

Membership in a Fraternity or Sorority, Student Engagement, and Educational Outcomes at AAU Public Research Universities

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Research involving 6,782 undergraduates (50% first-year students, 50% seniors, 16% fraternity/sorority members, and 58% females) at 15 AAU public research universities revealed that Greek affiliation had a weak positive relationship with engagement and gains in learning. The effects for Greek affiliation were stronger for seniors than first-year students.

During the past 4 decades, the role of fraternities and sororities on college campuses has come under increasing scrutiny (see Clark, 1962; Jakobsen, 1986; Kuh, Pascarella, & Wechsler, 1996; Maisel, 1990; Winston & Saunders, 1987). Critics of the Greek system have pointed to research showing that membership in a fraternity or sorority is associated with higher levels of alcohol use (Wechsler, Kuh, & Davenport, 1996), lower levels of personal development (Wilder, Hoyt, Doren, Hauck, & Zettle, 1978; Wilder, Hoyt, Surbeck, Wilder, & Carney, 1986), and lower levels of academic achievement (Blimling, 1993; Pike & Askew, 1990). Recently, criticisms of the Greek system have intensified and focused on research results showing that Greek affiliation can have negative effects on students' learning and intellectual development (Pascarella et al., 1996). Based on results of the National Study of Student Learning (NSSL), Kuh et al. (1996, p. A68) concluded: "Fraternities are indifferent to

academic values and seem to short-change [*sic*] the education of many members." NSSL researchers recommended that "rush and new-member activities, especially for White men, might be deferred to the second semester—or even the second year—of college" (Pascarella et al., p. 189).

Evidence that Greek affiliation is associated with lower levels of student learning and intellectual development is somewhat surprising. Research has shown that fraternity and sorority members tend to be more involved (Astin, 1977, 1993; Baier & Whipple, 1990; Pike & Askew, 1990; Thorson, 1997), and that involvement is positively related to student learning and intellectual development (Astin, 1977, 1993; Pascarella & Terenzini, 1991). As a result, it would be reasonable to expect higher, not lower, levels of learning and development for Greek members (Winston & Saunders, 1987).

Relatively few studies have examined the effects of fraternity or sorority membership on students' learning and intellectual development. In a longitudinal study of more than 6,000 seniors, Pike and Askew (1990) found that Greek students reported higher levels of academic effort, involvement in organizations, and interaction with other students. However, Greeks had significantly lower scores on the College Outcome Measures Program (COMP) objective test (Forrest & Steele, 1982) than did non-Greek

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students. These differences persisted after controlling for entering ability and college experiences and were the same for males and females.

In a longitudinal study of students at 18 colleges and universities, Pascarella et al. (1996) examined the relationships between Greek affiliation and scores on the Collegiate Assessment of Academic Proficiency (CAAP) examination (American College Testing Program, 1989). Statistical controls were used to account for differences in background, ability, and first-year college experiences. Separate analyses were conducted for men and women. Results revealed that fraternity membership was associated with significantly lower levels of reading comprehension, mathematics performance, and critical thinking. Sorority membership was related to lower reading comprehension scores.

The results of a third study were more consistent with theories of involvement and learning. A cross-sectional study of approximately 600 freshmen and 1,000 seniors at the University of Missouri–Columbia (MU) found that Greek students reported substantially higher levels of academic and social involvement (Student Life Studies, 1997). Compared to their non-Greek counterparts, Greek freshmen reported making substantially greater gains in interpersonal skill development, whereas Greek seniors reported making significantly greater gains in general education, intellectual development, and interpersonal skill development.

