

STUDENT INVOLVEMENT AND GRADUATION RATES: A QUANTITATIVE STUDY ON THE IMPACT OF ADDING A FRATERNITY AND SORORITY COMMUNITY AT COLLEGES AND UNIVERSITIES IN THE UNITED STATES

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The National Panhellenic Conference recognized 33 colleges and universities in the United States as having added a fraternity and sorority community between 2000 and 2015. Graduation rate data from these institutions were collected from before the addition of fraternal organizations, and from six years later. Graduation rates after the addition of fraternities and sororities ($M = 57.00$) were higher than before ($M = 52.97$), ($t [32] = -4.42, p < .01$). The results of this study suggest that the addition of a fraternity and sorority community can have a positive overall influence on student and institutional success.

A substantial amount of research has shown that the students who are involved in campus activities are more likely to persist in their studies and graduate from their college or university (Winston, 2003; Pascarella & Terenzini, 1991; Astin, 1999, 2005; Tinto, 1998). As a means for improving student engagement, fraternities and sororities provide opportunities for students to participate in campus activities, interact with other students, and to create a connection to the institution as a whole (Pike & Kuh, 2005; Long, 2012). It has been found that membership in fraternities and sororities leads to higher levels of involvement in, and satisfaction with campus life, as well as predicting higher rates of persistence and graduation (Walker, Martin, & Hussey, 2014). The addition of a fraternity and sorority community to campuses that did not previously include this entity may be an avenue to help students and institutions achieve greater levels of success (Schroeder, 1994).

This study investigated the graduation rates at colleges and universities in the United States before and after the implementation of a fraternity and sorority community on campus. The intent of this study was to develop a better understanding of the impact that the addition of a system of fraternities and sororities can have in regard to the graduation rates of the students enrolled at an institution of higher education. The

aim of this study is to provide insight into how fraternity and sorority communities can directly impact both student and institutional success. These results may be valuable for colleges and universities as decisions are made regarding the extracurricular programs that are available for students.

Literature Review

Upcraft and Schuh (1996) asserted that, “for about 350 years, our citizenry accepted as a matter of faith that... higher education was doing its job, and doing it well” (p. 5). However, there has become an increasing demand for colleges and universities to provide an environment in which students can be successful in achieving their academic goals, and graduation rates have become a common and significant measurement related to student and institutional success. Several states have implemented “college completion agendas” to increase educational achievement (Zumeta, Breneman, Callan & Finley, 2012), and many states have moved toward a performance-based funding model for colleges and universities. The theory behind these funding structures is that taxpayer dollars are best used to finance outputs, in the form of degrees, rather than inputs, in the form of enrollments (Hillman, Tandberg & Gross, 2014), and that this approach will incentivize

institutions to graduate more students. Given that only half of all undergraduate students that attend public four-year colleges earn degrees within six years, it has become a primary concern of policymakers to develop strategies for improving college completion rates (National Student Clearinghouse, 2012).

The programs managed by student affairs divisions have become key components of enrollment management, as they impact student retention, student success, and institutional well-being (Seidman, 2005). Research has shown that students who are involved in activities and experiences on campus are more likely to persist through graduation, and report a higher level of satisfaction with their collegiate experience (Winston, 2003). With regard to the impact of fraternity and sorority communities, Biddix, Matney, Norman, and Martin (2014) point out that several findings overwhelmingly suggest that the opportunity for students to belong and connect with their peers through fraternal organizations serves as a powerful method for retaining students.

Student Involvement

Research has continually shown that students who are more fully involved in collegiate activities, both in and out of the classroom, gain greater educational benefits, are more successful, and are more satisfied with the overall experience (Astin, 1977, 1993; Kuh, Schuh, Whitt, & Associates, 1991). Tinto (1975) points out that students who voluntarily leave college tend to do so because they have not become integrated into the academic or social activities associated with the institution (Creamer, Creamer, & Brown, 2003), and evidence consistently reveals that student involvement, academically and socially, is related to persistence into the next academic year (Pascarella & Terenzini, 2005). Braxton, Sullivan, and Johnson (1997), along with Astin (1993), reiterate that levels of student involvement and integration into any of the academic and social systems of an institution are

critical factors in determining whether a student will persist.

