perhaps by monitoring students through daily computerized or telephoned questions, followed by both an online and group assessment would aid researchers in the field of college drinking as to what context is most representative.

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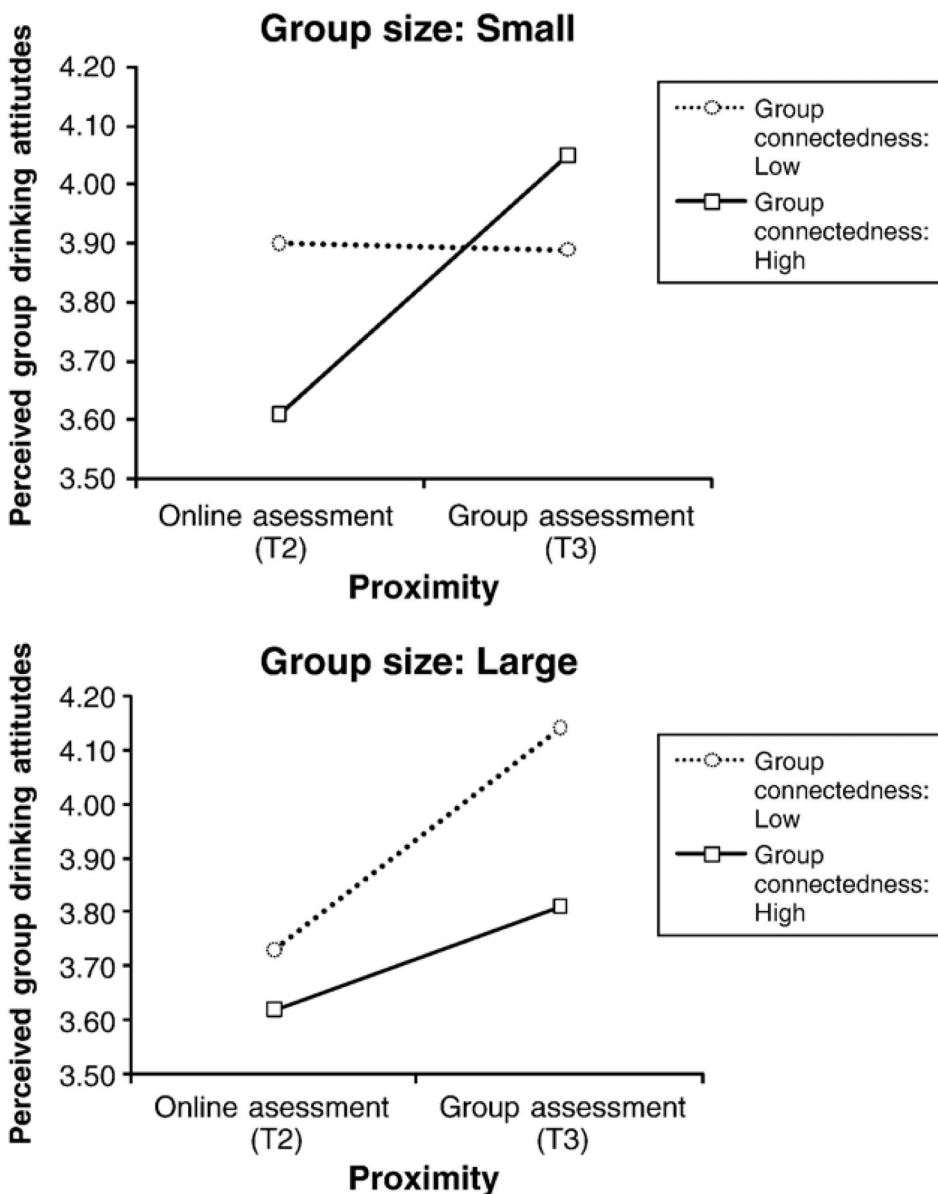


Fig. 1. Proximity×group connectedness×group size on perceived group drinking attitudes.

