

Triumph or Tragedy: Comparing Student Engagement Levels of Members of Greek-Letter Organizations and Other Students

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This study compared the levels of student engagement between fraternity and sorority members and other undergraduate students. After controls, Greek members appeared to be equally and sometimes more engaged in academically challenging tasks, active learning, student-faculty interaction, community service, diversity, satisfaction, and on learning and personal development gains.

About 650 campuses nationwide host social fraternities and sororities (North-American Interfraternity Conference, 2001). Administrators and faculty members working at these colleges and universities know all too well that Greek-letter organizations occasionally display wild swings in temperament and the starkly contrasting personas that reveal the best and worst of human endeavor depicted in Greek mythology.

On the one hand, fraternities and sororities provide their members with numerous opportunities for leadership development and volunteerism (Astin, 1993; Kuh, 1982). Being Greek also is positively correlated with persistence (Astin, 1977, 1984) as well as with higher levels of alumni giving (Nelson, 1984) and other benefits (National Panhellenic Conference, 2001; Owen, 1991; Robson, 1977; Schuh, Triponey, Heim, & Nishimura, 1992) including more interaction with peers (Pike & Askew, 1990) and greater

self-reported cognitive gains especially for men of color (Pascarella et al., 1996). Sorority women often academically outperform other women students (Pascarella, Flowers, & Whitt, 2001).

On the other hand, the benefits ostensibly enjoyed by members of Greek organizations are frequently overshadowed by incidents of hazing, date rape, and hazardous use of alcohol along with other transgressions. Faculty members say that during new member recruitment and orientation (pledgeship) fraternity and sorority members appear distracted and tired. In evaluating the value of Greek organizations the editor of a special issue of the *NASPA Journal* reluctantly concluded, "the successes are harder to detect than the failures" (Heida, 1990, p. 3). Others have been less circumspect, characterizing Greek-letter organization as antithetical to the educational process (Kuh, Pascarella, & Wechsler, 1996; Maisel, 1990; Philips, 1999; Strange, 1986). There is some empirical justification for such an untoward conclusion. Among the negative effects of Greek membership are less exposure to people from different racial and ethnic backgrounds (Pike, 2000), less openness to diversity (Pascarella et al., 1996), lower average grades (Astin, 1993; Pike & Askew, 1990), stunted intellectual development for members in the first year of college except

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for men of color (Pascarella et al., 1996), negative effects on cognitive skills and gains (Pascarella et al., 2001), and higher frequency of incidents of academic dishonesty (McCabe & Bowers, 1996). Table 1 shows the key findings from selected research studies related to the positive and negative impact of Greek membership on student engagement.

In response to relentless media attention and criticisms from inside the academy, responsible national and campus leaders are implementing programs and adopting resolutions to address these nontrivial concerns. For example, the North-American Interfraternity Conference's (NIC) "Values in Action: The Select 2000 Initiative" calls for Greek organizations to focus more on scholarship, accountability, ethical leadership, and responsibility to campus and community (North-American Interfraternity Conference, 2001). Another NIC initiative known as IMPACT (Influence + Motivation + Purpose + Action + Community + Trust) is designed to promote positive changes in Greek organizations as is Sigma Phi Epsilon's Balanced Man Program and Beta Theta Pi's Men of Principles Initiative. In addition, many of the national Greek-letter organizations and executive bodies including the NIC (www.nicindy.org), the National Panhellenic Conference (www.npcwomen.org), the National Pan-Hellenic Council, Inc. (www.nphc.org), and the National Association of Latino Fraternal Organizations (www.nalfo.org), have recently adopted new resolutions on hazing, academic standards, and the misuse of alcohol.

Although we did not attempt to evaluate the impact of these interventions on student engagement, such efforts to improve the Greek experience is relevant. Indeed, it is ironic that despite the media attention, the

general changing context, and the call for more data-driven policies, relatively few studies have been done to systematically examine the educational experience of fraternity and sorority members (Dungy, 1999; Pascarella & Terenzini, 1991; Winston & Saunders, 1987). Research findings about the relationship between Greek membership and student development from multiple campuses are especially rare with a few notable exceptions (Astin, 1977, 1993; Pascarella et al., 1996; Pascarella et al., 2001). Prospective students, parents, and external authorities want and need credible, trustworthy information about collegiate quality in general and the student experience in particular. Thus, more must be learned about the nature of the experiences of members of Greek-letter organizations relative to that of other students.

Purpose

We examined the levels of engagement in educationally effective practices of members of Greek-letter organizations and other students. Educationally effective practices are those that are known from the literature to be empirically linked to high levels of student learning and personal development (Chickering & Gamson, 1987; Education Commission of the States, 1995; National Survey of Student Engagement, 2000; Pascarella & Terenzini, 1991; Sorcinelli, 1991). Specifically, we explored how Greek members compare with nonmembers in terms of how much they study, participate in extracurricular activities, and interact with faculty members and peers related to substantive topics.

1. Do they have more or less positive views of the college environment?
2. Do they report gaining more or less from

- the college experience compared with other students?
3. Do the experiences of Greek-letter organization members differ depending on their year in school and whether they live in a fraternity or sorority house or elsewhere?
 4. Do the experiences of Greeks and nonmembers differ depending on institutional characteristics, and if so, which institutional characteristics matter?

