The Ties That Bind: Bonding Versus Bridging Social Capital and College Student Party Attendance

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ABSTRACT. Objective: This study explored the relationship between bonding and bridging social capital and college student attendance at alcohol-present parties, a common method for building informal social networks. **Method:** A random sample of students ($n = 6,291$; 52% female) from a large public midwestern university completed a survey regarding their alcohol use and party-related behaviors on targeted weekends. The survey also included questions regarding students' living arrangements, romantic relationships, and membership in student and community organizations. **Results:** Based on a dichotomous logistic regression analysis, we concluded that the act of attending parties largely serves as a complement to, rather than a substitute for, more conventional and formal social capital. Membership in bonding groups

is associated with increased odds of party attendance, and bridging exerts no direct effect on party attendance. However, bridging capital does mitigate the effect of bonding capital, reducing its apparent tendency to promote or contribute to partying. **Conclusions:** Off-campus parties may offer an informal supplement to more conventional social capital as students establish themselves in their new context. These findings may have implications for structural decisions (e.g., number of roommates) as well as the design of context-based prevention programs that address students' need to quickly build social capital without exposing both themselves and the students around them to the harms associated with high-risk drinking. (*J. Stud. Alcohol Drugs*, 73, 604–612, 2012)

MORE THAN 2.5 MILLION YOUNG ADULTS graduate from U.S. high schools each year, and more than 60% of them make the transition from high school to college (Planty et al., 2008). Whether a young person continues to live with parents or moves in with roommates on a college campus, this major life transition requires that students establish a new social identity and develop new social connections (Terenzini et al., 1994). The magnitude of social change is greatest, however, for those students who leave home to engage in their college education, because previous community, friendship, and family networks are typically not in proximity (Giddan, 1988).

The important process of developing new social networks and support systems is facilitated in the college setting by a number of formal and structural mechanisms. University administrators make roommate assignments, classes and athletic events provide structured opportunities for students to interact with peers, and sponsored intramural athletics and student organizations provide activities in which students can interact with others who have similar interests (Upcraft and Gardner, 1989). In recognition of the difficulty that

navigating this transition presents, many institutions also use first-year success programs, which offer activities to support students' social development and adjustment to the college community (Hunter, 2006).

At the same time, students also make use of informal mechanisms to establish new relationships and social networks. On many campuses, participation in high-risk drinking in general, and at off-campus parties in particular, is both a part of the overall increase in risk-taking that is common among students during the transition to college (Maggs, 1997; Schulenberg and Maggs, 2002) and a commonly used informal mechanism for integrating oneself into the student community (Borsari and Carey, 2001).

Although participation in off-campus parties may help students with their need to develop a social network and to build social capital in their new setting, the heavy drinking associated with off-campus parties results in significant problems on campus and in the surrounding community. In addition to the negative consequences that drinking parties themselves experience (Hingson et al., 2002, 2009; Wechsler et al., 1994), high-risk drinking is associated with negative effects on nondrinking students and the larger community (Perkins, 2002; Wechsler et al., 1995). Off-campus parties have also been associated with celebratory disturbances in college communities (Andrews and Buettner, 2003; McCarthy et al., 2007; Ruddell et al., 2005), and these disturbances can result in injury to students and public safety personnel, negative town–gown relations, and prevention and intervention costs to the community (Gebhardt et al., 2000; Lanter, 2004; Perkins, 2002).

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The personal and community costs associated with off-campus parties have prompted studies into what predicts parties and high-risk drinking, with researchers examining individual characteristics of students who engage in high-risk drinking (Baer, 2002; Buettner et al., 2010; McCabe, 2002), as well as the influence of setting on alcohol intake (Demers et al., 2002; Paschall and Saltz, 2007) and subsequent risk behaviors (Usdan et al., 2005). Included in previous efforts to understand the antecedents of college party behavior are studies examining the relationship between social capital and college drinking. To date, results have been mixed. In some studies, institutional social capital was found to have a protective effect on high-risk drinking (Weitzman and Chen, 2005; Weitzman and Kawachi, 2000), whereas others have not been able to replicate those results (Theall et al., 2009).