The actions taken by an institution of higher education play a key role in student success. As Astin (1985), asserts, “the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement” (p. 36). Restating this notion, Pike and Kuh (2005) point out that with regard to the impact an institution has on student achievement, the most important factors are the policies and procedures that are implemented for the purpose of increasing levels of student engagement. Students who depart from college without achieving a degree often feel alienated and uninvolved (Creamer, Creamer, & Brown, 2003), and in general, the more that students interact and form relationships with faculty, staff, and other students, the more likely they are to persist in their studies (Mallette & Cabrera, 1991; Tinto, 1998). The creation of a feeling of connectedness and integration into the campus culture are key components of student satisfaction, academic success, and retention, and are a vital part of the successful college experience (Jorgenson, Farrell, Fudge, & Pritchard, 2018). In working toward these goals, student affairs divisions are charged with the tasks of planning, offering, and implementing programs that will enhance the college experience for all students on campus (Council for the Advancement of Standards, 2006). Fraternities and sororities contribute to the psychological sense of community that is experienced by students and increases levels of social involvement (Pike & Askew, 1990), and a system of fraternities and sororities can be a positive component of the extracurricular offerings of an institution (Schroeder, 1994).

Fraternity and Sorority Communities

Fraternity or sorority membership predicts higher levels of involvement in campus activities (Pike, 2000), which is correlated with higher grades and greater levels of satisfaction with the

overall college experience (Astin, 1999). Long (2012) stated that research consistently shows that membership in a fraternity or sorority has a positive overall impact on student learning, and determined that “the fraternity/sorority experience was excellent at producing gains in sense of belonging and peer interaction, and good at developing respondents’ study skills, critical thinking, commitment to service, management skills, and career skills” (p. 21). Research has indicated that those joining fraternities and sororities sought membership to meet people and to feel a sense of belonging on campus (Case, Hesp, & Eberly, 2005; Fouts, 2010). As an opportunity for immediate involvement, joining a fraternal organization provides members with instant access to a supportive peer network (Biddix, Singer, & Aslinger, 2018). Additionally, fraternities and sororities provide members with a small and intimate community within the context of the campus, which allows members to meet new people, establish close friendships, empathize with others, and resolve interpersonal conflicts (Long, 2012). This type of social integration into the campus culture is positively associated with overall levels of persistence (Allen, Robbins, Casillas, & Oh, 2008; Lohfink & Paulsen, 2005), and as Biddix, Singer, and Aslinger (2018) determined, membership in a fraternal organization had a positive impact on critically important first-year retention.

Pike (2000), concluded that members of fraternities and sororities showed greater gains than their nonaffiliated counterparts in communication skills, interpersonal skills, and critical thinking, and it has also been found that membership in fraternities and sororities is associated with gains in general education, and practical competence (Hayek, Carini, O’Day, & Kuh, 2002). Focal points for fraternities and sororities include developing the character and leadership skills of their members, serving the community, and creating lifelong friendships (Gregory, 2003). As a means for accomplishing these goals, fraternities and sororities offer

several opportunities for members to develop as they serve in leadership roles (Hallenbeck, Dickman, & Fuqua, 2003), as well as providing the ability to participate in a variety of community service projects (Astin, 1993; Kuh, 1982). When overall student development is considered, research shows that membership in fraternities and sororities correlates to growth in the areas of scholarship, leadership, service, and friendship (Long, 2012). As added benefits for institutions, the presence of a fraternity and sorority community helps to engender an active and supportive alumni base beyond the collegiate years (Walker, Martin & Hussey, 2014), along with fostering higher levels of alumni donations (Nelson, 1984; Tyler 2012).