TABLE 1.
Major Findings From Selected Studies on the Impact of
Greek Membership on Student Engagement

Author	Type of Study	Positive Greek Effect	Negative / Neutral Greek Effect
Astin (1977, 1984)	Longitudinal study of college dropouts	More likely to persist	
Blimling (1989)	Meta-analysis of past research		Slight negative effect on academic achievement compared to living in residence hall
Pike & Askew (1990)	Single institution study of 6000+ seniors	More interaction with peers and function in groups more effectively	Negative or neutral effect of fraternity membership on academic achievement
Astin (1993)	Longitudinal study of college dropouts	Self-reported gains in leadership ability	No effects on student satisfaction and negative with GPA
Pascarella et al. (1996)	National sample of first-year students	Modest positive effect on cognitive development for men of color	Negative on cognitive outcomes for first-year students and negative effect on openness to cultural diversity after first year
McCabe & Bowers (1996)	9 institutions, sophomores, juniors, and seniors		Significant relationship between Greek membership and academic dishonesty
Pike (2000)	Single institution	Higher levels of general gains in cognitive development	Negatively related to integration of diverse college experiences
Pascarella, Flowers, & Whitt (2001)	18 institutions, sophomores and juniors	Positive cognitive growth for sororities	Negative to neutral cognitive skills for men and women, negative cognitive growth for men

Answers to these questions will not provide direct, incontrovertible evidence of learning and personal development, but they can serve as a proxy for the quality of the Greek experience relative to other students.

METHODS

Data Sources

The data used in this study were collected under the auspices of the National Survey of Student Engagement (NSSE), an ongoing project that collects and reports information about collegiate quality (Kuh, 2001). NSSE data are gathered by administering the survey to randomly selected first-year students and seniors at participating colleges and universities. The size of the sample, which ranges from 450 to 1,800 students, is based upon undergraduate enrollment and mode of administration. Students are given the opportunity to complete a paper or Web-based version of the survey and aggressive follow-up activities are coordinated by NSSE to maximize response rates, which average approximately 42% for both modes. Data collection and survey administration are coordinated by staff at the Indiana University Center for Survey Research.

The sample is composed of 42,182 undergraduate students at 192 institutions that had recognized Greek systems in the Spring of 2000 and who completed the NSSE survey instrument, *The College Student Report* (Kuh, 2000a). This group includes 6,560 self-identified Greek students (62% women, 38% men) and 35,622 other students (65% women, 35% men). The institutions included 43 doctoral extensive universities, 19 doctoral-intensive universities, 77 master's colleges and universities, 33 liberal arts colleges, and 20 general colleges (Carnegie Foundation for the Advancement of Teaching, 2000). The

proportions of Greek respondents at these institutions compared favorably with the proportions of students who belonged to Greek organizations as reported in *Peterson's Guide to 4 Year Colleges 2000* and in *U.S. News and World Report's* (2001) College Rankings Web site and were generally consistent with the percentage of undergraduates at those schools who join such groups (Center for the Study of the College Fraternity, 2001). In cases where these sources indicated that there were no Greek organizations on campus yet more than 5% of an institution's NSSE 2000 respondents reported they were Greek members, we obtained correct information by calling the appropriate official at the institution.

Instrument

NSSE's survey instrument is *The College Student Report*. *The Report* was originally designed in 1998 by a team of national assessment experts to measure the extent to which students and institutions were engaged in good educational practices (Kuh, 2001). Many of the survey items have been used for years in other college student surveys such as the *College Student Experiences Questionnaire* (CSEQ) and UCLA's *Student Information Form* (the CIRP annual freshman survey). *The Report* asks students about their experiences in four major areas: (a) amount of time and quality of effort devoted to various in-class and out of class activities, (b) participation in educationally enriching programs such as study abroad, service learning, internships, and senior capstone experiences, (c) gains in areas of personal and educational development, and (d) perceptions of key features of the campus environment. Students also provide information about their background (e.g., age, race or ethnicity, gender, enrollment status, living arrangements, major field of study)

including whether they belong to a fraternity or sorority.

As with all college student surveys, *The Report* relies on student self-reports. Generally, five conditions must be met for self-reported information to be valid: (a) the information requested is known to respondents, (b) the questions are phrased clearly (Laing, Sawyer, & Noble, 1988), (c) the questions refer to recent activities (Converse & Presser, 1989); (d) the respondents think the questions merit a serious and thoughtful response (Pace, 1985), and (e) answering the questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways (Bradburn & Sudman, 1988). *The Report* was designed to satisfy all these conditions. The items are clearly worded, well defined, have high face validity, and acceptable reliability (Kuh et al., 2001). The questions ask students to reflect on their experiences during the current school year, typically a reference period of about six months or less. The format of most response options is a simple rating scale that helps students to accurately recall and record the requested information, thereby minimizing this as a possible source of error. The gains items ask students to make a value-added judgment and student responses to such questions are generally consistent with other evidence, such as results from achievement tests (DeNisi & Shaw, 1977; Hansford & Hattie, 1982; Lowman & Williams, 1987; Pike, 1995). Kuh, Hayek, Carini et al. (2001) provides more information about the psychometric properties of *The Report*.

Variable Specification

In Table 2 the measures of student engagement in effective educational practices used in this study are described and Appendix A

shows a list of the items contributing to each measure. Greek membership was determined via the survey question, "Are you a member of a social fraternity or sorority?" To accurately estimate the effects of Greek membership on student engagement we controlled for a number of student-level and institution-level characteristics. Student-level controls included year in school, enrollment status, whether lived on-campus, sex, race or ethnicity, and major field of study. Institutional-level controls included Carnegie Classification, undergraduate enrollment from the Integrated Postsecondary Education Data System (IPEDS), *Barron's* admissions selectivity, public versus private, and degree of urbanization (IPEDS).