One consideration for these mixed results is how social capital has been defined in studies of college drinking. Sociologists generally define social capital as the links that exist between and within social networks and, further, typically identify two types of social capital—bonding and bridging (Putnam, 2000). Bonding encompasses social networks that cement groups of similar people together (e.g., fraternities). These ties can provide important resources (e.g., sense of identity and social support) to an individual but can also reinforce negative behaviors (Putnam, 2000). For example, both families and gangs are considered bonding social groups. On the other hand, bridging refers to those networks that make connections across heterogeneous groups of people (e.g., hobby clubs, student government, and service organizations)—bridging divisions that usually separate society, such as class, race, or religion. This form of social capital is thought to provide important benefits for both individuals and their communities, although the bridging dimension of social capital is typically more difficult to build (Putnam, 2000). There is some suggestion, however, that for individuals, bonding and bridging social capital are highly correlated; that is, people who are members of many bonding groups also tend to be high in bridging social capital (Halpern, 2005).

Using this social capital framework, the current study explored three research questions that, to our knowledge, had not yet been examined: (1) Are bonding and bridging social capital highly correlated in a college student population; (2) does the type of more formal social network in which a student engages (i.e., activities that typically would build either bonding or bridging social capital) differ in relationship to a student's attendance at alcohol-present parties, a common method for building informal social networks; and (3) if so, does bridging social capital provide a protective effect for party attendance?

Our focus in this study, therefore, was to extend the examination of social capital and party-related drinking behaviors by observing it at the student level, focusing on the relationship between the different forms of social capital

and a student's likelihood to attend a party at which high-risk drinking behavior occurs. In other words, what are the links between the more formal mechanisms for creating social networks (e.g., participation in various clubs and organizations) and the more informal mechanisms of party attendance? We believe that understanding the nature of this relationship would inform intervention efforts on college campuses.

Method

Data and sampling procedures

Four waves of randomly sampled students ($N = 7,181$) from a large, public midwestern university completed a survey regarding their alcohol use and party-related behaviors on targeted weekends (one high-risk and one low-risk weekend in each of the fall and spring quarters over 2 academic years, 2005–2006 and 2006–2007). Factors that were associated with high-risk drinking and party behavior over a 10-year period on the campus (e.g., home football game, traditional sports rival, student block-party weekend) were used to determine risk status. The focus was on drinking and related behaviors during the targeted weekends, and therefore the survey administration was structured to obtain that information as soon as possible after the weekend's conclusion.

We followed the same procedures for each administration of the survey. Undergraduate college students were contacted and asked to complete a web-based survey examining party behaviors and alcohol use. The survey was fielded for 3 days after each study weekend. The target sample was 900 undergraduate students (225 students from each of the four ranks). For both weekends in each wave, a sample of 4,000 (1,000 from each class) full-time students was randomly selected from enrollment lists. We based the sample size on response rates of 30% to 35% obtained in other web-based surveys measuring college student alcohol use (DuRant et al., 2007; O'Brien et al., 2006). To increase response rates, the sample was randomly divided into three subsamples of 2,000, 1,000, and 1,000 students, and only the initial 2,000 students were contacted on the first day of the survey. The recruitment email invited students to participate and informed them that if they did so, \$10 would be added to their campus account. We released a second group of 1,000 on Day 2 only if there was not a minimum of 750 students who completed the survey within 24 hours after the initial email. We also emailed a reminder on Day 2 to all noncompleters from the first sample. The survey was closed after 900 completions were reached on Day 2 (the release of the final 1,000 was never necessary because the response reached 900 in each case on Day 2). This resulted in a response rate of 30% for each administration and overall.