Regarding student success, it has been determined that fraternity and sorority communities serve as a beneficial resource to members, and as a model for broader efforts that are designed to maximize student retention and degree completion (Walker, Martin, & Hussey, 2014). Several traits that are positively associated with retention and graduation are evident in the students who are members of fraternities and sororities. Moving away from home to go to college, living with a group of peers, and striving for status are all characteristics that are emblematic of the students who join fraternities and sororities, and each of these attributes is also positively correlated with improved graduation rates (Astin, 1993). In conjunction with these traits, research has steadily shown that membership in fraternities and sororities is associated with higher levels of interaction with peers (Pike & Askew, 1990), increased rates of persistence, and academic success (Astin, 1977, 1984; DeBard, Lake, & Binder, 2006; DeBard & Sacks, 2010). Severtis and Christie-Mizell (2007) found fraternity/sorority membership increased the odds of college graduation by 370% compared to nonaffiliated students.

Research Approach

The purpose of this study was to investigate the effect on graduation rates after a college or university added a fraternity and sorority community as a new component of their campus environment.

Definitions

The following definitions are provided for this study:

- **Graduation Rate:** The percentage of the students at a college or university who complete their degree program within 150 percent of the published time for the program. At the four-year institutions used in this study, this refers to the students who complete and are considered graduates within six years of enrolling (National Center for Education Statistics, 2019).
- **Fraternal Organizations:** An inclusive term encompassing both fraternities and sororities.
- **Fraternity and Sorority Community:** A group of fraternities and sororities that are associated with a college campus and are social in character.
- **National Panhellenic Conference:** Established in 1902 to assist collegiate and alumnae chapters in cooperating with colleges and universities and to foster interfraternal relationships, the NPC is the premier advocacy and support organization for the advancement of the sorority experience (National Panhellenic Conference, 2019).
- **Newly Added Fraternity and Sorority Community:** These have been identified by the National Panhellenic Conference. NPC recognizes a fraternity and sorority community establishment date as the time when two or more NPC member organizations exist on campus. The North American Interfraternity Conference does not maintain a record

of dates of establishment. As a result of these factors, it is possible that some institutions in the study may have had fraternities or sororities on campus at some point prior to the establishment date stated by NPC. These institutions may have been without the requisite number of member organizations for NPC recognition, or they may have had a fraternity and sorority community that became inactive, and then returned on the date provided by NPC.

Methodology

This study used a deductive framework and quantitative methodology to investigate graduation rate data from institutions of higher education. The National Panhellenic Conference identified 33 colleges and universities in the United States as having added a fraternity and sorority community to their campus between 2000 and 2015, and all 33 of these institutions were included in this study. To obtain the dataset, a formal request was submitted to the Measurable Outcomes Committee of the NPC. This research proposal was reviewed and given approval by the NPC, who then provided a list of institutions and the corresponding dates when two or more NPC member organizations were fully established at those institutions.

Since official graduation rates at four-year institutions are calculated based upon a six-year time frame, for each of the institutions, graduation rate data were collected from before the addition of fraternities and sororities, and from six years later. This data set was analyzed to determine whether the addition of fraternal organizations had a significant impact on graduation rates. A list of the institutions that added a fraternity and sorority community between 2000 and 2015 is shown in Appendix A. The data for, and characteristics of the institutions that were included in the study is provided in Appendix B, and Appendix C is a key to the abbreviations that were used in the data set.

Table 1*t-test: Paired Two Sample for Means*

	Variable 1	Variable 2
Mean	52.97	57.00
Variance	399.09	347.81
Observations	33	33
Pearson Correlation	0.97	
Hypothesized Mean Difference	0	
df	32	
t Stat	-4.42	
P(T<=t) one-tail	5.35	
t Critical one-tail	1.69	
P(T<=t) two-tail	<0.01	
t Critical two-tail	2.04	

Statistical Analysis

A paired-samples *t*-test was conducted to determine whether there was a difference between the graduation rates that were present prior to the addition of a fraternity and sorority community when compared with graduation rates after this entity was added to the campus environment. As shown in Table 1, the results of the paired-samples *t*-test shows the graduation rates before the addition of a fraternity and sorority community ($M = 52.97$) were significantly different than that same data from six years later ($M = 57.00$), ($t [32] = -4.42$, $p < .01$).