Statistical Model and Data Analysis

This study used Hierarchical Linear Modeling (HLM), which is a preferred analytical approach in situations where multiple levels of data are being analyzed (Bryk & Raudenbush, 1992; Ethington, 1997). In this instance both student level and institutional level variables could affect the engagement of students. HLM is particularly well suited to do this as it separates the effects at the individual student level from the contextual effects of the institutions themselves. For example, HLM is able to estimate the proportion of the variance in each engagement measure that exists within and between institutions, something ordinary least square (OLS) regression cannot do. Please refer to Table 3 for information about within- and between-institution variance on each engagement measure. Between-institution variance statistics were generally consistent with what other researchers have found in higher education (Ethington, 1997; Pascarella & Terenzini, 1991). We replicated all analyses in this paper with OLS regressions. Although

TABLE 2.
 Descriptions, Means, Standard Deviations, and Reliabilities of Engagement Measures

Variable	Description	Metric	Mean	SD ^a	N	Reliability ^b
<i>Engagement Scale</i>						
Academic Challenge	Nature and amount of academic work performed	Sum of 10 items	25.57	4.55	40,891	.72
Active and Collaborative Learning	Frequency of participation in class and collaborative learning	Sum of 7 items	16.41	3.36	41,515	.66
Student-Faculty Interaction	Frequency of student interactions with faculty	Sum of 6 items	12.19	3.26	41,803	.76
Supportive Campus Environment	Degree to which the institution is perceived to be supportive academically and nonacademically	Sum of 6 items	15.62	3.66	41,752	.79
Personal-Social Gains	Self-reported college gains related to personal and social issues	Sum of 5 items	13.40	3.40	41,786	.77
General Education Gains	Self-reported college gains related to writing, speaking, and thinking critically	Sum of 4 items	12.21	2.63	41,936	.79
Practical Competence Gains	Self-reported gains related to computing, analyzing quantitative problems, and other job-related skills	Sum of 3 items	8.48	2.19	41,953	.64
Community Service	Degree engaged in community service and projects	Sum of 3 items	7.30	1.89	36,258	.51
Diversity	Degree of contact with others of different backgrounds	Sum of 3 items	7.60	1.89	41,965	.63
Satisfaction	Degree satisfied with current institution	Sum of 2 items	6.31	1.38	42,008	.76
<i>Engagement Item</i>						
Cocurricular	Time spent in cocurricular activities in a typical week	Hours	6.66	6.83	41,200	NA ^c
Class Preparation	Time spent preparing for class in a typical week	Hours	14.47	8.30	42,058	NA
Relaxing and Socializing	Time spent relaxing and socializing in a typical week	Hours	12.97	8.22	41,909	NA

^a Standard Deviation.

^b Cronbach's alpha.

^c Not Applicable.

effects estimated with OLS differed somewhat from the HLM-estimated effects, the overall conclusions were similar for the two methods.

Three HLM models were employed to accomplish the purposes of this study. The first model measured the effects of Greek membership at the student or within-institution level without using any controls. The Greek variable was centered on the mean of each student's respective institution. In the formulae to follow, we adopt the notation used by Bryk and Raudenbush (1992). The formula at the student level, or within-institution level was:

$$Y_{ij} = \beta_{j0} + \beta_{1j}(\text{Greek}) + r_{ij} \quad (1a)$$

where i = the i th student in institution j , β_{0j} = the mean engagement at institution j , β_{1j} is the engagement differential between

Greeks and nonmembers at institution j , and r_{ij} was a residual term.

The intercept at the student-level was allowed to vary randomly between institutions, as shown at the between-institution level:

$$\beta_{0j} = \gamma_{00} + u_{0j} \quad (1b)$$

$$\beta_{1j} = \gamma_{10} + u_{1j} \quad (1c)$$

where γ_{00} = the grand mean of all institutions on engagement, u_{0j} and u_{1j} were random error terms, and γ_{10} is the average Greek coefficient across all institutions. This approach produced a net engagement differential for Greeks and nonmembers at each institution. We then calculated the mean differential across all institutions.

In the second model we also centered all student-level variables on the means of their respective institution, but also introduced

TABLE 3.
Psychometric Properties From Hierarchical Linear Models

	Within-Institution Variance	Between-Institution Variance	Intraclass Correlations
Academic challenge	18.694	1.474	.073
Active and collaborative learning	10.566	0.560	.050
Student-faculty interaction	9.806	0.811	.076
Supportive campus environment	12.187	1.078	.081
Personal-social gains	11.092	0.398	.035
General education gains	6.595	0.304	.044
Practical competence gains	4.616	0.143	.030
Community service	2.872	0.246	.079
Diversity	4.797	0.259	.051
Satisfaction	1.758	0.143	.075
Cocurricular	42.138	3.952	.086
Class preparation	65.685	3.153	.046
Relaxing and socializing	64.586	2.561	.038

student-level controls for class, enrollment status, whether lived on campus, sex, age, race or ethnicity, and major field. The formulae were:

$$Y_{ij} = \beta_{j0} + \beta_{1j}(\text{Greek}) + \beta_{2j}(\text{Class}) + \dots + \beta_{mj}(X_m) r_{ij} \quad (2a)$$

$$\beta_{0j} = \gamma_{00} + u_{0j} \quad (2b)$$

$$\beta_{1j} = \gamma_{10} + u_{1j} \quad (2c)$$

$$\beta_{2j} = \gamma_{20} + u_{2j} \quad (2d)$$

...

$$\beta_{mj} = \gamma_{m0} + u_{mj} \quad (2m)$$

where β_{1j} was the engagement differential between Greek and nonmember students at institution j , net of student characteristics, β_{2j} was the net engagement differential between senior and first-year students at institution j , β_{mj} was the net engagement differential on variable m for institution j , γ_{20} is the average net engagement differential for seniors compared to first-year students across all institutions, and γ_{m0} was the average net engagement differential on variable m across all institutions. Initially we allowed all within-institution slopes (β_{1j} , β_{2j} , ... β_{mj}) to vary randomly across institutions. However, within-institution slopes were constrained to vary nonrandomly when the slopes were homogeneous across all institutions.