Given that the two studies of the Greek system that used objective tests produced negative findings, whereas the study using self-reported, survey data produced positive results, it is tempting to ascribe the inconsistent results to measurement differences in the studies. Some empirical evidence exists

to support this interpretation. Pike (1995) examined the relationships between seniors' scores on the College Basic Academic Subjects Examination (College BASE) (Osterlind, 1989) and self-reports of learning from the College Student Experiences Questionnaire (CSEQ), third edition (Pace, 1990). He found that, whereas both instruments measured the same underlying constructs, scores contained substantial method-specific variance. In a subsequent study of more than 1,500 students at 10 institutions, Pike (1996) again found evidence that the relationships between self-reported gains and achievement test scores were influenced by method-specific factors. In a study using NSSL data, Whitt, Edison, Pascarella, Nora, and Terenzini (1999) found significant differences in relationships between involvement and outcomes, depending on whether test scores or self-reported gains were used as the outcome measure.

Attributing inconsistent findings on the effects of Greek affiliation to measurement differences may be too simplistic, however. Despite the presence of method-specific factors, Pike (1995) found that the relationships between college experiences and educational outcomes were generally consistent, irrespective of how outcomes were measured. An alternative explanation for the inconsistent findings about the effects of fraternity or sorority memberships is that differences in research results may be due to the analytic methods employed. In the NSSL research, as well as the study by Pike and Askew (1990), the inclusion of students' college experiences as controls in regression-based analyses may have masked important relationships between Greek affiliation and educational gains. In regression, no distinction is made between indirect and spurious effects (Cohen & Cohen, 1983; Loehlin,

1992). If the effects of Greek affiliation on student learning are mediated by college experiences, and those college experiences are used as control variables, legitimate indirect effects will be treated as spurious and suppressed.

In a study of 827 first-year students, Pike (2000) used path analysis to examine the direct and indirect effects of fraternity or sorority membership on student involvement and self-reported gains. Controlling for gender differences and differences in entering ability levels, Greek students reported significantly higher levels of social involvement and gains than did non-Greek students. Gains in learning were found to be the indirect result of Greek students' higher levels of social engagement. One limitation of Pike's research was that relatively few fraternity members participated in the study. Thus, the positive effects for Greek students applied more strongly to sorority membership than to fraternity membership.

The current study extends Pike's (2000) research by focusing on the relationships among membership in a fraternity or sorority, student engagement, and educational outcomes. Specifically, the research sought to provide additional information about the differential effects of the Greek system on men and women and on first-year and senior students. Three questions guided this research:

1. Are levels of student engagement and educational outcomes different for Greek and non-Greek students?
2. Are the relationships among Greek affiliation, student engagement, and educational outcomes different for males and females?
3. Are the relationships among Greek affiliation, student engagement, and

educational outcomes different for first-year students and seniors?

Answers to these questions would help scholars better understand how membership in a fraternity or sorority is related to student learning and would provide institutional policy makers with information that could be used to guide decisions about rush and new-member activities.

METHOD

Participants

The participants in this study were 6,782 undergraduates attending 15 American Association of Universities (AAU) public research universities that completed the National Survey of Student Engagement's The College Student Report (CSR) in 2000 (Indiana University Center for Postsecondary Research and Planning, 2000). The CSR is administered annually during the Spring academic term. NSSE sampling procedures require that equal numbers of first-year students and seniors be sent the survey. For the institutions involved in this study the minimum sample size was 500 first-year students and 500 seniors. Larger samples ($n = 900$ first-year students and $n = 900$ seniors) were drawn for Web-only administrations. Seven of the institutions made use of Web-only administration procedures. Institutions provided NSSE with a data file containing their total first-year and senior populations based on Fall enrollments. Survey samples were randomly selected from these populations.

Almost exactly half of the participants were first-year students ($n = 3,390$) and half were seniors ($n = 3,392$). Slightly more than 58% of the participants were females. Almost 16% of the participants were mem-

bers of minority groups (4.3% African American, 6.8% Asian American, 4.2% Hispanic, 0.4% Native American), 79% were White, 2% were foreign students, and the remaining 3% did not indicate ethnic identity. Approximately 16% of the participants were transfer students, and 93% indicated that they were enrolled full-time. Almost 50% of the students lived in campus residence halls, 47% lived in residences off campus, and 3% lived in a fraternity or sorority house.