Comparisons of contacted and noncontacted students on demographic variables were nonsignificant. Comparisons on

variables between waves indicated no significant differences on sex and race. A previous article published using this data set confirmed that there were increased drinking behaviors on high-risk weekends (Champion et al., 2009). We also found a significant difference in the number of memberships in bonding activities. Those differences were between fall and spring, however, not between weekends in the same quarter, suggesting that this was a function of the academic year. The university's institutional review board approved all procedures used in the study.

In addition to standard demographic questions, the questionnaire included questions about participation in campus and local organizations/activities (e.g., academic clubs, fraternities/sororities, performing arts, community service, student government). There were also questions about current living arrangements—both location (on-campus student housing, off-campus student housing, parent's home) and details (number, relationship) of roommates—as well as about party attendance, alcohol consumption, and alcohol-related consequences.

Following listwise deletion of cases with missing information, an effective sample size of 6,192 students ($M_{\text{age}} = 20.66$ years, $SD = 2.16$) was used in the analysis. Of these, 52% were female. Most were full-time students (97.1%), and 30.1% reported themselves to be freshmen, 25.6% sophomores, 23.4% juniors, and 20.9% seniors. In terms of race, 86% were White, with the remainder minority-status students. The final sample closely mirrored the university population, which was 49.09% female and 86% White.

Regarding parents' education, 78.1% reported that their fathers had had at least some college, and 77.8% reported the same for their mothers. Last, 43.7% of the students reported belonging to at least one bonding-type organization, and 55.1% belonged to at least one organization of the bridging variety (see below). Table 1 presents descriptive statistics for all variables used in the analysis.

Dependent variable

The dependent variable was "attended party." Participants were asked if, over the weekend, they attended a party at which alcohol was served. Responses were coded dichotomously (0 = did not attend a party, 1 = attended a party). Roughly 63% of the sample indicated that they had attended an alcohol-present party during this period.

Independent variables

A number of factors related to student embeddedness in social networks are likely to be directly related to party participation. Several measurements were therefore included in the study to analyze the link between student party attendance, social capital, and related indicators of student connectedness.

TABLE 1. Descriptive statistics

Variable	Valid obs., <i>n</i>	<i>M</i>	<i>SD</i>	Min.	Max.
Dependent variable					
Attended party	6,192	0.626	0.484	0	1
Control variables					
Male ^a	6,192	0.480	0.500	0	1
White ^b	6,192	0.860	0.346	0	1
Age	6,192	20.663	2.162	18	30
Father's education	6,192	3.663	1.147	1	5
Spending money	6,192	1.956	1.240	1	6
High-risk weekend ^c	6,192	0.500	0.500	0	1
Test variables					
Student rank					
Freshman	6,192	0.301	0.459	0	1
Sophomore	6,192	0.256	0.436	0	1
Junior	6,192	0.234	0.423	0	1
Senior	6,192	0.209	0.406	0	1
Full-time student ^d	6,192	0.971	0.167	0	1
Married/partnered ^e	6,192	0.470	0.499	0	1
Work ^f	6,192	0.570	0.495	0	1
Live off campus ^g	6,192	0.570	0.495	0	1
Residence structure					
Alone	6,192	0.092	0.290	0	1
With roommate	6,192	0.575	0.494	0	1
With roommates	6,192	0.226	0.418	0	1
With family	6,192	0.055	0.228	0	1
With partner	6,192	0.045	0.208	0	1
With children	6,192	0.007	0.083	0	1
Bonding capital	6,192	0.526	0.662	0	3
Bridging capital	6,192	0.632	0.813	0	4
Total valid <i>n</i>	6,192				

Notes: Obs. = observations; min. = minimum; max. = maximum. ^aReference category is female; ^breference category is non-White; ^creference category is low-risk weekend; ^dreference category is part-time student; ^ereference category is single; ^freference category is unemployed; ^greference category is live on campus.

Student year in school. As noted above, the transition to college life is often accompanied by loss of, or increased distance from, extant social networks. For newer students especially, college life may be marked by loneliness (Pargetter, 2000), disconnectedness, and a lack of social involvement (Perry and Allard, 2003). Drinking at off-campus parties constitutes a widespread and readily available activity that offers an easy source of integration (Borsari and Carey, 2001), particularly for newer students. Student rank was measured as a series of dummy variables representing each rank, with freshmen serving as the omitted category.