If there was evidence of Greek slope heterogeneity between institutions, we introduced institutional variables (Carnegie Classification, sector, undergraduate enrollment, admissions selectivity, and degree of urbanization) to model this heterogeneity (Model 3). We did not attempt to explain slope heterogeneity between institutions on

student-level controls, as these variables were not of central interest for this study. Similarly, although we modeled β_{0j} by introducing institutional-level controls, we do not report the results here. Accordingly, between institutional effects on β_{0j} and student-level controls were either non-randomly varying or random. All institutional variables were grand-mean centered. The formula at the student level was identical to Equation 2a. In addition, Equations 2d and 2m, apply here, though their error terms may not have been random. Between schools, Equations 2b and 2c were:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{Sector}) + \gamma_{02}(\text{Enrollment}) + \dots + \gamma_{0n}(X_n) + u_{0j} \quad (3)$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{Sector}) + \gamma_{12}(\text{Enrollment}) + \dots + \gamma_{1n}(X_n) + u_{1j} \quad (4)$$

where β_{0j} = the mean engagement at institution j , net of student-level controls, β_{1j} was the engagement differential for Greeks and nonmembers in institution j , net of student characteristics, γ_{10} was the average engagement differential between Greeks and nonmembers across all institutions, net of both student and institutional characteristics, γ_{11} was the average engagement differential for private as compared to public control, net of all other institutional variables in the model, γ_{12} was the average engagement differential for each additional 1,000 undergraduates, net of other institutional variables, and γ_{1n} was the average engagement differential for each unit of institutional variable n , net of other institutional variables.

Finally, all analyses were performed in two ways: (a) with poststratification weights applied at the student level to minimize nonresponse bias related to sex and enrollment status, and (b) without poststratification weights. The results were virtually identical

using either the weighted or unweighted approach. To determine whether the effects associated with Greek membership had practical as well as statistical significance (Cohen, 1988), we computed the effect size (ES) for the engagement differential between Greeks and nonmembers by dividing the unstandardized coefficient by the standard deviation for nonmembers on the measure, that is, a y -standardized coefficient (Greenwald, Hedges, & Laine 1996; Light & Pillemer, 1982; Pascarella, Flowers, & Whitt 2001).

RESULTS

Table 4 shows unstandardized HLM regression results for all students. We first examined within-institution Greek effects without any controls (Model 1). The Greek variable was coded as a 1 for Greeks and a 0 for nonmembers. On 11 of the 13 measures, Greek membership had statistically significant and positive effects, indicating that Greeks were more highly engaged than nonmembers, on average. The only measure that favored nonmembers was time spent preparing for class. The effects of being Greek on relaxing and socializing was not statistically significant.

The effect sizes in Model 1 (Table 4) suggest that the greatest differences between Greeks and nonmembers were for cocurricular (.84), community service (.29), personal-social gains (.26), student-faculty interaction (.23), and active and collaborative learning (.21).

Model 2 (Table 4) shows the Greek effects after taking into account all student-level controls. Although coefficient sizes were generally smaller than those in Model 1, 10 of 13 measures favored Greeks over nonmembers. Unlike Model 1, the co-

efficient for the amount of time spent relaxing and socializing became significant and negative, suggesting that Greeks spent *less* time than nonmembers in these activities, once student characteristics were controlled. Although the effect size for relaxing and socializing time was very small (.04), others were not: cocurricular time (.78), community service (.27), personal-social gains (.22), and student-faculty interaction (.15). Because self-reported gains are usually positively correlated with objective measures of various student outcomes, we explored whether the academic challenge, active and collaborative learning, student-faculty interaction, and supportive campus environment engagement measures might explain why Greeks reported greater personal-social gains. In supplementary analyses not shown here, we added these four measures into the student-level model with controls. The Greek coefficient on personal-social gains dropped from 0.756 to 0.502, suggesting that these four scales accounted for nearly 34% of the Greek-nonmember differential on personal-social gains after individual level controls, although a nontrivial Greek-nonmember difference persisted.

We also tested whether there was sufficient variance between institutions in their Greek-nonmember slopes to explain institutional-level variables (Model 3). On 6 of the 13 measures, there was scant evidence of heterogeneous Greek slopes between institutions, or very little between-institution variance left to explain. That is, the effects that favored Greeks were similar across different types of institutions. However, on the other seven measures there was evidence to reject Greek slope homogeneity, meaning that Greek effects did differ between institutions in areas such as student-faculty

TABLE 4.

Unstandardized Hierarchical Linear Modeling Coefficients for Engagement Levels of Greeks Versus Nonmembers^a

Engagement Measure	Model 1 Within-Institution Greek Slope Without Controls	Model 2 Within-Institution Greek Slope With Student-Level Controls ^b	Model 3 Between-Institution Greek Effects With Institutional Controls ^c
Academic Challenge	.238*** (.069) ES ^d = .05	.149 (.064) ES = NR ^e	NA ^f
Active and Collaborative Learning	.685*** (.052) ES = .21	.407*** (.042) ES = .12	NA
Student-Faculty Interaction	.741*** (.061) ES = .23	.488*** (.052) ES = .15	.545*** (.055) ES = .17
Supportive Campus Environment	.422*** (.059) ES = .12	.444*** (.055) ES = .12	NA
Personal-Social Gains	.883*** (.050) ES = .26	.756*** (.048) ES = .22	NA
General Education Gains	.376*** (.040) ES = .14	.285*** (.035) ES = .11	NA
Practical Competence Gains	.282*** (.038) ES = .13	.160*** (.032) ES = .07	NA
Community Service	.554*** (.028) ES = .29	.505*** (.025) ES = .27	.533*** (.025) ES = .28
Diversity	.115** (.038) ES = .05	.061 (.034) ES = NR	.088 (.035) ES = NR
Satisfaction	.154*** (.023) ES = .11	.145*** (.022) ES = .10	.144*** (.024) ES = .10
Cocurricular	5.113*** (.180) ES = .84	4.769*** (.171) ES = .78	4.706*** (.162) ES = .77
Class Preparation	-.516*** (.142) ES = .06	-.475*** (.131) ES = .06	-.441** (.135) ES = .05
Relaxing and Socializing	-.024 (.140) ES = NR	-.354** (.136) ES = .04	-.328** (.126) ES = .04

