

Prevalence and Profiling: Hazing Among College Students and Points of Intervention

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Objective: To examine university students' attitudes, behaviors, and beliefs related to hazing. **Methods:** A random and representative sample of students completed a web-based survey regarding team-building and initiation behaviors (N=736). **Results:** Thirty-six percent of the respondents participated in hazing. Greeks, males, varsity athletes, leaders, and upperclassmen were more likely to

engage in hazing. Students who engaged in hazing were more likely to engage in positive team-building activities. **Conclusions:** Hazing is occurring on campus, although not always recognized as such by students. Various factors that would enable someone to stop a hazing situation are addressed.

Key words: hazing, violence, college students

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Hazing has been a part of group initiation practices since Plato's time¹ and has persisted to the present. Current hazing practices present difficulties to both college administrators and students.²⁻⁴ Hazing endangers one's physical and/or emotional well-being.⁵ Although hazing supporters assert that it is an effective means to build unity and initiate new members,^{6,7} hazing can result in the psychological and physical damage of those hazed⁸⁻¹¹ and even death.^{1-3,8,9,11-14} Although it is generally accepted that deaths due to hazing are underreported,^{1,2} 23 students died from hazing incidents in

2000, 24 in 2001, and 42 in 2002.¹

Hazing is often conducted in secret. These rituals serve the significant role of indoctrinating new members with the organization's ideals, including, but not limited to, religious values, moral standards, basic principles, and virtues and notions of brotherhood.¹⁴ This hazing can lead to potentially dangerous practices and situations that, when unchecked, can contribute to hazing as a dangerous, complex, poorly understood, and understudied practice^{2,3} and keeps those possibly able to stop hazing ignorant and powerless to address the issue.¹¹

Hazing is any activity, required implicitly or explicitly as a condition of initiation or continued membership in an organization, that may negatively impact the physical or psychological well-being of the individual or may cause damage to others, or to public or private property.^{1,5} A range of hazing behaviors exists, such as being kidnapped, transported, and abandoned; participating in drinking contests/games; being deprived of sleep; engaging in or simulating sexual acts; being physically assaulted; carrying unnecessary objects; and being required to remain silent.^{15,16} Many organizations also initiate or sustain membership through posi-

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tive team-building activities such as community service, fund-raising, mentoring, and ropes courses, or team challenges.^{15,16}

Although it is commonly acknowledged that hazing occurs on college campuses and can have extreme negative consequences, who participates and why are often assumed. The extant literature is thin regarding the characteristics of those participating in hazing beyond athletes and fraternity and sorority members – even though documented exceptions to these groups exist.¹⁵⁻¹⁷ Additionally, beliefs, attitudes, and norms regarding hazing have been understudied. Therefore, the purpose of this study is to investigate (a) the prevalence of hazing among a general college student body; (b) the extent to which students recognize activities as meeting the definition of hazing; (c) the sociodemographic characteristics of students who engage in hazing, either as a hazer or hazee; (d) the attitudes, behaviors, and societal factors that are related to hazing behavior; (e) the sociodemographic characteristics, attitudes, behaviors, and societal factors that predict hazing; and (f) students' perceptions of what might be helpful in getting themselves or their peers out of hazing situations.

REVIEW OF LITERATURE

Reasons for Hazing

Although many aspects of hazing are as yet unknown, prior research suggests that those who engage in hazing believe it will increase group cohesiveness^{17,18} and foster organizational respect, discipline, and loyalty.¹⁷ Others note the psychological and sociological needs that rites of passage, like hazing or any initiation, fulfill for the college student.¹¹

Those who undergo hazing may be more likely to find group membership attractive.¹⁸ However, it may not be the hazing itself, but the initiation accompanying the hazing that holds the appeal.¹⁹ Conversely, as Thomas Paine said, "What we obtain too cheap, we esteem too lightly."²⁰ The challenge of an initiation process may be what makes it intrinsically appealing to college students. Despite the appeal of an intense initiation, research suggests that the more severe the initiation process, the greater the feelings of depression, dissatisfaction, and loneliness among new members.¹⁹

According to research on the initiation

process, pledges are first made to feel special^{10,21} while contact with outsiders is broken. Then pledges are asked to perform hazing practices²¹ or are abused.¹⁰ They submit to this treatment because they want to gain others' affirmation or because they fear abuse if they do not take on an aggressor role.²¹ After their hazing ends, new members become hazers, thus perpetuating a hazing cycle.^{2,3,10,21,22} This is similar to other abuse cycles in which victims become perpetrators.^{23,24}

Hazing is believed to be widespread among a variety of populations. Prevalence rates have been found to be as high as 48% for high school students¹⁶ and 79% for NCAA varsity athletes.¹⁵ The prevalence rates among the general college population are still unknown. Therefore, we pose the following research question:

Research Question 1: What is the prevalence of hazing behaviors among the general college student body?