Student and relationship status. Although drinking and attending parties are common behaviors for many college students (Maggs, 1997; Schulenberg and Maggs, 2002), some individuals (e.g., traditional full-time) are more likely to be drawn into the student norms than others (e.g., married students). Student status was measured dichotomously, where 0 = part-time student status and 1 = full-time status. Marital or other committed relationship status was measured dichotomously as well, such that 0 = single (including separated, divorced, and widowed), and 1 = partnered (including married or in a relationship).

Work. Many students work while in college, and this may have important influences over other aspects of their social life, including their likelihood of attending off-campus parties. Time spent working is time taken away from other activities (White and Gager, 2007). However, work may function to integrate individuals into larger social networks. For example, Scanlon et al. (2007) found that many of the students in their sample who worked did so not primarily because they needed money, but “for social reasons” (p. 239): to meet people and make friends. Work status was coded dichotomously (0 = unemployed, 1 = employed).

Residential location and structure. Where a student lives, and with whom, are likely indicative of the degree or type of access to other social networks. Previous studies have found that living with both biological parents has a positive influence on participation in extracurricular activities (White and Gager, 2007). However, attending college parties might be more properly conceived of as a risk behavior, and living with parents may not exhibit the same effect. Yet in this regard, residential structure can still exert a powerful influence over the risk-taking behavior, as Duncan et al. (2005) found to be the case with students who had roommates. We measured residence patterns in two ways. First, participants were asked whether they lived on campus (coded as 0) or off campus (coded as 1). Second, a series of dummy variables measured with whom participants lived. Living alone served as the omitted reference category; other residence structures were living with one roommate, living with two or more roommates, living with family, living with a spouse or partner, and living with one's children.

Formal social capital. Last, we measured membership in organizations. As described in the previous section, two types of formal social capital might be related to the informal social capital attained through attending parties. In the Theall et al. (2009) study of social capital, the authors considered participation in campus activities separately and in the aggregate. Following Theall et al., we also aggregated participation. However, we aggregated membership in bonding and bridging organizations separately.

Two important studies have previously validated the measurements we used to distinguish between bonding and bridging-type associations. Knudsen et al. (2008) used a panel of “15 ‘experts’ to judge” (p. 21) how restrictive membership was for various types of groups. Paxton (2007) used a more empirical method of determining the connectedness (bridging) of different types of groups in a sample with 35,144 people in 31 nations. Each time someone was a member of a group, the author measured how many other groups they were members of and averaged each category. Both Knudsen et al. and Paxton came to remarkably similar conclusions given their different methodologies. For example, the former study found that 93.33% of judges agreed in classifying religious groups as more exclusive in nature. Paxton found that these groups stand out as one of the least

connected, with members belonging to 1.17 fewer other group types, on average, than other associational categories.

Therefore, organizational participation types (and percentage of students reporting participation) in the bonding measure were sports club members (28.3%), religious organization participants (12.5%), sports team members (3%), and fraternity/sorority members and pledges (2.8%). Observed measures for the scale ranged from 0 to 3, indicating the total number of bonding memberships. Organizational participation types in the bridging measure were community service group or volunteer work (27.5%), academic clubs or honor societies (23.9%), performing arts groups (6.5%), student government or political club (5.2%), campus media organizations (1.8%), and residence hall advisors (1.1%). Observed measures ranged from 0 to 4, indicating the total number of bridging memberships.