** $p < .01$. *** $p < .001$ (two-tailed).^a Robust standard errors in parentheses.^b Student-level controls include class, enrollment status, whether living on campus, sex, age, race or ethnicity, and major field.^c Institutional-level controls include Carnegie Classification, sector, enrollment, selectivity, and degree of urbanization.^d ES = Effect Size for Greeks relative to nonmembers.^e NR = Not Reported, coefficient not statistically significant.^f NA = Not Applicable, insufficient Greek slope variance to model between institutions.

interaction, community service, cocurricular activities, and satisfaction. The Greek coefficients in Model 3 were net of controls for both student and institutional characteristics. However, the addition of institutional variables had little impact on the Greek coefficients for these 7 measures (compared to Model 2, Table 4). Therefore, even after controlling for institutional differences, the Greek effects remained.

In addition to generating the engagement differential between Greeks and nonmembers net of institutional characteristics, Model 3 also tested whether specific institutional variables shaped Greek effects, though these coefficients are not shown in Table 4. Sector (whether an institution was public or private) was the institutional characteristic that was most frequently related to Greek effects, after controlling for Carnegie Classification, undergraduate enrollment, admissions selectivity, and degree of urbanization. Specifically, the differentials between Greeks and nonmembers were larger at public institutions than private institutions for community service (.25 higher, $p < .01$), cocurricular activities (1.21 hours more, $p < .05$), and class preparation (1.26 hours more, $p < .001$). Admissions selectivity was associated with two significant Greek effects. The Greek membership effect was smaller at more selective schools on student-faculty interaction and diversity, approximately .09 lower ($p < .05$) and .07 lower ($p < .05$) for each additional selectivity-unit increase, respectively. Carnegie Classification, degree of urbanization, and enrollment had little impact here.

We also performed additional analyses to determine whether the effects of Greek membership on engagement were specific to certain segments of the Greek population (i.e., sorority or fraternity members) or class

(first-year students or seniors). The analysis by sex also allowed us to determine whether the relatively large proportion of women in the sample (64%) unduly influenced the previous contrasts involving both sexes. Specifically, we examined whether Greek-nonmember differentials differed for sorority or fraternity members by analyzing women (Model 1) and men (Model 2) separately (Table 5). The coefficients in Models 1 and 2 indicated that the Greek effects of both sorority and fraternity membership were similar and generally favorable. Model 3 displays the absolute differences in coefficients. Time devoted to cocurricular activities had the greatest effect—Greek status imparted .88 hours (53 minutes) more per week in cocurricular activities for men than for women. We also investigated the interaction between Greek membership and class, shown in Table 6. Models 1 and 2 suggested that Greek effects were generally positive regardless of year in school (first year, senior). Model 3 showed that Greek effects were very similar for first-year students and seniors. However, one notable exception involved cocurricular activities ($ES = .32$), with the Greek premium over nonmembers being nearly 2 hours (1.93) per week more for first-year students than seniors.

In supplemental analyses not shown here, we looked at whether the proportion of Greeks at an institution shapes the engagement of their students. Specifically, we examined whether the following were associated with greater Greek proportions: (a) the size of the average Greek-nonmember differential and the (b) engagement of Greek members and nonmembers. We used the proportion of the student body with Greek membership as reported in *Peterson's Guide 2001*. In cases where *Peterson's* did not indicate the proportion of Greek member-

TABLE 5.

Unstandardized Hierarchical Linear Modeling Coefficients for Greek Effects, Sorority Versus Fraternity Members^{a,b}

Engagement Measure	Model 1 Sorority Members vs. Nonmember Women, Full Controls ^c	Model 2 Fraternity Members vs. Nonmember Men, Full Controls ^c	Model 3 Absolute Difference in Greek Effects Between Models 1 & 2
Academic Challenge	.160 (.076) ES ^d = NR ^e	.127 (.105) ES = NR	.03 ES = NR
Active and Collaborative Learning	.402*** (.060) ES = .12	.414*** (.063) ES = .12	.01 ES = NR
Student-Faculty Interaction	.509*** (.062) ES = .16	.582*** (.088) ES = .18	.07 ES = NR
Supportive Campus Environment	.514*** (.067) ES = .14	.320*** (.083) ES = .09	.19 ES = NR
Personal-Social Gains	.781*** (.058) ES = .23	.718*** (.073) ES = .23	.06 ES = NR
General Education Gains	.282*** (.046) ES = .11	.237*** (.057) ES = .09	.05 ES = NR
Practical Competence Gains	.194*** (.038) ES = .09	.096 (.047) ES = NR	.10 ES = NR
Community Service	.532*** (.032) ES = .29	.513*** (.048) ES = .27	.02 ES = NR
Diversity	.016 (.039) ES = NR	.200*** (.056) ES = .09	.18*** ES = .08
Satisfaction	.166*** (.026) ES = .12	.085 (.039) ES = NR	.08** ES = .06
Cocurricular	4.332*** (.182) ES = .76	5.212*** (.248) ES = .78	.88*** ES = .14
Class Preparation	-.317 (.175) ES = NR	-.721*** (.213) ES = .09	.40 ES = NR
Relaxing and Socializing	-.349 (.148) ES = NR	-.299 (.227) ES = NR	.03 ES = NR

** $p < .01$. *** $p < .001$ (two-tailed).^a Robust standard errors in parentheses.^b N s range from 12,660 to 26,998 for Models 1 and 2.^c Controls include (1) student-level variables, and (2) institutional characteristics if there is evidence of slope heterogeneity between institutions.^d ES = Effect Size for Greeks relative to nonmembers.^e NR = Not Reported, coefficient not statistically significant.