Recognition of Certain Behaviors as Hazing

In a recent study, 60% of hazed university athletes indicated that they would not report hazing.¹⁵ Whether these students decided to remain silent because they truly believed that they did not engage in hazing, because they were expressing team loyalty, or because they did not understand the concept of hazing is uncertain. Confusion about the definition of hazing appears prevalent. Although definitions of hazing exist, students often complain that hazing policies are not explicit enough or disagree that specific activities are hazing.¹¹ Therefore, we propose:

Research Question 2: What is the difference between students' perceptions of having been hazed and meeting the university behavioral criterion of having been hazed?

Sociodemographic Characteristics

Often framed in the media as a problem in the military, athletic groups, and fraternities and sororities, hazing is also an issue for other groups.^{11,16} A study of existing literature yielded that attitudes toward hazing at the university level depend on various sociodemographic variables like gender, ethnicity, Greek/non-Greek status,²⁵ and organization status.¹⁷

Given the multiple potential predictors

of hazers and hazing, this study aims to investigate the makeup of hazers and hazing within a population of university students and clarify the variables that are characteristic of students who engage in hazing. Therefore, the present study addresses the following:

Research Question 3: What are the sociodemographic characteristics of students engaging in hazing behaviors?

Theoretical Explanations

The theory of planned behavior,²⁶ the extended parallel process model (EPPM)^{27,28} and the health belief model (HBM)²⁹ are especially relevant to this investigation and discussion of hazing because of their emphasis on individuals' choices and the influence of attitudes, beliefs, and the social environment on decision making. The theory of planned behavior²⁶ asserts that how one behaves is affected by one's own attitudes, the attitudes of important others, volitional control, and behavioral intention. The EPPM explains behavior and suggests that fear is an effective catalyst for behavior change if its components – severity, susceptibility, response-efficacy, and self-efficacy – are present.^{27,28,30} The HBM suggests that a person weighs personal threat and susceptibility to some risk and, if that risk is great enough, then weighs the benefit of taking preventative action versus not taking preventative action.²⁹ The HBM includes perceived susceptibility, seriousness, benefits, and barriers and cues to action.

These theories suggest a set of constructs that play a role in students' decisions to engage in hazing. These constructs include the notions of susceptibility, severity, volitional control, barriers and cues to action, and subjective norms. Because these are likely to affect behavior, this study addresses a fourth research question:

Research Question 4: What attitudes, perceptions, and experiences are characteristic of those who engage in hazing behavior?

Sociodemographic variables and attitudes are likely to affect behavior; therefore, we pose:

Research Question 5: What factors predict who engages in hazing behavior?

Hazing Interventions

Many solutions to stop and prevent

hazing have been proposed and tested.^{15,31} These include message dissemination through authority figures and written policies; quick response to hazing violations; lack of tolerance; and organized activities that promote leadership, service to the community, and goal setting.¹⁵ Other ideas for targeting hazing practices entail direct support to hazing victims and initiation of preemptive strategies like educational efforts and steps to make the university environment inhospitable to hazing practices.³¹

Bronfenbrenner's³²⁻³⁴ model of social influence and Bloom's³⁵ model of prevention both suggest that individuals are most influenced by those most closely surrounding them, in this case, close friends, who may be more influential than family members.³⁶ Faculty members may also be helpful in intervening with hazed pledges.²¹ If an intervention were to be implemented, it would seem prudent to start with students' perceptions of how they can help stop hazing situations. Therefore,

Research Question 6: What are student perceptions of factors that might be helpful to them to stop hazing situations for students exposed to or caught up in hazing behaviors?

METHODS

This survey research was part of a broader participatory action research project involving campus administrators, health educators, faculty, and student leaders at a mid-sized northeastern university. Based on the theoretical literature and previous studies on hazing, the survey was developed to comprehensively assess the prevalence of hazing and students' attitudes, beliefs, and behaviors towards hazing. Specific questions on team-building and initiation activities (TBIs) were derived from a national survey of college sports teams¹⁵ and university judicial board records. The survey included measures of sociodemographic variables and participation in TBIs.