Control variables

In addition to the test variables, several standard demographic variables were included as controls (i.e., sex, race, age, father's education, and spending money), typical of similar studies regarding youth behavior or social capital (cf. Duncan et al., 2005; Theall et al., 2009; White and Gager, 2007). Sex was coded as a dichotomous dummy variable, in which 0 = female and 1 = male. Given that most of the sample was White (86%), race was also coded dichotomously, such that 0 = other than White, and 1 = White. Age was coded continuously and ranged in value from 18 to 30 years. We coded father's education via an ordinal variable ranging from 1 to 5, with increasing values corresponding to higher levels of education (i.e., 1 = less than high school degree, 5 = more than 4-year degree). To measure spending money, participants were asked, “How much spending money for entertainment do you have in an average month?” Students could select one of six options: less than \$100, \$100–\$199, \$200–\$299, \$300–\$399, \$400–\$499, and \$500 or more.

One last control variable was also included: risk weekend. Administrators on college campuses typically prepare for increased partying and high-risk drinking on “celebratory” weekends that are associated with sports events against traditional rivals, championship games, and local or national holidays. Champion et al. (2009) confirmed that these events are associated with increased rates of drinking.

Analytic strategy

Given that the dependent variable is dichotomous, we used logistic regression in the analysis. Four models in total were tested: (1) a baseline model that included only the control variables; (2) a model adding the test variables to the baseline; (3) a reduced model, in which variables found not to be significant in Model 2 were removed for the sake of parsimony; and (4) a final model that includes an interaction

term. No multicollinearity was detected in any of the models nor, following the centering of interval-level variables used to calculate interactions, were any significant interactions found other than presented in the final model. We examined interaction effects in a conservative rather than exploratory or post hoc fashion. That is, interactions were tested only when directly pertinent to the research questions and where there was also strong, preexisting theoretical or empirical support for their inclusion. The interaction between bridging and bonding social capital, for example, is an extrapolation from existing literature. Halpern (2005) found that membership in associations of each type was highly correlated with memberships in the other. Given that socioeconomic status indicators also have a proven history of importance across a wide range of research, two other interaction terms were also examined: father's education by respondent's gender and father's education by spending money. Neither term was significant.

Likelihood ratio tests were used to determine the significance of each model as a whole and the significance of individual parameters within the models (Long and Freese, 2006). To aid interpretation, odds ratios, calculated as $\exp(B)$, are presented in Table 2 along with the B coefficients and standard errors. Nagelkerke's pseudo- R^2 is also presented for each model. All pseudo- R^2 measures estimate the predictive power of a model relative to a baseline model with no predictors. They are roughly analogous to R^2 in other regression methodologies but indicate log likelihood improvement rather than variance explained (Pampel, 2000). Nagelkerke's is a commonly used pseudo- R^2 estimate that ensures a maximum value of 1.

Results

The results of the logistic models are presented in Table 2. In Model 1, which included only the controls, all of the variables were found to be significant (each at $p < .001$). The odds of men attending a party at which drinking occurred were approximately 29% higher, $\exp(B) = 1.291$, relative to the odds of women attending such a party. The odds of Whites attending a party were 57% higher compared with all other races. The age of students correlated negatively with odds of party attendance. The odds of attending a party decrease by about 15% for a 1-year increase in age. Father's education was positively associated with odds of party attendance such that a unit increase in the scale resulted in nearly a 10% increase. Spending money was also found to increase odds of party attendance (16% increase in odds for a unit increase on the scale). Last, "high-risk" weekends were found to increase the odds of party attendance by 54%.

Overall, use of Model 1 significantly improves the odds of predicting student party attendance over the null model in which no predictors are included in the model ($\chi^2 = 344.26$, $p < .001$). Moreover, the Hosmer and Lemeshow chi-square

statistic indicates that it adequately fits the data ($\chi^2 = 8.087$, $p < .425$). However, the overall explanatory power of the model is fairly small (Nagelkerke $R^2 = .074$). As discussed next, inclusion of the main test variables of interest in the equation improved the model.