Slightly more than 15% of the first-year students participating in the study were members of fraternities or sororities, whereas 17% of the seniors were members of fraternities or sororities. Nearly 62% of the Greek first-year students were female, and 59% of their non-Greek counterparts were female. Approximately 56% of the Greek seniors were female compared to 58% of the non-Greek seniors.

Measures

All of the measures used in this study, except class level, which was provided by the institutions, were taken directly from the 2000 NSSE survey. Developed as an alternative to the reputation- and resource-based ratings of news magazines and college guidebooks, NSSE is designed to assess the extent to which students are engaged in educationally purposeful activities that contribute to their learning and success in college (Kuh et al., 2001). NSSE makes extensive use of students' self-reports of their college experiences and educational gains. Self-report data is widely used in research on college effects, and the validity and credibility of these data has been extensively studied (see Berdie, 1971; Pace, 1985; Pike, 1995; Pohlmann & Beggs, 1974). Research shows that self-reports are likely to be valid

under five conditions:

1. the information requested is known to the respondents;
2. the questions are phrased clearly and unambiguously;
3. the questions refer to recent activities;
4. the respondents think the questions merit a serious and thoughtful response; and
5. answering the questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways. (Kuh et al., 2001, p. 9)

Kuh et al. (2001) noted that the NSSE *College Student Report* was designed to satisfy these five criteria. In addition, cognitive testing of the survey revealed that students understood what was being asked, found the directions to be clear, interpreted the questions in the same way, and formulated their answers to questions in a similar manner (see Kuh, 2001). Research has also shown that mode of administration has a very minor effect on students' survey responses (Carini, Hayek, Kuh, & Ouimet, 2001).

Four of the NSSE benchmarks of student engagement were included in this study. The first benchmark, Level of Academic Challenge, contained 10 questions related to time spent preparing for class, amount of reading and writing, emphasis on higher order thinking in classes, working hard to meet instructors' expectations, and institutional emphasis on studying and academic work. Respondents were asked to think about their experiences during the current academic year when answering these questions. The question about time spent preparing for class was scored on a 7-point scale ranging from

spending less than 5 hours per week studying to spending more than 30 hours per week studying. Questions about reading and writing were scored on a 5-point scale ranging from no textbooks being read or reports written to more than 20 textbooks being read or reports written. The remaining questions were scored on 4-point, Likert-type scales. The alpha reliability coefficient calculated from the data in the current study was 0.69 for this scale. A list of the specific items included in this scale, and all other scales, is provided in the appendix.

The second benchmark, Active and Collaborative Learning, consisted of seven questions asking students how often during the current academic year they had engaged in activities designed to make them think about what they had learned and to apply what they learned in different settings. All of the items were scored on a 4-point Likert-type scale ranging from *never* to *very often*. The alpha reliability coefficient for the scale was 0.67. Student Interaction With Faculty Members was the third benchmark used in this research. Six items, using 4-point Likert-type scales ranging from *never* to *very often*, comprised this benchmark. Alpha reliability for the benchmark was 0.73. The fourth benchmark, Supportive Campus Environment, also consisted of six items. Three of the items were measured on a 4-point scale, whereas the three items dealing with students relationships with students, faculty, and administrative personnel and offices were scored on a 7-point scale. The alpha reliability coefficient for this scale was 0.74.

Two additional scales, Gains in Academic Development and Gains in Personal Development were created using a series of questions that asked students to report the extent to which their college educations had contributed to their knowledge, skill, and

personal development. Responses were scored on a 4-point scale ranging from very little to very much. The academic gains scale produced an alpha reliability coefficient of 0.79, and the personal development scale produced an alpha reliability coefficient of 0.82.

Because the number of response options per item varied for the Level of Academic Challenge and Supportive Campus Environment scales, a preliminary analysis was conducted to determine if those items with more response options, and presumably greater variance, tended to dominate the scales. An examination of the item-total correlations for these two scales revealed that those items with more response options did not contribute disproportionately to the scales. Consequently, no effort was made to adjust responses before calculating summed scales.