Data and Sampling

Data for this study were collected through a web-based questionnaire distributed to a random sample of 2000 undergraduates in November 2002. The sample was stratified based on class year. Participants were invited via email to participate in a web-based survey that

Table 1
Participation Rates in Hazing and Positive
Team-Building Activities

Type of Activity	% Students Who Have Participated
Hazing Activities^a	
Participating in a drinking contest/games	17.1
Being deprived of sleep	14.9
Being kidnapped or transported and abandoned	5.4
Acting as a personal servant to others	5.2
Destroying or stealing property	3.8
Being tied, taped up, or confined	2.9
Engaging in or simulating sexual acts	1.9
Being hit, kicked or physically assaulted in some form	0.8
Making body alterations (branding, tattooing, piercing)	0.2
Other Negative Team-Building and Initiation Activities	
Carrying around unnecessary objects or items	13.8
Being required to remain silent or being silenced	13.2
Being yelled, cursed, or sworn at	9.6
Having food thrown at you or other new members	5.7
Being pressured to eat something you did not want	4.9
Associating with specific people, not others	4.0
Positive Team-Building and Initiation Activities	
Doing community service	41.2
Keeping a specific grade point average	40.5
Playing recreational games/sports	37.2
Organizing a fundraising event	29.7
Completing ropes course, leadership courses, or other similar activities	19.3
Engaging in mentoring or academic tutoring	18.4

^a Hazing activities as defined by university policy and used as constituting hazing in this study.

would take approximately 20 minutes to complete. Nonrespondents received 2 reminder emails, after 5 and 8 days.

Measures

To measure the prevalence and implications of hazing, activities were selected that met the university definition of hazing and were agreed upon by the teams advising the project and hence did not vary by context. Additionally, factor and reliability analyses were conducted, where appropriate, to determine if individual response items could be combined into single factors and if the items had good internal consistency. For a comprehensive list of the nine TBIs that constitute hazing and are used in the creation of variables listed below, see Table 1.

Participation in hazing activities. This measure was a sum of the number of

hazing activities in which one had engaged while a student at the university ($M=1.34$, $SD=2.69$). A second variable was created that dichotomized participants into those who had participated in at least one hazing activity versus those who had not.

Participation in positive TBIs. Respondents indicated whether they had participated in each positive activity as part of team-building and initiation while at the university (Table 1). A variable was created summing the number of positive activities in which each respondent had participated ($M=1.72$, $SD=1.79$). A second variable was created that dichotomized respondents into those who had participated in at least one positive activity versus those who had not.

Perceptions of susceptibility ($M=2.90$, $SD=.70$, $\alpha=.89$). This 9-item, single-factor scale, constructed using factor analy-

Table 2
Helpfulness of Factors Enabling Students to Leave or to Stop a Hazing Situation

	Means ^a	Standard Deviations
Factors Enabling Student to Walk Away From Hazing Situation		
I have friends outside of the organization to support me.	4.11	1.11
I will be harmed in a way I don't want to be if I continue with hazing activities.	3.83	1.22
I will have friends within the organization to support me leaving.	3.73	1.24
I will be more respected by my peers if I step out.	3.63	1.29
I will not be ostracized by the organization I wanted to join.	3.59	1.36
I won't disappoint the older organization members by leaving.	3.29	1.35
I won't let down the other new members	3.29	1.35
I won't have wasted any time.	3.28	1.25
I will feel embarrassed if I allow myself to be hazed.	3.25	1.33
I won't have wasted any money.	3.12	1.25
The authorities will protect me.	2.96	1.37
Factors Enabling Student to Stop a Friend From Hazing Another		
My friend and I have a close relationship.	4.03	1.07
I am strongly opposed to hazing.	3.70	1.25
My friend is hazing someone I know.	3.69	1.21
My friend's emotional health may be harmed by hazing another.	3.68	1.25
Our friendship won't be jeopardized by my views.	3.57	2.83
I believe that hazing is not important to forming an effective group.	3.46	1.30
I believe others are opposed to my friend's behavior.	3.41	1.19
I'm concerned my friend will get caught.	3.40	1.20
I am in the group with my friend.	3.27	1.26
What my friend does reflects on me.	3.16	1.29
I have been hazed before and didn't like it.	3.10	1.35
I have hazed someone before and didn't like it.	2.79	1.29
I am not in the group with my friend.	2.78	1.20

a Means determined on a 5-point Likert scale from 1=Not helpful at all to 5=Very helpful

sis, included measures of one's perceived susceptibility to, or perception of likelihood of, experiencing harm as a result of the 9 hazing activities. Susceptibility was measured by asking students how likely it would be for them to experience harm should they participate in individual TBIs. Perception was reported on a 5-point Likert scale ranging from *very unlikely* to *very likely*.