Research Findings and Practical Significance

Overall, the results of this study revealed that the addition of a fraternity and sorority community on a college or university campus correlated to a positive impact on graduation rates. These results are in alignment with Astin's Theory of Student Involvement (1977, 1984, 1993) and Tinto's Theory of Student Departure (1975, 1987, 1993), which state that as students become more involved with the academic and social communities of a college campus, they are more likely to persist in their studies and

graduate from their institution. Further, and in harmony with the works of Astin and Tinto on student success, Walker, Martin, and Hussey (2014), found that "participation in a Greek organization leads to significantly higher levels of involvement with campus life" (p. 217). Research has also revealed that membership in fraternal organizations has a positive impact on student development and learning (Hayek et al., 2002; Long, 2012), and is a predictor of higher graduation rates (Severtis & Christie-Mizell, 2007; Walker, Martin, & Hussey, 2014).

The results of this study support the work of Shonrock (1998), Whipple and Sullivan (1998), and DeBard and Sacks (2011), who found that colleges and universities with an existing system of fraternities and sororities should work to cultivate and strengthen the relationship between the chapter houses and the institution. Biddix et al. (2014) state that campus administrators and professionals should assert a more significant influence on fraternity and sorority members, pointing out that while campus professionals often attend to the riskier behaviors that take place, there is a lack of effort with regard to creating a healthier vision for the organizations. Biddix et al. (2014) continue, providing an overall philosophy for institutions by stating that, "connecting fraternities and sororities

to the philosophical and practical mission of higher education would empower students to make broader educational gains within these organizations while potentially reducing high-risk behaviors and adverse media gathering events” (p. 112).

Fraternal organizations strive to shape men and women into responsible adults and ethical leaders (Earley, 1998; Whipple & Sullivan, 1998), and student affairs divisions can take advantage of these principles when collaborating to create academic and behavioral standards for the fraternities and sororities on campus (Pascarella & Terenzini, 1991). An approach that incorporates both goals and concerns from students is necessary to create buy-in and ownership from the members of the fraternities and sororities (Biddix et al., 2014). When an environment of trust and cooperation is established between the fraternity and sorority community and the student affairs office, these entities can work together to achieve the goals of the institution, and to create an environment that is conducive to positive student development and student success (DeBard & Sacks, 2011; Shonrock, 1998; Whipple & Sullivan, 1998).

Limitations

Generalizations drawn from the results of this study were based upon specific years and a finite number of institutions. The study is also limited by the definition of “Newly Added Fraternity and Sorority Community” that shaped the dataset. As detailed earlier, the institutional list dataset provided by the National Panhellenic Conference included institutions with newly recognized fraternity/sorority communities based on their definition of two or more NPC organizations. Additionally, the data used for comparison in this study were the overall graduation rates at colleges and universities, and it is difficult to identify any single action as the direct cause of an increase or decrease in those rates. While the results of this study may add to the literature that is available

for college or university administrators, student affairs personnel, and other interested parties, the results may not generalize to all situations or institutions.

Opportunities for Future Research

Future studies could be conducted to determine the characteristics of institutions where the addition of a fraternity and sorority community has the greatest positive impact on student success. This research could include investigating the Carnegie Classifications of institutions, the number of students who are enrolled, the level of selectivity with regard to admissions, or whether the institution consists of a student body that is primarily residential or nonresidential. Other areas for investigation could include the impact that the addition of a fraternity and sorority community has on student recruitment or retention, overall student satisfaction scores, and contribution levels from alumni. Additionally, in keeping with Astin’s Theory of Student Involvement, the level of participation in other extracurricular activities that are available on campus could be investigated as a possible predictor of improved graduation rates. Any or all of these characteristics of colleges and universities could be studied, which would provide information for individual institutions that are making decisions related to the extracurricular opportunities that are available for their students, including the addition or presence of a fraternity and sorority community.

Conclusion

The purpose of this study was to investigate the relationship between the addition of a fraternity and sorority community on a college campus and a subsequent change in the graduation rates of the institution. It was determined that the addition of fraternities and sororities on campus correlated to a significant positive impact on

graduation rates. The results of this study suggest that the inclusion of a fraternity and sorority community can help to promote student achievement, resulting in improved graduation rates for the college or university. As institutions of higher education take steps to give students the best chance to be successful, this research suggests that colleges and universities that do not currently offer membership in fraternities and sororities may want to consider whether their institution would be a good fit for the addition of these organizations on campus. Additionally, colleges and universities that currently have a fraternity and sorority community should take steps to develop, improve, and enhance the existing relationship between the leaders of the institution and the chapter houses. These findings may prove helpful to college and university administrators, student affairs professionals, and other interested parties when the overall program of available extracurricular activities is considered, designed, and implemented for the purposes of promoting both student and institutional success.