Data Analysis

Separate two-way analysis of variance (ANOVA) procedures for first-year students and seniors were used to answer the research questions. The models for both first-year students and seniors were identical and assessed whether the variances in scores on the student-engagement and gain scales could be attributed to main effects for either Greek affiliation or gender and an interaction between Greek affiliation and gender. Preliminary analyses (i.e., Levene's test) indicated that there were no statistically significant differences in the error variances of the groups formed by the independent variables. Results from Levene's test did indicate that the error variances for first-year students and seniors were significantly different. As a result, class standing was not included as an independent variable in the analyses and separate analyses were con-

ducted for first-year and senior students.

A statistically significant main effect for Greek affiliation would indicate that Greek and non-Greek students differed in either their levels of engagement or learning outcomes, whereas a significant interaction between gender and Greek affiliation would indicate that the relationship between Greek affiliation and student engagement or gains was different for males and females. Different ANOVA results for first-year students and seniors would suggest that the relationships between Greek affiliation and engagement or gains varied according to the students' class level.

RESULTS

First-Year Students

Table 1 shows the student-engagement and learning-outcome means and standard deviations for first-year students. ANOVAs identified relatively few statistically significant effects for either Greek affiliation or gender and no statistically significant interactions between Greek affiliation and gender. No statistically significant main effects for Greek affiliation were found for Level of Academic Challenge, Student Interaction With Faculty Members, or Gains in Academic Development. Greek and non-Greek students did differ significantly in their perceptions of the campus environment ($F = 15.719$; $df = 1,3386$; $p < 0.001$; $Eta^2 < 0.01$), with Greek students perceiving the campus environment to be more supportive (22.59) than non-Greek students (21.75). Scores on the Gains in Personal Development scale also differed significantly by Greek affiliation ($F = 11.498$; $df = 1,3386$; $p < 0.001$; $Eta^2 < 0.01$). The personal-gains mean for Greek students was 18.24, compared to a mean of 17.49 for non-Greek

students. Significant gender differences were also found for reported gains in personal development ($F = 9.171$; $df = 1,3386$; $p < 0.001$; $Eta^2 < 0.01$), with women reporting greater gains than men (17.90 and 17.19, respectively). In contrast, men reported higher levels of active and collaborative learning (14.12) than did women (13.70), and this difference was statistically significant ($F = 9.334$; $df = 1,3386$; $p < 0.001$; $Eta^2 < 0.01$). It is important to note that none of the statistically significant effects was able to explain even 1% of the variance in students' scores.

Senior

ANOVA results revealed that the effects of membership in a fraternity or sorority were more pronounced for seniors than for first-year students. Greek affiliation was significantly related to differences in students' scores on the Active and Collaborative Learning ($F = 12.130$; $df = 1,3388$; $p < 0.001$; $Eta^2 < 0.01$), Student Interaction With Faculty Members ($F = 5.913$; $df = 1,3388$; $p < 0.05$; $Eta^2 < 0.01$), and Supportive Campus Environment ($F = 11.450$; $df = 1,3388$; $p < 0.001$; $Eta^2 < 0.01$) scales. Fraternity and Sorority members reported significantly higher levels of Active and Collaborative Learning (16.26 versus 15.70) and Student Interaction With Faculty Members (12.64 versus 12.25). They also perceived the campus environment to be more supportive than did non-Greeks (21.17 versus 20.41). Significant main effects for Greek affiliation were found for gains in both academic development ($F = 18.487$; $df = 1,3388$; $p < 0.001$; $Eta^2 < 0.01$) and personal development ($F = 39.896$; $df = 1,3388$; $p < 0.001$; $Eta^2 = 0.01$). Greek students, in comparison to their non-Greek counterparts, reported making greater gains in their

academic development (21.85 and 21.03, respectively) and their personal development (19.53 and 18.20, respectively). Gender was significantly related to Level of Academic Challenge ($F = 12.094$; $df = 1,3388$; $p < 0.001$; $Eta^2 < 0.01$) and Gains in Personal