Perceptions of severity or harm (M=4.09, SD=.72, α =.84). This 9-item, single-factor scale included perceptions of harm related to hazing activities. Perception of harm was measured by asking students how potentially harmful they considered a set of TBIs (emotionally, physically, and academically). The responses were measured using a 5-point

Likert scale ranging from *not at all harmful* to *very harmful*.

Friends' approval of hazing behavior (M=2.47, SD=.57, α =.87). Nine items assessed friends' level of approval of each hazing activity. Approval was measured by asking level of agreement with the statement: "My friends would approve of the following behaviors in team-building and initiation." The responses were on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*.

Perception of hazing as cohesion building (M=2.45, SD=.64, α =.88). This 9-item, single-factor scale measured a student's perception of the extent of cohesion building that takes place with hazing activities. Degrees of cohesion were measured by asking students to what extent

Table 3
Response Rate by Sociodemographic Variables (N=736)

Variable	Sample N (%)	Expected N (%)	χ^2 , P value
Women	369 (50.1%)	361 (49.1%)	$\chi^2 = 0.17$, $P > .05$
Whites	513 (69.8%)	451 (61.3%)	$\chi^2 = 11.55$, $P < .001$
Asian/Pacific Islander	133 (18.1%)	122 (16.6%)	$\chi^2 = 0.57$, $P > .05$
Latino	32 (4.3%)	39 (5.3%)	$\chi^2 = 0.73$, $P > .05$
Multiracial	29 (3.9%)	2 (0.2%)	$\chi^2 = 24.02$, $P < .001$
African American/Black	21 (2.9%)	34 (4.7%)	$\chi^2 = 3.19$, $P > .05$
American Indian	5 (0.7%)	4 (0.5%)	$\chi^2 = 0.11$, $P > .05$
Live on Campus	343 (47.6%)	323 (43.9%)	$\chi^2 = 1.09$, $P > .05$
Freshman	204 (27.8%)	166 (22.5%)	$\chi^2 = 5.21$, $P < .05$
Sophomore	166 (22.3%)	177 (24.1%)	$\chi^2 = 0.46$, $P > .05$
Junior	182 (24.4%)	187 (25.4%)	$\chi^2 = 0.174$, $P > .05$
Senior	184 (24.7%)	204 (27.7%)	$\chi^2 = 1.40$, $P > .05$
Greek	160 (30.3%)	162 (30%)	$\chi^2 = 0.02$, $P > .05$
Varsity Athletes	74 (11%)	81 (10%)	$\chi^2 = 0.53$, $P > .05$

they thought each of the 9 hazing behaviors helped build group cohesion on a 5-point Likert scale ranging from *not at all* to *completely*.

Belief that hazing is fun ($M=2.51$, $SD=.87$, $\alpha=.88$). This 8-item, single-factor scale reflects a student's overall belief that hazing is a positive activity. For each item, they indicated level of agreement on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. The scale included items such as hazing strengthens ties and bonds with fellow members and alumni; secrecy is an important part of initiation; hazing weeds out the weak members of the organization; hazing is more effective than any other method of initiation; and hazing is fun.

Internal enabling factors to leave a hazing situation ($M=3.52$, $SD=1.12$, $\alpha=.91$). This 5-item, single-factor scale examined factors within the organization that would help a student walk away from a hazing situation. The items were each measured on a 5-point Likert scale ranging from *not helpful at all* to *very helpful*. Enabling factors included friends within the organization being supportive of the decision to walk away, the lack of being ostracized as a result of walking away, being respected for walking away, not disappointing the older organization members by leaving, and not letting down the other new members.

Helpfulness of factors enabling a student to leave a hazing situation. Re-

spondents were asked to rate on a Likert scale ranging from *not helpful at all* to *very helpful* a series of 11 statements. The statements reflected various enabling factors that would help a student walk away from a hazing situation within an organization. Items included factors both internal and external to the organization. Internal factors included items such as "I won't let down other new members" and "I will not be ostracized by the organization I wanted to join." External factors included items such as "I have friends outside the organization to support me" and "The authorities will protect me" (for complete list, see Table 2).