References

- Allen, J., Robbins, S. B., Casillas, A., & Oh, I. S. (2008). Third-year college retention and transfer: Effects of academic performance, motivation, and social connectedness. *Research in Higher Education*, 49(7), 647-664. <https://doi.org/10.1007/s11162-008-9098-3>
- Astin, A. W. (1977). *Four critical years: Effects of college on beliefs, attitudes, and knowledge*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A. W. (1985). Involvement: The cornerstone of excellence. *Change* 17(4), 35-39. <https://doi.org/10.1080/00091383.1985.9940532>
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518-529.
- Astin, A. W. (2005). Making sense out of degree completion rates. *Journal of College Student Retention*, 7(1/2), 5-17. <https://doi.org/10.2190/7pv9-khr7-c2f6-upk5>
- Biddix, J. P., Matney, M. M., Norman, E. M., & Martin, G. L. (2014). The influence of fraternity and sorority involvement: A critical analysis of research (1996-2013). *ASHE Higher Education Report*, 39(6). Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1002/aehe.20012>
- Biddix, J. P., Singer, K. I., & Aslinger, E. (2018). First-year retention and National Panhellenic Conference sorority membership: A multi-institutional study. *Journal of College Student Retention*, 20(2), 236-252. <https://doi.org/10.1177/1521025116656633>
- Braxton, J., Sullivan, A., & Johnson, R. (1997). Appraising Tinto's theory of college student departure. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (107-158). New York, NY: Agathon.
- Carnegie Classification of Institutions of Higher Education. (2019). *Institution lookup*. Retrieved from: <http://carnegieclassifications.iu.edu/lookup/lookup.php>
- Case, D. N., Hesp, G. A., & Eberly, C. G. (2005). An exploratory study of the experiences of gay, lesbian and bisexual fraternity and sorority members revisited. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 1(1), 15-31.
- Chronicle of Higher Education. (n.d.). *College completion: Who graduates from college, who doesn't, and why it matters*. Retrieved from: <https://collegecompletion.chronicle.com>
- Council for the Advancement of Standards. (2006). *CAS professional standards for higher education* (6th Ed.). Washington, DC: Author.
- Creamer, E. G., Creamer, D. G., & Brown, K. S. (2003). Applying quality educational principles to academic advising. In G. L. Kramer & Associates (Eds.), *Student Academic Services* (205-222). San Francisco, CA: Jossey-Bass.
- DeBard, R., Lake, T., & Binder, R. S. (2006). Greeks and grades: The first-year experience. *NASPA Journal*, 43(1), 56-68. <https://doi.org/10.2202/0027-6014.1571>
- DeBard, R., & Sacks, C. (2010). Fraternity/sorority membership: Good news about first-year impact. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 5(1), 12-23.
- DeBard, R., & Sacks, C. (2011). Greek membership: The relationship with first-year academic performance. *Journal of College Student Retention*, 13(1), 109-126. <https://doi.org/10.2190/cs.13.1.f>
- Earley, C. (1998). Influencing ethical development in Greek letter organizations. *New Directions for Student Services*, 1998(81), 39-47. <https://doi.org/10.1002/ss.8104>
- Fouts, K. S. (2010). Why undergraduates aren't "going Greek": Attraction, affiliation, and retention in fraternities and sororities. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 5(1), 24-33.