In Model 2, presented in Table 2, the test variables were added into the equation to determine their effects on the odds of party attendance. All of the control variables were maintained from the previous model. Each control remained significant and exhibited an effect similar to that it had earlier, although the significance levels of two variables were somewhat reduced (i.e., male, $p < .05$; father's education, $p < .01$). Turning to the test variables, most of the parameters indicate a relationship to party attendance. First, the student rank variables indicate that the odds of attending a party are decreased as students increase in rank. Sophomores, juniors, and seniors all have lower odds of party attendance relative to freshmen, although the coefficient for sophomores is not significant. Both juniors ($p < .01$) and seniors ($p < .05$) exhibit roughly 25% lower odds than freshmen.

Next, students involved in a relationship were found to have significantly lower odds of party attendance than single students (approximately 25% reduction in odds at $p < .001$). Students who work, however, were found to have significantly higher odds of party attendance. Relative to nonworking students, workers exhibited 11% greater odds ($p < .05$, two tailed). Residential location and type also were significantly related to party attendance. First, in terms of location, the odds of attending a party for students who lived off campus were about 58% higher than for those who lived on campus ($p < .001$). Next, with whom students live was found to be related to party attendance. Relative to students who live alone, significant differences in odds of party attendance were found for students who live with a single roommate (79% increase in odds of party attendance at $p < .001$), live with two or more roommates (155% increase in odds at $p < .001$), live with adult family members (52% reduction in odds at $p < .001$), and live with their children (63% reduction in odds at $p < .05$).

Last, a significant relationship was found with bonding capital. A unit increase in bonding capital is associated with a 41% increase in odds of party attendance ($p < .001$). Although bridging social capital was not found to significantly relate to odds of party attendance, the direction of the relationship (decreased odds of attendance with a recorded increase in bridging capital) is in the direction suggested by the research of Weitzman and Kawachi (2000).

Overall, Model 2 improves accuracy in estimating party attendance significantly over Model 1 ($\chi^2 = 711.96$, $p < .001$) and adequately fits the data (Hosmer and Lemeshow $\chi^2 = 11.229$, $p < .189$). The explanatory strength of the model, although still relatively modest in magnitude (Nagelkerke $R^2 = .148$), is doubled over that of the previous model, in which only the controls were included, providing reasonable

TABLE 2. Logistic regression models of party attendance predictors

Variable	Model 1		Model 2		Model 3		Model 4	
	<i>B</i> (<i>SE</i>)	Odds	<i>B</i> (<i>SE</i>)	Odds	<i>B</i> (<i>SE</i>)	Odds	<i>B</i> (<i>SE</i>)	Odds
Control variables								
Male ^a	0.256*** (0.055)	1.291	0.129* (0.058)	1.138	0.125* (0.058)	1.133	0.126* (0.058)	1.134
White ^b	0.452*** (0.077)	1.572	0.300*** (0.081)	1.351	0.304*** (0.081)	1.355	0.302*** (0.081)	1.353
Age	-0.168*** (0.013)	0.846	-0.105*** (0.020)	0.901	-0.111*** (0.019)	0.895	-0.109*** (0.019)	0.897
Father's education	0.091*** (0.024)	1.096	0.078** (0.025)	1.082	0.076** (0.025)	1.079	0.076** (0.025)	1.079
Spending money	0.144*** (0.023)	1.155	0.131*** (0.025)	1.140	0.133*** (0.024)	1.142	0.133*** (0.025)	1.143
High-risk weekend ^c	0.430*** (0.054)	1.537	0.457*** (0.056)	1.579	0.449*** (0.056)	1.566	0.456*** (0.056)	1.578
Test variables								
Student rank ^d								
Sophomore			-0.115 (0.085)	0.891	-0.118 (0.085)	0.889	-0.110 (0.085)	0.896
Junior			-0.282** (0.102)	0.754	-0.277** (0.101)	0.758	-0.269** (0.102)	0.764
Senior			-0.294* (0.118)	0.745	-0.281* (0.117)	0.755	-0.283* (0.118)	0.754
Full-time student ^e			0.263 (0.177)	1.301				
Married/partnered ^f			-0.284*** (0.058)	0.752	-0.289*** (0.058)	0.749	-0.289*** (0.058)	0.749
Work ^g			0.104† (0.060)	1.11	0.097† (0.060)	1.102	0.111† (0.060)	1.118
Live off campus ^h			0.460*** (0.082)	1.584	0.469*** (0.082)	1.598	0.460*** (0.082)	1.584
Residence structure ⁱ								
With roommate			0.584*** (0.097)	1.793	0.589*** (0.097)	1.802	0.582*** (0.097)	1.790
With roommates			0.938*** (0.111)	2.554	0.940*** (0.110)	2.559	0.940*** (0.111)	2.560
With family			-0.744*** (0.150)	0.475	-0.744*** (0.150)	0.475	-0.741*** (0.150)	0.477
With partner			-0.158 (0.163)	0.854	-0.158 (0.163)	0.854	-0.156 (0.163)	0.855
With children			-0.995* (0.434)	0.370	-1.004* (0.433)	0.367	-1.001* (0.434)	0.367
Bonding capital			0.345*** (0.046)	1.412	0.349*** (0.046)	1.417	0.369*** (0.047)	1.446
Bridging capital			-0.013 (0.036)	0.987			-0.009 (0.036)	0.991
Bonding Capital × Bridging Capital							-0.108* (0.051)	0.898
Constant	-0.196 (0.131)		-1.094*** (0.254)		-0.829*** (0.171)		-0.832*** (0.172)	
<i>n</i>	6,192		6,192		6,192		6,192	
Nagelkerke <i>R</i> ²	.074		.148		.148		.149	
-2LL	7,849.56		7,484.2		7,481.9		7,477.516	