TABLE 6.

Unstandardized Hierarchical Linear Modeling Coefficients for Greek Effects, First-Year Students Versus Seniors^{a,b}

Engagement Measure	Model 1 First-Year Greeks vs. First-Year Nonmembers, Full Controls ^c	Model 2 Senior Greeks vs. Senior Nonmembers, Full Controls ^c	Model 3 Absolute Difference in Greek Effects Between Models 1 & 2
Academic Challenge	.255** (.083) ES ^d = .06	.086 (.082) ES = NR ^e	.17 ES = NR
Active and Collaborative Learning	.367*** (.064) ES = .12	.444*** (.058) ES = .13	.08 ES = NR
Student-Faculty Interaction	.534*** (.087) ES = .19	.499*** (.067) ES = .15	.04 ES = NR
Supportive Campus Environment	.471*** (.075) ES = .13	.442*** (.071) ES = .12	.03 ES = NR
Personal-Social Gains	.767*** (.071) ES = .23	.746*** (.062) ES = .22	.02 ES = NR
General Education Gains	.299*** (.057) ES = .11	.251*** (.046) ES = .10	.05 ES = NR
Practical Competence Gains	.188*** (.047) ES = .09	.147*** (.040) ES = .07	.04 ES = NR
Community Service	.452*** (.036) ES = .27	.576*** (.033) ES = .28	.12** ES = .07
Diversity	.096 (.058) ES = NR	.074 (.043) ES = NR	.02 ES = NR
Satisfaction	.178*** (.037) ES = .13	.120*** (.029) ES = .08	.06 ES = NR
Cocurricular	5.955*** (.276) ES = .96	4.021*** (.173) ES = .66	1.93*** ES = .32
Class Preparation	-.171 (.193) ES = NR	-.630*** (.178) ES = .07	.46*** ES = .06
Relaxing and Socializing	-.943*** (.201) ES = .11	.055 (.145) ES = NR	1.00*** ES = .12

** $p < .01$. *** $p < .001$ (two-tailed).^a Robust standard errors in parentheses.^b N s range from 15,400 to 22,874 for Models 1 and 2.^c Controls include (1) student-level variables, and (2) institutional characteristics if there is evidence of slope heterogeneity between institutions.^d ES = Effect Size for Greeks relative to nonmembers.^e NR = Not Reported, coefficient not statistically significant.

ship, we called an appropriate official at the institution. In four cases we were unable to obtain this information from the institution, and instead used the proportion of Greek members among the institution's respondents. We also created three dummy variable categories (less than 10% Greek, 10% to 20% Greek, and greater than 20% Greek) to probe for nonlinear effects. The HLM analysis showed that only 2 outcomes were related to proportion Greek: student satisfaction and diversity. Specifically, institutions with greater proportions of Greek members tended to have more favorable Greek-to-nonmember differentials on student satisfaction ($p < .01$). In contrast, greater proportions of Greeks tended to have increasingly less favorable Greek to nonmember differentials for diversity ($p < .05$).

While this analysis suggests that the Greek to nonmember differential is generally stable as institutional Greek proportions vary, it tells us little about the nature of the specific effects on Greek members or nonmembers. Using multivariate OLS regressions with full student and institutional controls, a larger proportion of Greeks at an institution was *not* associated with less favorable scores for *any* of the 13 items for either Greek members or nonmembers. While higher Greek proportions were linked to higher engagement on many of these measures for both Greeks and nonmembers, the effect sizes (fully-standardized coefficients, with both the mean and standard deviation for proportion Greek equal to .15) were small, between .03 and .07.

Finally, we compared the responses of those living in Greek housing to Greeks living in residence halls. Of the 992 students living in Greek housing, 79% were seniors. Because the experiences of first-year students and seniors living in Greek housing may be quite different, we analyzed the two

classes separately. We performed this analysis using OLS regression using full controls (the small number of students in Greek housing rendered HLM impractical, especially for the 205 first-year students). These results are not included in the tables. First-year Greek students living in a Greek house or a residence hall were generally similar in the level of educational engagement, with a few notable exceptions that favored those in Greek housing: more cocurricular time ($ES = .29, p < .001$), more class preparation ($ES = .16, p < .05$), and less socializing and relaxing ($ES = .20, p < .05$). However, for seniors, living in Greek housing appeared less benign. Seniors in Greek housing compared with their counterparts living in residence halls reported less academic challenge ($ES = .15, p < .01$), less student-faculty interaction ($ES = .15, p < .01$), less diversity ($ES = .17, p < .01$), more cocurricular time ($ES = .22, p < .001$), and more socializing and relaxing ($ES = .12, p < .05$). This housing analysis involved a relatively small number of respondents and the results did not suggest that Greek housing had broad-based or large effects on student engagement. At the same time, the difference in the number of significant coefficients reported for first-year students and seniors was not a function of differences in the respective numbers of students in the analysis, particularly for academic challenge, student-faculty interaction, and diversity. Yet, the lower engagement scores associated with Greek housing on several measures for seniors is reason to give pause.