Helpfulness of factors enabling a student to stop a friend from hazing. Respondents rated 13 statements on a Likert scale from *not helpful at all* to *very helpful*. Sample items included, "I'm concerned my friend will get caught," "I am not in the group with my friend," and "My friend and I have a close relationship" (for complete list, see Table 2).

Analysis

We used descriptive statistics to determine hazing behavior prevalence among students and their perceptions of enabling factors that would help stop a hazing situation. We also used several inferential statistics such as χ^2 tests to make separate comparisons between the sociodemographic characteristics of those who participated in hazing and those who

Table 4
Sociodemographic Differences of Hazing and Positive Team-Building Participation as a Hazer or Hazee

	% Self-Identified ^a as Hazee (n)	χ^2 , P value	% Self-Identified Hazer (n)	χ^2 , P value
Greek Status				
Greek (n=160)	38.3% (61)	$\chi^2 = 83.31$ P<.001	23.3% (37)	$\chi^2 = 60.85$ P<.001
Non-Greek (n=576)	6.9% (40)		2.9% (17)	
Gender				
Males (n=367)	15.7% (58)	$\chi^2 = 5.23$ P=.015	8.8% (32)	$\chi^2 = 3.79$ P=.036
Females (n=369)	9.9% (37)		5.4% (20)	
Leadership				
Leaders (n=195)	22.6% (44)	$\chi^2 = 19.79$ P<.001	14.4% (22)	$\chi^2 = 22.13$ P<.001
Members (n=541)	9.7% (52)		4.1% (22)	
Varsity Athletics				
Athletes (n=74)	29.7% (22)	$\chi^2 = 15.90$ P<.001	15.6% (12)	$\chi^2 = 7.81$ P<.010
Nonathletes (n=665)	11.6% (77)		6.1% (41)	
Class Status				
Freshman (n=204)	4.6% (9)	$\chi^2 = 16.73$ P<.001	0.5% (1)	$\chi^2 = 17.43$ P<.001
Other (n=532)	16.0% (85)		9.4% (50)	

^a Self-identified indicates they checked "yes" to having been a hazer or hazee.

had not. Participation in hazing included self-identified and researcher-identified participation in at least one activity meeting the definition of hazing. Finally, we conducted logistic regressions to determine the predictors of those who had participated in hazing while at the university.

RESULTS

Survey Response and Respondents

Of the 2000 undergraduates selected, 736 students responded for a response rate of 37%. The sample is statistically representative of the overall undergraduate population along a number of demographic indicators (Table 3). The characteristics on which the sample is statistically distinct from the overall student body are limited to race and class year. Our sample overrepresents white students, multiracial students, and first-year students. The mean age of the sample is 19.88 (SD=1.88).

Prevalence of Hazing?

Research question 1 queried the prevalence

of hazing behaviors and other TBIs. Table 1 lists the proportion of respondents who reported participating in activities defined as hazing or positive team-building. The most commonly reported hazing activities were drinking contests/games and sleep deprivation. The most common positive team-building activities were community service and maintaining a minimum GPA. In terms of self-reported identification as participating in hazing behavior according to the university definition of the activity, 6.7% reported that they had been a hazer, and 12.4%, a hazee.

Research question 2 addressed a possible discrepancy between identification as having been involved with hazing and engaging in activities that constitute hazing. This discrepancy was observed. When asked which TBIs they had engaged in, 36% indicated that they had engaged in a behavior that would actually constitute hazing.

Participation in Hazing

Research question 3 asked what sociodemographic variables are charac-

Table 5
Socio-demographic Differences of Researcher-Identified Hazing
and Positive Team-Building Participation^a