Notes: LL = loglikelihood. ^aReference category is female; ^breference category is not White; ^creference category is low-risk weekend; ^dreference category is freshman; ^ereference category is part-time student; ^freference category is single; ^greference category is unemployed; ^hreference category is live on campus; ⁱreference category is lives alone.

†*p* < .05 (two tailed).

p* < .05; *p* < .01; ****p* < .001 (one tailed).

evidence supporting a link between student party attendance and measures of social capital and other indicators of social connectedness.

Next, Model 3 presents a more parsimonious estimate by removing nonsignificant factors from the equation. The

coefficients for each remaining factor were largely consistent with Model 2, while the significance levels of each factor remained unchanged. Moreover, the model continues to adequately fit the data (Hosmer and Lemeshow, $\chi^2 = 12.075$, *p* < .148), the explanatory strength of the model is largely

unchanged (Nagelkerke $R^2 = .148$), and the model is not significantly different from the previous one that included the nonsignificant variables ($\chi^2 = 2.321$, $p < .313$). Likelihood ratio tests performed on the individual parameters within this model indicate the relative explanatory power of each within the equation by omitting the variable and noting changes in log-likelihood. Residence structure had the most predictive power overall ($\chi^2_{\text{improvement}} = 142.100$), with the distinction between having multiple roommates and living alone being the most important dichotomy ($\chi^2_{\text{diff}} = 72.832$). The control variable, high-risk weekend, was the next most predictive variable ($\chi^2_{\text{diff}} = 64.964$), followed closely by bonding capital ($\chi^2_{\text{diff}} = 60.143$).

Model 4 investigates the relationship between bonding social capital and bridging social capital. Although bridging capital was not found to be significant in any of the previous models, a Pearson correlation was found linking it weakly, but significantly, to bonding social capital (Pearson $r = .156$, $p < .01$). To further investigate the third hypothesis that bridging capital might have a protective effect, Model 4 includes an interaction between bridging and bonding social capital. The significance levels of the other variables remain unchanged from Model 3, and coefficients vary only slightly. However, the interaction term for bonding and bridging capital is both significant and negative ($p < .05$). This suggests that although membership in bonding groups is associated with increased odds of party attendance, and bridging continues to exert no direct effect on party attendance, bridging capital does mitigate the effect of bonding capital, reducing its apparent tendency to promote or contribute to partying. Model 4, like those before it, was found to adequately fit the data (Hosmer and Lemeshow $\chi^2 = 11.891$, $p < .156$) and further improves accuracy in estimating party attendance significantly over Model 1 ($\chi^2 = 4.473$, $p < .05$), although the overall explanatory power of the model is only somewhat increased by the inclusion of the interaction term (Nagelkerke $R^2 = .149$).