- Gregory, D. (2003). The dilemma facing fraternal organizations at the millennium. In D. E. Gregory (Ed.), *The administration of fraternal organizations on North American campuses: A pattern for the new millennium* (3-25). Asheville, NC: College administration Publications.
- Hallenbeck, D. A., Dickman, M. M., & Fuqua, D. R. (2003). Dimensions of leadership and motivation in relation to residential setting. *Journal of College and University Student Housing*, 32(2), 23-31.
- Hayek, J. C., Carini, R. M., O'Day, P. T., & Kuh, G. D. (2002). Triumph or tragedy: Comparing student engagement levels of members of Greek-letter organizations and other students. *Journal of College Student Development*, 43(5), 643-663.
- Hillman, N., Tandberg, D. & Gross, J. (2014). Performance funding in higher education: Do financial incentives impact college completions. *The Journal of Higher Education* 85(6), 826-857. <https://doi.org/10.1353/jhe.2014.0031>
- Jorgenson, D. A., Farrell, L. C., Fudge, J. L., & Pritchard, A. (2018). College connectedness: The student perspective. *Journal of the Scholarship of Teaching and Learning*, 18(1), 75-95. <https://doi.org/10.14434/josotl.v18i1.22371>
- Kuh, G. D. (1982). *Enhancing the quality of Greek life*. Bloomington, IN: Center for the Study of the College Fraternity.
- Kuh, G. D., Schuh, J. H., Whitt, E. J., & Associates. (1991). *Involving colleges: Successful approaches to fostering student learning and development outside the classroom*. San Francisco, CA: Jossey-Bass.
- Lohfink, M. M., & Paulsen, M. B. (2005). Comparing the determinants of persistence for first-generation and continuing-generation students. *Journal of College Student Development*, 46(4), 409-428. <https://doi.org/10.1353/csd.2005.0040>
- Long, L. (2012). Unchallenged, professed core values: Do undergraduate fraternity/sorority members actually benefit in the areas of scholarship, leadership, service and friendship? *College Student Affairs Journal*, 30(2), 15-30.
- Mallette, B. I., & Cabrera, A. (1991). Determinants of withdrawal behavior: An exploratory study. *Research in Higher Education*, 32(2), 179-194. <https://doi.org/10.1007/bf00974436>
- National Center for Education Statistics. (n.d.). *Compare institutions*. Retrieved from: <https://nces.ed.gov/ipeds/datacenter/InstitutionByName.aspx>
- National Center for Education Statistics. (2019). *Glossary Results*. Retrieved from: <https://surveys.nces.ed.gov/ipeds/VisGlossaryAll.aspx>
- National Panhellenic Conference. (2019). *Mission, Vision and Purpose*. Retrieved from: <https://www.npcwomen.org/about/mission-vision-and-purpose/>
- National Student Clearinghouse. (2012). *Completing college: A state-level view of student attainment rates* (No. 4). Herndon, VA: National Student Clearinghouse Research Center.
- Nelson, W. T. (1984). *A comparison of selected undergraduate experiences of alumni who financially support their alma mater*. Unpublished doctoral dissertation. Indiana University, Bloomington.
- Pascarella, E. & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco, CA: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Pike, G. (2000). The influence of fraternity or sorority membership on students' college experiences and cognitive development. *Research in Higher Education*, 41(1), 117-139. <https://doi.org/10.1023/a:1007046513949>
- Pike, G., & Askew, J. (1990). The impact of fraternity or sorority membership on academic involvement and learning outcomes. *NASPA Journal*, 28(1), 13-19.
- Pike, G. R. & Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education* 46(2), 185-209. <https://doi.org/10.1007/s11162-004-1599-0>