	% Researcher-Identified ^a Hazing (n)	χ^2 , P value	% Positive Team- Building (n)	χ^2 , P value
Greek Status				
Greek (n=160)	81.6% (131)	$\chi^2 = 197.24$	93.1% (149)	$\chi^2 = 162.19$
Non-Greek (n=576)	25.1% (145)	P<.001	54.7% (315)	P<.001
Gender				
Males (n=367)	39.7% (146)	$\chi^2 = 26.72$	59.9% (220)	$\chi^2 = 19.61$
Females (n=369)	32.3% (119)	P=.031	66.9% (247)	P=.003
Leadership				
Leaders (n=195)	47.4% (92)	$\chi^2 = 32.02$	79.7% (155)	$\chi^2 = 55.33$
Members (n=541)	31.6% (171)	P=.006	57.0% (308)	P<.001
Varsity Athletics				
Athletes (n=74)	49.1% (36)	$\chi^2 = 21.70$	80.4% (59)	$\chi^2 = 17.35$
Non-Athletes (n=665)	34.8% (231)	P=.116	60.0% (399)	P=.008
Class Status				
Freshman (n=204)	25.2% (51)	$\chi^2 = 20.82$	52.9% (108)	$\chi^2 = 40.52$
Other (n=532)	39.6% (211)	P=.143	66.9% (356)	P<.001

^a Researcher identified indicates respondents checked "yes" to participating in at least one activity that meets the definition of hazing or a positive team-building activity.

teristic of students engaging in hazing. Survey data suggested that although there are no clear and consistent characteristics differentiating students who haze and those who are hazed by others, there are certain sociodemographic characteristics associated with hazing activity. Greeks, males, varsity athletes, leaders, and upperclassmen were more likely to engage in hazing-related behaviors. Additionally, Greeks, females, leaders, varsity athletes, and upperclassmen were more likely to have engaged in positive TBIs (Tables 4 and 5).

When comparing the results for those self-identifying as hazers with those who indicated that they had been involved with at least one activity that constituted hazing behavior, the trends were virtually identical. Greeks, males, leaders, varsity athletes and upperclassmen were more likely to have participated in hazing. Those more likely to have engaged in at least one positive TBI included Greeks, leaders, females, varsity athletes, and upperclassmen.

Attitudes, Beliefs, and Subjective Norms Regarding Hazing

Research question 4 asked what attitudes, perceptions, and experiences are characteristic of students who engage in hazing behavior. Students reported their feelings regarding the potential harm, susceptibility, normative perceptions, and beliefs regarding hazing. Overall, students agreed that hazing behaviors were harmful ($M=4.09$, $SD=0.72$). However, students were neutral regarding their susceptibility to harm if they participated in hazing activities ($M=2.90$, $SD=0.70$), whether their friends approve of hazing-related activities ($M=2.47$, $SD=0.57$), their belief that hazing is fun ($M=2.51$, $SD=0.87$), and their belief that hazing builds cohesion ($M=2.45$, $SD=0.64$).

Relationships between attitudes, subjective norms, and hazing behavior. Participation in hazing behavior was positively related to participation in positive TBIs, friends' perceptions of hazing, the belief that it would build group cohesion, and the belief that hazing is fun. Hazing

Table 6
Correlations Between Hazing, Positive Team-Building
and Initiation Activities (TBIs), Attitudes, and
Subjective Norms (n=736)^a

	1	2	3	4	5	6	7
Hazing Behaviors (1)							
Positive TBIs (2)	.43***						
Harm (3)	-.15***	-.03					
Susceptibility (4)	-.19***	-.13**	.61***				
Perception of Friends' Attitudes (5)	.38***	.25***	-.55***	-.42***			
Hazing Builds Cohesion (6)	.15**	.14**	-.33***	-.27***	.37***		
Hazing is Fun (7)	.32***	.13**	-.55***	-.43***	.49***	.58***	

a * P<.01, ** P<.001, *** P<.001

behavior was also negatively related to perceptions of harm and susceptibility. All relationships were statistically significant (Table 6).

Greek and non-Greek comparisons.

Students outside the Greek system indicated a greater perception of potential harmfulness of hazing than did Greek students (non-Greek harm M=4.10, SD=.72, Greek harm M=3.95, SD=.67; F=4.10, P=.045) and a greater feeling of susceptibility to hazing (non-Greek susceptibility M=2.94, SD=.69, Greek susceptibility M=2.60, SD=.68; F=20.14, P<.001). Greek students indicated a greater belief that hazing is fun (Greek hazing fun M=2.90, SD=.96, non-Greek hazing fun M=2.43, SD=.81; F=22.20, P<.001).

Gender comparisons. Compared to males, females admitted to feeling more susceptible to the dangers of hazing (male susceptibility M=2.71, SD=.74; female susceptibility M=3.07, SD=.62; F=37.17, P<.001) and to believing that hazing is more harmful (male harm M=3.88, SD=.78; female harm M=4.29, SD=.59; F=51.30, P<.001).