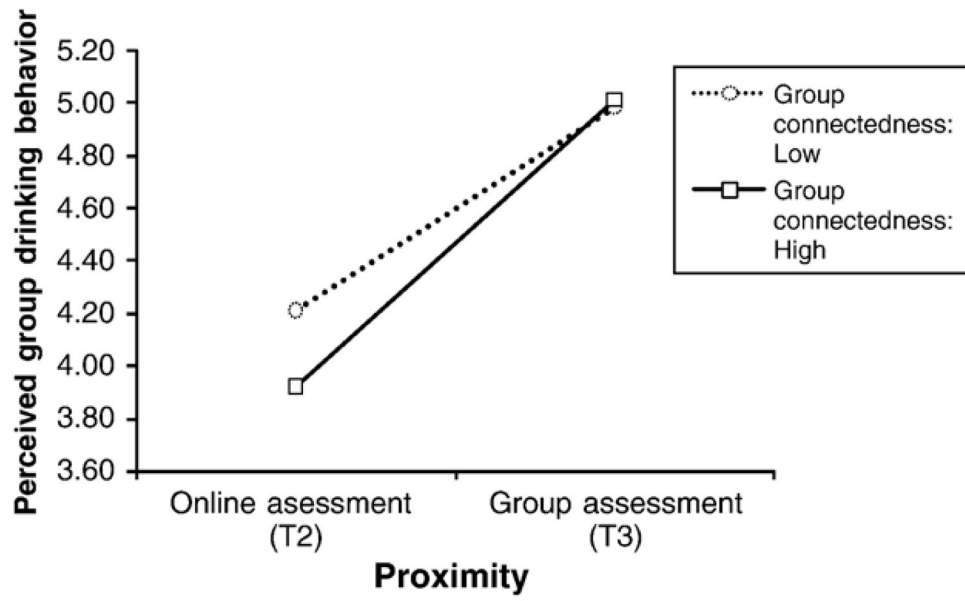


Fig. 2.
Proximity×group connectedness on perceived group drinking behavior.

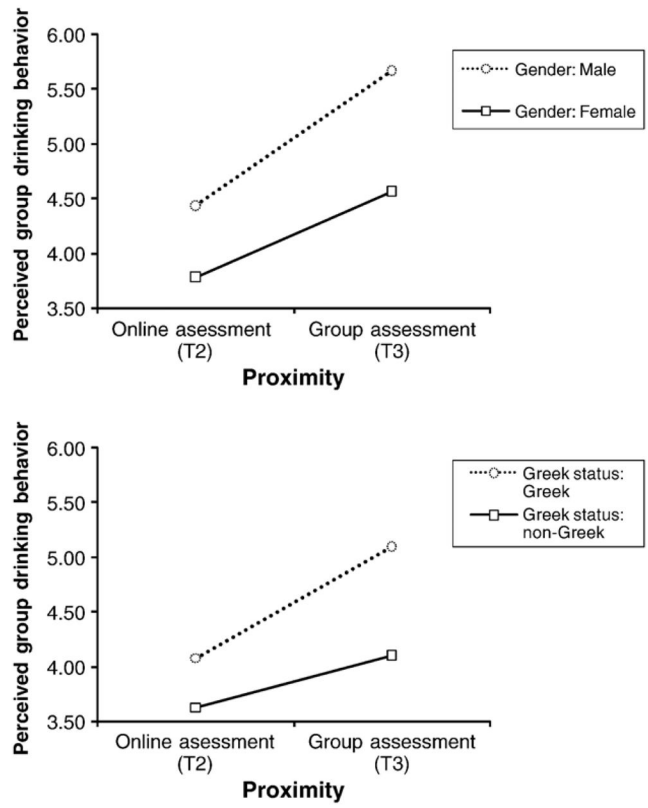


Fig. 3. Gender and Greek status moderating the effect of proximity on perceived group drinking behavior.

Table 1

Mean differences between Time 1 and Time 2

| Dependent measure | Online assessment (T1) | | Online assessment (T2) | | Repeated $F(1283)$ |
|------------------------------------|------------------------|--------|------------------------|--------|--------------------|
| | <i>M</i> | (SD) | <i>M</i> | (SD) | |
| Individual drinking behavior | 3.57 | (1.45) | 3.54 | (1.43) | 0.34 |
| Perceived group drinking behavior | 4.03 | (1.12) | 4.01 | (1.18) | 0.16 |
| Individual drinking attitudes | 3.58 | (1.17) | 3.46 | (1.15) | 3.78 |
| Perceived group drinking attitudes | 3.69 | (1.29) | 3.69 | (1.29) | 0.00 |

No significant differences on any of the dependent measures, $p > .05$.

Table 2

Mean gender and Greek status differences

| Dependent measure | Gender | | | | Greek status | | | | Repeated <i>F</i> (1280) | |
|------------------------------------|----------|---------------|----------|---------------|--------------|---------------|----------|---------------|--------------------------|----------|
| | Male | | Female | | Male | | Female | | | |
| | <i>M</i> | (<i>SD</i>) | <i>M</i> | (<i>SD</i>) | <i>M</i> | (<i>SD</i>) | <i>M</i> | (<i>SD</i>) | | |
| Individual drinking behavior | 4.32 | (2.92) | 3.25 | (2.90) | 4.16 | (1.58) | 3.41 | (3.81) | 18.87*** | 9.29** |
| Perceived group drinking behavior | 4.84 | (1.92) | 3.71 | (1.92) | 4.73 | (1.04) | 3.82 | (2.51) | 49.08*** | 31.58*** |
| Individual drinking attitudes | 3.47 | (2.28) | 3.44 | (2.26) | 3.54 | (1.23) | 3.27 | (2.97) | 0.44 | 1.96 |
| Perceived group drinking attitudes | 3.95 | (2.21) | 3.51 | (2.20) | 3.90 | (1.20) | 3.55 | (2.86) | 5.70* | 3.56 |

Note. These are main effects from the proximity×gender×Greek status models.

* $p < .05$.

** $p < .01$.

*** $p < .001$.