Development scores ($F = 38.046$; $df = 1,3388$; $p < 0.001$; $Eta^2 = 0.01$). Mean academic challenge scores were higher for women (29.19) than men (28.41), and women reported making greater gains than men in their personal development (18.91

TABLE 1.
Engagement and Gain Means and Standard Deviations for First-Year Students

	Male	Female	Total		Male	Female	Total
<i>Level of Academic Challenge</i>				<i>Supportive Campus Environment</i>			
Greek	28.25 (4.79)	28.24 (4.55)	28.24 (4.64)	Greek	22.54 (4.67)	22.62 (4.38)	22.59* (4.49)
Non-Greek	27.82 (4.89)	28.52 (4.84)	28.23 (4.87)	Non-Greek	21.45 (4.68)	21.96 (4.41)	21.75* (4.53)
Total	27.88 (4.88)	28.47 (4.79)	28.23 (4.84)	Total	21.60 (4.69)	22.06 (4.41)	21.87 (4.54)
<i>Active and Collaborative Learning</i>				<i>Gains in Academic Development</i>			
Greek	14.38 (2.87)	13.90 (3.21)	14.08 (3.09)	Greek	19.48 (4.07)	18.95 (4.06)	19.15 (4.07)
Non-Greek	14.08 (3.05)	13.67 (2.88)	13.84 (2.95)	Non-Greek	19.11 (4.20)	18.87 (4.21)	18.97 (4.21)
Total	14.12* (3.02)	13.70* (2.93)	13.87 (2.98)	Total	19.16 (4.18)	18.88 (4.19)	19.06 (4.18)
<i>Student Interaction With Faculty</i>				<i>Gains in Personal Development</i>			
Greek	11.17 (2.72)	10.78 (2.76)	10.93 (2.75)	Greek	17.87 (4.72)	18.47 (4.48)	18.24* (4.58)
Non-Greek	10.71 (2.68)	10.79 (2.51)	10.75 (2.58)	Non-Greek	17.08 (4.48)	17.79 (4.36)	17.49* (4.43)
Total	10.77 (2.69)	10.79 (2.55)	10.78 (2.61)	Total	17.19* (4.53)	17.90* (4.39)	17.60 (4.46)

Note. Standard deviations are in parentheses.

* $p < 0.05$.

TABLE 2.
Engagement and Gain Means and Standard Deviations for Seniors

	Male	Female	Total		Male	Female	Total
<i>Level of Academic Challenge</i>				<i>Supportive Campus Environment</i>			
Greek	28.43 (5.10)	29.36 (4.89)	28.95 (5.00)	Greek	20.78 (4.73)	21.47 (4.64)	21.17* (4.69)
Non-Greek	28.40 (5.43)	29.15 (5.24)	28.84 (5.33)	Non-Greek	20.31 (4.68)	20.48 (4.77)	20.41* (4.73)
Total	28.41* (5.37)	29.19* (5.18)	28.86 (5.27)	Total	20.39 (4.69)	20.64 (4.76)	20.54 (4.73)
<i>Active and Collaborative Learning</i>				<i>Gains in Academic Development</i>			
Greek	16.17 (3.35)	16.34 (3.38)	16.26* (3.36)	Greek	21.79 (3.89)	21.90 (4.06)	21.88* (3.99)
Non-Greek	15.79 (3.36)	15.64 (3.38)	15.70* (3.37)	Non-Greek	21.23 (4.07)	20.88 (3.89)	21.03* (3.97)
Total	15.85 (3.36)	15.76 (3.39)	15.80 (3.38)	Total	21.33 (4.04)	21.05 (3.94)	21.17 (3.98)
<i>Student Interaction With Faculty</i>				<i>Gains in Personal Development</i>			
Greek	12.42 (3.42)	12.81 (3.19)	12.64* (3.30)	Greek	18.68 (4.46)	20.19 (4.32)	19.53* (4.44)
Non-Greek	12.24 (3.35)	12.26 (3.22)	12.25* (3.27)	Non-Greek	17.56 (4.61)	18.65 (4.63)	18.20* (4.65)
Total	12.27 (3.36)	12.35 (3.22)	12.32 (3.28)	Total	17.76* (4.60)	18.91* (4.62)	18.43 (4.65)

Note. Standard deviations are in parentheses.