Leaders vs members. There were no significant differences between leaders and members in their perceptions of harm, susceptibility, friends' attitudes toward hazing, and the beliefs that hazing would build group cohesion or be fun.

Varsity athletic involvement. Again, there were no significant differences between varsity athletes and others regarding perceptions of harm, susceptibility,

friends' attitudes toward hazing, and beliefs that hazing would build group cohesion or be fun.

Class year comparisons. Freshmen indicated a slightly greater sense of susceptibility to hazing than did upperclassmen (freshman susceptibility M=2.99, SD=.70; upperclassman susceptibility M=2.86, SD=.70) although the difference was not statistically significant (F=3.56, P=.060). They did not differ on perceptions of harm, friends' attitudes toward hazing, and beliefs that hazing would build group cohesion or be fun.

Predictors of Hazing Behavior

Research question 5 asked which factors predicted hazing participation (Table 7). Self-identifying as a hazer, being a leader and believing that hazing builds group cohesion significantly increase the odds of identifying as a hazer. Self-identification as a hazee, Greek affiliation, varsity athletic status, and belief that hazing builds cohesion increase the odds of identifying as a hazee. In terms of researcher-identified hazing participation, being male, a Greek member, and believing your friends approve of hazing significantly increase likelihood of participation.

Student Perceptions of Effective Interventions

Research question 6 queried student perceptions of effective interventions for students involved in hazing behaviors. Students perceived the most helpful en-

Table 7
Odds Ratios From Logistic Regression Analysis Predicting
Researcher-Identified Hazing and Self-identification
as Hazer and Hazees^a

	Researcher-Identified Hazing			Self-Identified Hazer			Self-Identified Hazees		
	Block 1	Block 2	Model	Block 1	Block 2	Model	Block 1	Block 2	Model
Gender	1.56	2.04*		2.26	1.93		1.34	1.59	
White	.82	0.97		1.15	1.02		0.58	0.68	
Greek	11.27***	5.12***		5.39***	3.00		10.88***	6.44***	
Leader	1.02	.93		1.80*	1.89*		1.47	1.835	
Freshman	0.69	0.71		.00	.00		0.633	0.56	
Varsity Athlete	1.75	1.02		2.75	4.27*		7.11***	6.99**	
Harm		0.89			0.69			1.16	
Susceptibility		1.15			1.07			1.38	
Friends		2.16*			1.29			1.20	
Cohesion		0.80			3.09*			2.00*	
Hazing is Fun		1.63			1.20			1.44	
Positive Acts		1.69			1.14			1.14	
χ^2	70.71***	57.97***	128.69***	54.11***	23.40***	77.51***	84.05***	20.73*	104.78***
R ² (Cox/ Snell)	.19		.32	.15		.20	.22		.26

a = Researcher identified = checked "yes" to participating in at least one hazing activity.

*P<.05, ** P<.01, ***, P<.001

abling factor in walking away from a situation in which they were being hazed was having friends outside the organization to support them. In stopping a friend from hazing another person, students perceived the most effective enabling factor to be having a close relationship with their friend (Table 2).

DISCUSSION

Previous studies have made suggestions regarding appropriate and effective responses to hazing at universities.^{9,11,15,21,31} This study builds on the literature and offers suggestions derived from a comprehensive sample of university students. We found that 36% of the respondents participated in at least one hazing activity. Greeks, males, varsity athletes, leaders, and upperclassmen were more likely to engage in hazing-related behaviors. Moreover, Greeks, females, leaders, varsity athletes, and upperclassmen were more likely to have engaged in positive team-building activities. Additionally, there were significant positive correlations between negative and positive TBIs. This suggests that positive TBIs may be supplemental to, and not a replacement for, hazing. Educators and

others suggesting hazing alternatives must promote positive team-building practices while educating about the harmful effects of hazing.

There was a clear discrepancy between self-identification as participating in hazing and participation in hazing as defined by university policy. This discrepancy may be because students have a narrow definition of hazing, including only extreme forms like being tied up, beaten, or raped, or there may be psychological barriers to students recognizing their own involvement, such as dissonance caused by feelings of guilt or hypocrisy.