DISCUSSION

Limitations

This study has several limitations. First, the standard NSSE research design targets only first-year and senior students. Sophomores

and juniors make up the bulk of the most active members of Greek-letter organizations and probably are more likely than first-year students and seniors to live in fraternity or sorority houses, which Blimling (1989) suggested could have a dampening effect on engagement. Also, anecdotal reports have indicated that many more sophomores are taking on major leadership positions in their organizations, which could also have an unknown effect on engagement in effective educational practices. In addition, the results might have differed if the survey had been administered in the Fall semester as contrasted with the Spring semester, which is the standard NSSE cycle. Seniors close to graduation are probably less involved in their fraternity or sorority at that point than they were previously during college. By the middle of the Spring term, first-year fraternity members may have worked through whatever potentially debilitating effects group membership might have had on the amount of time they devoted to academics because of preinitiation and new member activities. Although a number of student-level controls were used, no direct measures of precollege characteristics were included in the models, such as high school GPA, ACT scores, or parental education or income. These could have confounded the Greek engagement effect particularly for first-year students. Pike and Askew (1990) did not find differences in GPA or ACT scores between Greek members and non-members, but found statistical differences between these groups for parental education and income. In addition, including other institutional characteristics in the analysis, such as support services per student and measures of research productivity or endowment, might yield different results and conclusions. Finally, even though the student engagement scales are comprised of items

that have been linked in the past to desired outcomes, the items do not capture the full complexity of the college student experience and other various dimensions merit analyses as well.

Conclusions and Implications

The results from this study point to two conclusions.

First, students who belong to Greek-letter organizations do not fare worse and in many cases fare better than other students in terms of their levels of engagement in educationally effective practices. This was true almost across the board—from the amount of effort they put forth inside and outside the classroom (including experiences and exposure to diversity), to self-reported gains in various educational and personal growth areas, and to perceptions of the campus environment. These findings run counter in some ways to much of the extant research showing mixed or negative relationships between membership in Greek-letter organizations and desired student learning and personal development outcomes (Astin, 1993; Blimling, 1989, 1993; Pascarella et al., 1996; Pascarella et al., 2001; Pike & Askew, 1990).

Second, the overall favorable Greek engagement effect generally applied to all segments of Greek membership—men and women, first-year and senior students, and to a lesser extent those who lived in the fraternity or sorority house or elsewhere. Though living in Greek housing did not generate large negative effects on student engagement, the results do not necessarily refute the assertion that Greek housing might be linked to lower educational outcomes for some students (Blimling, 1989, 1993). Much of the commentary about the potential ill effects of living in Greek housing focus on the well-being and educational experience

of first-year students and newly initiated sophomores, not seniors. First-year students living in Greek housing spent more time in extracurricular activities with no appreciable diminution of time in other activities. Although participating in these activities may aid social integration and positively influence persistence, it also suggests that the time commitments of first-year Greek members may well be stretched beyond those of their nonmember counterparts, making it difficult to balance their studies with responsibilities to their new organization including new member activities.

Seniors comprised the lion's share of the students who reported living in Greek housing. They were also the group that benefited the least from Greek housing. This finding may have more to do with the personal characteristics of students who choose to live in a fraternity or sorority house in their senior year, as by this time many of their same-age peers have moved off campus or live elsewhere. Greek housing also may have differential effects on engagement of sophomores and juniors. Only studies of all four classes of Greek members could provide a definitive answer.

Implications

The findings from this study are more encouraging than those reported over the past 10 to 15 years, which showed at best mixed results related to the effects of Greek-letter organizational membership. Perhaps the various programs and activities being implemented at local chapters by national organizations and campus-based personnel to enhance the quality of Greek life are having the desired impact. It is too soon to know for sure whether the student engagement data in this study are a harbinger of a shift in the culture of Greek-letter organizations, especially with the continuing

reports of excessive use of alcohol.

For this reason, these findings may not change the views of university administrators and faculty members who are "fed up with squandered academic opportunities" (Dungy, 1999). A more important and potentially more productive first step is for individual campuses to use information about student engagement to better understand the undergraduate experience of all their students. Although Greek-letter organization members performed well overall, on any given campus there may be certain groups whose members are much less engaged than students in general or than members of other fraternities and sororities. Campuses should examine student engagement data to identify those groups and areas of effective educational practice where improvement would be welcome.

The few differences by institutional type showed a larger Greek-membership differential for members at large public institutions. This may suggest that Greek organizations at large universities constitute more distinctive subcultures compared with groups at smaller colleges. This makes intuitive sense as the institutional press of small colleges where most students live in close proximity may be more powerful in shaping student behavior than the Greek group environment is, whereas at large institutions the institutional culture is more fragmented and less coherent, thereby having less of a conforming influence on the attitudes and behaviors of students. Thus, at large public universities the work of the Greek advisor and others such as faculty sponsors and other student affairs professionals becomes critical to helping establish and maintain an environment in Greek organizations consistent with the institution's academic goals and values.

This type of institutional level analysis can generate information that can help

college and university administrators make better policy decisions. For instance, some have asserted that “policies barring first-year students from joining fraternities are essential” (Kuh et al., 1996, p. A68). The findings from this study suggest that such a blanket policy may not be needed for all fraternity and sorority systems. However, a careful inspection of student engagement data at the campus level by student affairs professionals and others may be helpful in identifying which groups might benefit from a deferred rush policy.