* $p < 0.05$.

and 17.76, respectively). Once again, the magnitudes of these effects were quite small. Only the effects of Greek affiliation and gender on gains in personal development accounted for as much as 1% of the variance in scale scores.

DISCUSSION

Overall, the results of the current research are consistent with the findings of previous studies that relied on self-reports of student engagement and learning and did not attempt to control for differences in students' college

experiences. Instead of being less involved, fraternity and sorority members were at least as engaged as their non-Greek counterparts. Greek students, who were seniors, tended to be significantly more involved than seniors who were not members of a fraternity or sorority. Seniors who were Greeks also reported making significantly greater gains in their academic development than did independent students, and all Greeks, both first-year students and seniors, reported making significantly greater gains in their personal development than did students who were not members of fraternities or sororities.

Contrary to conventional wisdom, and some research findings, the relationships between Greek affiliation and both engagement and gains were not significantly different for men and women. First-year women, whether Greek or independent students, reported lower levels of active and collaborative learning than men, but they had greater gains in personal development. Women who were seniors had significantly greater mean scores than men on the Level of Academic Challenge and Gains in Personal Development scales.

The results of this research also suggest that the positive effects of belonging to a Greek organization are greater for seniors than for first-year students. First-year Greek students differed from their non-Greek counterparts in that they had more positive perceptions of the campus environment and reported greater gains in their personal development. Greek students who were seniors scored higher than independents on three of the four measures of student engagement and both measures of student learning. In addition, the strength of the relationships between Greek affiliation, student engagement, and educational gains

were greater for seniors than for first-year students.

Limitations

Care should be taken not to overgeneralize these results. This study was based on the survey responses of student attending 15 AAU public research universities. Although the results for students from 15 universities are more likely to be generalizable to other institutions than the results of a single-institution study, the 15 institutions included in the current research may not be typical of other public research universities or all four-year colleges and universities. The generalizability of the results is also limited by the measures of engagement and gains used in this study. Had different measures of student engagement and educational gains been used, the results could have been substantially different. In addition, the inclusion of two scales with reliability coefficients less than 0.70 may have made it difficult to detect important differences between Greek and independent students.

Another limitation of the current study was the cross-sectional nature of the research. Surveys are snapshots in time. As such, they cannot fully depict learning or student development. Only a longitudinal design that followed students throughout their college careers could provide a complete description of student learning and intellectual development.

Care also should be taken not to overgeneralize the results for gender in this study. Specifically, the finding that first-year male students scored higher on active and collaborative learning than their female counterparts may be attributable to the items included in the scale. Items, such as making a class presentation and participating in a community-based project, reflect instructors'

decisions about course structure. Although the effects of these decisions should be the same for males and females, students self-select these courses and the effects of these interventions may not be distributed equally across females and males. In addition, some of the items included in this scale (e.g., asking questions during class and participating in class discussions) may have created an advantage for male students (see Baxter Magolda, 1992).

A potential limitation of the current research is its reliance on students' self-reports. Although many researchers have found that self-reports of student engagement and educational gains produce results that are comparable to more objective measures, Pascarella (2001) argued that self-reported gains do not adequately account for individual differences and are not comparable to scores on objective tests. Although Pike's (2000) research suggested that measurement differences are not the most likely source of inconsistencies in research on the Greek system, the accuracy of self-reported gains was presumed in the current research.