Overall, students did perceive hazing as harmful. However, students were neutral regarding their susceptibility to harm. Although respondents tended to disagree that their friends approved of hazing, that hazing is fun, and that hazing builds cohesion, these sentiments were not strongly held. In addition, χ^2 analyses indicated that students who felt susceptible to harm were less likely to engage in hazing although this was not significant in the logistic regression. The EPPM and the HBM both suggest that susceptibility and perceptions of harm are important components in an individual's decision to

engage in a given behavior. These findings support the proposition that one's sense of harm and susceptibility play a role in a person's health-related decisions.³⁷ Alternatively, the HBM suggests that it could mean that attitudes are factored through a cost-benefit examination, and those who decide to engage in hazing have determined that the benefits of joining the group outweigh the costs of hazing. If a student engages in hazing and does not perceive great harm, the student may feel positively toward the experience and in turn, may feel that he is both less susceptible to hazing and that hazing is not harmful.

Our analyses indicated multiple factors predicting self-identification as a hazer or hazee and researcher-identified participation in hazing activities. In terms of stopping the practice, the most important dependent variable is actual participation rates, which are predicted by Greek status, gender (male), and friend's attitudes. Self-identification was predicted by Greek status (hazee), leadership status (hazer), varsity athletics (hazer, hazee), and the belief that hazing builds cohesion (hazer, hazee). All are important in identifying potential points of intervention. Additionally, it is clear that both attitudinal and subjective norms are predictive, indicating some support for the theory of planned behavior.

Many campuses try to address the problem of hazing solely within the Greek system and varsity athletics. Although they should continue to work with these groups, hazing is clearly occurring in other organizations. The data indicate that first-year students report less hazing experience than upperclassmen, suggesting that all first-year students may be an appropriate target audience for anti-hazing interventions.

Leveraging Subjective Norms to Change Hazing Behavior

Several results of this study indicate that students believe having friends outside the organization in which they were being hazed would be the most helpful enabling factor in extricating them from that situation. Additionally, students indicate that the enabling factors most helpful in stopping a friend from hazing would include a strong relationship with that friend that would not be jeopardized by the student's view. Finally, the logistic re-

gression indicated that students' perceptions of their friends' attitudes toward hazing was a significant predictor of participation in hazing activities. Because friends can have a significant effect on a student's ability to leave a hazing situation, a subjective norms campaign targeting the student body, particularly friends of those engaged in hazing, may be effective in generating a less tolerant climate for hazing. Campaigns that address that norm must do so within friendship networks as suggested by the theory of planned behavior, and not social norms campaigns.³⁸

A Holistic Approach

Although we advocate efforts to increase education regarding hazing on college campuses and have pointed to a number of factors that might be helpful in an educational campaign, a more holistic approach is warranted. We suggest an environmental approach similar to that used to prevent high-risk drinking on college campuses. Education alone has not been enough of a deterrent on most campuses and needs to be coupled with enforcement and/or policy changes.³⁹⁻⁴⁵ Campus officials must be careful with education and policy changes, as students may respond to efforts to curb their behavior with psychological reactance, a process in which individuals respond by doing the opposite of what is advocated in order to protect their own attitudes and actions. This can lead to increased hazing and/or decreased reporting of hazing behaviors.^{46,47} Therefore, pretesting educational messages⁴⁸ and involving students in the process are vital.⁴⁰

Limitations

This study is cross-sectional and unable to show potential changes over time. Although great care was taken to use the word hazing judiciously in the survey, such as substituting TBIs, it is possible that students may have anticipated the topic and avoided responses that linked their actions to the negative connotations of hazing. Thus, we may have an underreporting of actual hazing levels. Also, small cell sizes for several minority groups did not allow testing of differences between ethnic groups, although previous studies suggest differences exist.²² Finally, our response rate was 37%. This exceeds previous studies of hazing, which

relied on response rates of 20%¹⁵ and 8.3%.¹⁶ More important, the sample is generally representative of the overall undergraduate population. The response rate was likely to be affected by survey length and the lack of survey incentives.⁴⁹ However, the response rate obtained is similar to Internet-based studies of similar populations.⁵⁰⁻⁵² Therefore, we consider this study to be a first step to more research on hazing at universities and how it can be prevented.

Concluding Thoughts

The study confirms the existence of hazing on a large university campus and discusses how hazing activities vary by sociodemographics. The findings suggest a multifaceted approach to intervention involving targeting on various levels to promote behavior change.^{29,32-35} Further, because violent behavior has a number of different components, all need to be addressed.⁵³ Hazing may bring together groups,^{7,11} but there are more positive ways to cohere groups than through harmful hazing activities. This study provides motivation for continued study of and intervention in student organizations with the goal of reducing potentially harmful behaviors.

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