In addition, an institution-wide focus on good educational practices can only enhance the quality of the undergraduate experience for all students, including members of Greek organizations. The premise here is that a rising tide will lift all boats, meaning that as the quality of the educational experience increases for all students, members of Greek organizations will also benefit. Indeed, there is some evidence that college and universities that offer rich out-of-class learning opportunities congruent with an institution’s academic mission have stronger Greek systems (Kuh & Lyons, 1990; Kuh et al., 1991). Certain periods are pregnant with opportunities to articulate institutional and organizational expectations and values. These include Summer orientation, Fall welcome week, and the first few weeks of classes. Faculty and staff members should take the time to explain and remind students about the various learning opportunities available to them inside and outside the classroom and the importance of engaging in effective educational practices. These individuals are in a position to shape student behavior by the expectations they set, the nature of the assignments they make, and the frequency and substance of the feedback they provide to students (Pascarella & Terenzini, 1991). Similar messages should be sent

frequently to fraternity and sorority members during rush and pledgship. Next, the extent to which students are engaged in these practices must be routinely assessed (Dungy, 1999). Modifying student and institutional behavior in desirable ways requires formal and informal feedback mechanisms whereby students learn how their performance compares with those of successful students at their college or university. Ideally, faculty and student affairs staff members will collaborate on the assessment of student performance and also actively participate in providing feedback to the institution and various groups including fraternities and sororities (Banta & Kuh, 1998).

Final Word

All too frequently we are reminded of the tragedies of fraternity or sorority members and other students who experience pain and suffering as a result of attending an event where alcohol is abused or where discrimination, hazing, and sexual violence occur. Such unconscionable acts have no place in a caring, enlightened society, especially on a college campus (Bryan, 1987; Whipple & Sullivan, 1998). That said, an optimistic reading of the findings of this study suggests that some Greek organizations at some institutions are poised to triumph.

In Greek mythology, the Phoenix rose from the fiery ashes to be reborn. Only time will tell if fraternities and sororities will respond affirmatively to internal and external scrutiny and emerge stronger and realize more fully their promise of being educationally vibrant living and learning communities. Systematic assessment of key indicators such as student engagement in effective educational practices is one way to determine whether Greek-letter organizations are on the right track and moving in the right direction.

APPENDIX.

Items Contributing to Student Engagement Measures

Academic challenge

- Number of hours in a typical week preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program) during the current school year
- Number of assigned textbooks, books, or book-length packs of course readings during the current school year
- Number of written papers or reports of 20 pages or more during the current school year
- Number of written papers of fewer than 20 pages during the current school year
- Extent to which coursework emphasized this school year: Analyzing the basic elements of an idea, experience, or theory such as examining a particular case or situation in depth and considering its components
- Extent to which coursework emphasized this school year: Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships
- Extent to which coursework emphasized this school year: Making judgments about the value of information, arguments, or methods such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
- Extent to which coursework emphasized this school year: Applying theories or concepts to practical problems or in new situations
- How often worked harder than you thought you could to meet an instructor's standards or expectations during the current school year?
- Extent to which your college emphasized this school year: Spending significant amounts of time studying and on academic work

Active and collaborative learning

- How often asked questions in class or contributed to class discussions during the current school year?
- How often made a class presentation during the current school year?
- How often worked with other students on projects during class during the current school year?

- How often worked with classmates outside of class to prepare class assignments during the current school year?
- How often tutored or taught other students during the current school year?
- How often participated in a community-based project as part of a regular course during the current school year?
- How often discussed ideas from your reading or classes with others outside of class (students, family members, co-workers, etc.) during the current school year?

Student-faculty interaction

- How often discussed grades or assignments with an instructor during the current school year?
- How often talked about career plans with a faculty member or advisor during the current school year?
- How often discussed ideas from your reading or classes with faculty members outside of class during the current school year?
- How often worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.) during the current school year?
- How often received prompt feedback from faculty on your academic performance during the current school year?
- How often worked with a faculty member on a research project during the current school year?

Supportive campus environment

- Extent to which your college emphasized this school year: Providing the support you need to succeed academically
- Extent to which your college emphasized this school year: Helping you cope with your non-academic responsibilities (work, family, etc.)
- Extent to which your college emphasized this school year: Providing the support you need to thrive socially
- In your experience this year, rate the typical quality of relationships among people at this college: Relationships with other students

Appendix continues

APPENDIX. *continued*

Items Contributing to Student Engagement Measures

- In your experience this year, rate the typical quality of relationships among people at this college: Relationships with faculty members
- In your experience this year, rate the typical quality of relationships among people at this college: Relationships with administrative personnel and offices

Personal-social gains

Extent to which your college education contributed to your knowledge, skills, and personal development in:

- Working effectively with others
- Voting in elections
- Learning effectively on your own
- Understanding yourself
- Being honest and truthful

General education gains

Extent to which your college education contributed to your knowledge, skills, and personal development in:

- Acquiring a broad general education
- Writing clearly and effectively
- Speaking clearly and effectively
- Thinking critically and analytically

Practical competence gains

Extent to which your college education contributed to your knowledge, skills, and personal development in:

- Acquiring job or work-related knowledge and skills
- Analyzing quantitative problems
- Using computing and information technology

Community service

- How often participated in a community-based project as part of a regular course during the current school year?
- Done or plan to do community service or volunteer work before graduation

- Extent to which your college education contributed to your knowledge, skills, and personal development: Contributing to the welfare of your community

Diversity

- How often had serious conversations during the current school year with other students whose religious beliefs, political opinions, or personal values were very different from yours?
- How often had serious conversations during the current school year with students of a different race or ethnicity than your own?
- Extent to which your college education contributed to your knowledge, skills, and personal development: Understanding people from other racial and ethnic backgrounds

Satisfaction

- How would you evaluate your entire educational experience at this institution?
- If you could start over again, would you go to the same institution you are now attending?

Cocurricular

- Number of hours in a typical week participating in cocurricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.) during the current school year

Class preparation

- Number of hours in a typical week preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program) during the current school year

Relaxing and socializing

- Number of hours in a typical week relaxing and socializing (watching TV, partying, exercising, playing games, etc.)

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