Implications

Despite these limitations, the findings of the current study have important implications for research and practice. For example, the inconsistent findings concerning the effects of the Greek system on student learning represent a starting point for future research. Whether the differences in research findings are the result of measurement differences, differences in analytical approaches, or some other set of factors was beyond the scope of the current research. Future studies of the Greek system should use multiple measures of student learning and a variety of analytical approaches to isolate the causes of compet-

ing claims about the benefits of membership in a fraternity or sorority.

The observed gender differences in student engagement and learning outcomes represent a second area in which additional research is needed. Many studies of student engagement, including the current research, have reported significant differences in how men and women learn and what they learn without adequately exploring the causes of the differences. The current results do not indicate whether gender differences are the result of learning styles, subtle biases introduced by the measures and methods used, or an interaction between learning styles and methods. Additional research is needed to understand what are likely to be complex interrelationships between research methods, student characteristics, college experiences, and educational outcomes.

Taken at face value, the results of the current research have important implications for practice vis-à-vis the Greek system on college campuses. The findings of the current study seem to contradict the claim made by Kuh et al. (1996) that Greek organizations are indifferent to academic values and shortchange their members. Likewise, the findings of this study do not support delaying rush and other new-member activities. Greek students, including first-year students, tended to be slightly more involved in educationally purposeful activities than their non-Greek counterparts and reported making greater gains in learning than independent students did.

The finding that seniors in fraternities and sororities are more involved than first-year students may also have important implications for institutional practice. Higher levels of involvement by seniors may reflect the fact that the Greek system provides its senior members with opportunities to be

involved on campus *and* to assume leadership roles in their own chapters. These opportunities to be engaged benefit Greek seniors and can have a profound effect, for good or ill, on younger members of fraternities and sororities who adopt seniors as role models. Colleges and universities may need to look carefully at the training and leadership opportunities they provide for prospective leaders to insure that these experiences contribute to the learning and intellectual development of all students.

Finally, it is important to understand that the findings of this study do not represent a complete endorsement of the Greek system on college campuses. Differences between Greek and non-Greek students, both in terms of their engagement and learning outcomes, were extremely small. Given serious concerns about the use and abuse of alcohol by Greek students, the modest academic advan-

tages offered by the Greek system may not be sufficient to justify its continuation in its current form.

On one point much of the research does agree: Fraternities and sororities are powerful socializing agents (Strange, 1986). Whether that socialization is positive or negative may depend on the institutional culture within which the Greek system operates. It is certainly appropriate to raise questions about the values being promoted by fraternities and sororities, but it is also appropriate to examine institutional policies to determine if those policies set expectations for the Greek system that are consistent with campus values and sound educational practices.

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APPENDIX.

Items and Scales Used in the Research

Level of Academic Challenge

- Preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more
- Number of written papers or reports of fewer than 20 pages
- Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory
- Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences
- Coursework emphasizes: Making judgments about the value of information, arguments, or methods
- Coursework emphasizes: Applying theories or concepts to practical problems or in new situations
- Worked harder than you thought you could to meet an instructor's standards or expectations
- Campus environment emphasizes spending significant amounts of time studying and on academic work

Active and Collaborative Learning

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students
- Participated in a community-based project as part of a regular course
- Discussed ideas from your reading or classes with others outside of class (students, family members, coworkers, etc.)

Student Interaction With Faculty

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your reading or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)
- Received prompt feedback from faculty on your academic performance
- Worked with a faculty member on a research project

Supportive Campus Environment

- Campus environment emphasizes providing the support you need to help you succeed academically
- Campus environment emphasizes helping you cope with your nonacademic responsibilities (work, family, etc.)
- Campus environment emphasizes providing the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices

Gains in Academic Development

- Acquiring a broad general education
- Acquiring job- or work-related knowledge and skills
- Writing clearly and effectively
- Speaking clearly and effectively
- Thinking critically and analytically
- Analyzing quantitative problems
- Using computer and information technology
- Gains in Personal Development
- Working effectively with others
- Voting in elections
- Learning effectively on your own
- Understanding yourself
- Understanding people of other racial and ethnic backgrounds
- Being honest and truthful
- Contributing to the welfare of your community

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