Discussion

Consistent with the literature, our analysis of data from 6,192 students at a large midwestern university found that our control variables—being male, being White, being younger, having a father with higher education levels, having more spending money, and the risk status of the weekend—all contributed to higher likelihood of party attendance. Also consistent with existing literature, we found that likelihood of participation decreased with additional rank (year in school) and if the student was in a romantic relationship. Factors that increased the likelihood of party attendance were working, living off campus, and having roommates, with more than one roommate increasing the odds of attending a party by 155%. As might be expected, we found that living with an adult relative or with one's children reduced the likelihood of party attendance.

Our data also suggest that among college students, there is a correlation between participation in bonding and bridging organizations/activities. This coincides with expectations based on previous research, which found a high correlation between the two kinds of social capital (Halpern, 2005).

We also found that students involved in activities and organizations categorized as bonding were more likely to attend parties and that the effect was cumulative; that is, the more bonding associations a student had, the more likely he or she was to attend an alcohol-present party. On the other hand, activities associated with bridging capital did not significantly lower risk for party attendance, even though the direction of the relationship was toward decreased odds of attendance with increased participation in bridging activities. The literature on correlates of high-risk drinking in college predicts that participation in some of the bonding activities (e.g., fraternity/sorority organizations and sports-related activities) would be associated with drinking and party attendance (Harford et al., 2002; Nelson and Wechsler, 2003; Wechsler et al., 2000). Given previous findings about the protective effect of institutional social capital (Weitzman and Chen, 2005) and participation in such organizations at the individual level (Theall et al., 2009), however, we expected the opposite for association with bridging activities. This divergence suggests that there may need to be a threshold level of aggregated participation in bridging-type activities for a protective effect to emerge. In addition, the size of a student body may play a role in that it may be more difficult to establish social networks on large campuses, thus intensifying the role of bonding activities. Further research could help clarify these issues. An additional area for further research is an examination of the long-term effects of the types of social embeddedness a student experiences while in college. Our data suggest a fairly clear pattern, in which one form of embeddedness draws students away from parties into more traditional or stable networks and the other binds them to the common college culture network of parties, roommates, and fraternities.

This study is not without limitations. Although statistically significant, the explanatory strength of our model was relatively modest, and, as with most studies of college student drinking, we relied on student self-report of party attendance. In addition, our data came from one large midwestern university campus, which may not fully represent the typical U.S. college campus. However, the university is similar demographically to peer institutions, and our study used a random sample of students, which increases generalizability. Last, the repeated random sampling frame resulted in a small percentage of nonidentifiable duplicates across the waves of data, a violation of the assumption of independence. The potential effect when this assumption is violated, however, is to bias variances, yielding variances either smaller or larger than should be expected. Kenny et al. (2006) note that when the correlations between responses are positive, which is the

case for the responses of a participant at Time 1 and Time 2 (the case here), any resulting bias causes the variance of the observation to be reported as smaller than it actually is. Therefore, the potential is that we have underreported the significance of our findings.

Limitations notwithstanding, these findings present implications for college administrators as they make structural decisions (e.g., number of roommates in residence locations) and design context-based prevention programs that address students' need to quickly build social capital without exposing themselves, the students around them, and the local community to the harms associated with high-risk drinking. Given the risks associated with alcohol misuse, it is understandable that college administrators see party behavior as something to discourage. The ubiquitous nature of off-campus parties suggests that they fulfill a function for young college students beyond getting drunk. Parties serve as mechanisms for students to build social networks and social capital that are otherwise disrupted in the transition to college. Therefore, it is important to account for the role that this phenomenon may play in that crucial process and to develop prevention efforts that support students in their need to build social capital while minimizing risk behaviors.

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