- Schroeder, C. C. (1994). Developing learning communities. In C. C. Schroeder, P. Mable, & Associates (Eds.), *Realizing the Educational Potential of Residence Halls* (165-189). San Francisco, CA: Jossey-Bass.
- Seidman, A. (2005). *College student retention: A formula for success*. Westport, CT: Greenwood.
- Severtis, R., & Christie-Mizell, C. (2007). Greek letter membership and college graduation: Does race matter? *Journal of Sociology and Social Welfare*, 34(3), 95–117.
- Shonrock, M. (1998). Standards and expectations for Greek letter organizations. *New Directions for Student Services*, 1998(81), 79-85. <https://doi.org/10.1002/ss.8107>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125. <https://doi.org/10.3102/00346543045001089>
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *Review of Higher Education*, 21(2), 167-177.
- Tyler, A. (2012). *15 revealing stats on the current state of greek life*. Retrieved from: <http://elitedaily.com/news/world/15-revealing-stats-current-state-greek-life/>
- University System of Georgia. (n.d.). *Graduation rate report: Bachelor degree six-year rates, first-time freshmen Fall 2003 cohort*. Retrieved from: <https://info.usg.edu>
- Upcraft, M. L., & Schuh, J. H. (1996). *Assessment in student affairs: A guide for practitioners*. San Francisco, CA: Jossey-Bass.
- Walker, J. K., Martin, N. D., & Hussey, A. (2014). Greek organization membership and outcomes at an elite, private university. *Research in Higher Education*, 56(3), 203-227. <https://doi.org/10.1007/s11162-014-9345-8>
- Whipple, E. G., & Sullivan, E. G. (1998). Greeks as communities of learners. *New Directions for Student Services*, 1998(81), 87-94. <https://doi.org/10.1002/ss.8108>
- Winston, Jr., R. B. (2003). Stimulating and supporting student learning. In G. L. Kramer & Associates (Eds.), *Student Academic Services* (3-26). San Francisco, CA: Jossey-Bass.
- Zumeta, W., Breneman, D., Callan, P., & Finney, J. (2012). *Financing American higher education in the era of globalization*. Cambridge, MA: Harvard University Press.

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Appendix A

Institutions that added a Fraternity and Sorority Community, 2000-2015¹

Institution	State	Year
Plymouth State University	NH	2002
The College of New Jersey	NJ	2002
John Carroll University	OH	2002
California State University - Northridge	CA	2003
Santa Clara University	CA	2003
Quincy University	IL	2003
Embry-Riddle Aeronautical University (Arizona)	AZ	2005
Iowa State University	IA	2006
University of Wyoming	WY	2006
St. Norbert College	WI	2006
Lake Forest College	IL	2006
Lycoming College	PA	2006
Fitchburg State University	MA	2006
University of Arkansas - Fort Smith	AR	2007
University of Texas at El Paso	TX	2007
University of Colorado at Colorado Springs	CO	2008
Franklin & Marshall College	PA	2008
State University of New York College at Geneseo	NY	2009
Boise State University	ID	2009
Augusta University	GA	2009
Sacred Heart University	CT	2009
Pace University - New York City	NY	2009
University of Michigan - Flint	MI	2010
Pratt Institute	NY	2010
Indiana University - Purdue University at Indianapolis	IN	2010
University of California - Santa Cruz	CA	2010
University of Virginia at Wise	VA	2011
Fairleigh Dickinson University - Metropolitan	NJ	2011
California State University - Stanislaus	CA	2011
New Jersey Institute of Technology	NJ	2012
University of San Francisco	CA	2012
Brooklyn College	NY	2012
Rogers State University	OK	2012

¹No institutions added Fraternity and Sorority Communities in 2000, 2001, 2004, 2013, 2014, 2015. Source: National Panhellenic Conference

Appendix B
Institutions and Graduation Rate Data

Institution	State	Type	Enroll	Carnegie	Profile	Adm	Setting	GR Before	GR 6 Later	Chg
Plymouth St Univ	NH	Pub	4855	Mstr Lrg	H Und	Incl	Pr Res	45	52	7
The College of NJ	NJ	Pub	7409	Mstr Lrg	VH Und	M Sel	Hi Res	83	85	2
John Carroll Univ	OH	Priv	3688	Mstr Lrg	H Und	M Sel	Hi Res	75	80	5
Cal St Northridge	CA	Pub	40131	Mstr Lrg	VH Und	Incl	Pr NR	32	44	12
Santa Clara Univ	CA	Priv	9015	Mstr Lrg	M Und	M Sel	Hi Res	85	85	0
Quincy Univ	IL	Priv	1279	Mstr Md	VH Und	Sel	Hi Res	46	42	-4
Embry-Riddle Prescott	AZ	Priv	2035	Bacc Div	VH Und	M Sel	Pr Res	61	57	-4
Iowa St Univ	IA	Pub	34435	D Highst	H Und	Sel	Pr Res	66	71	5
Univ ofWyoming	WY	Pub	12820	D Higher	H Und	M Sel	Pr NR	56	54	-2
St Norbert College	WI	Priv	2169	Bacc AS	VH Und	M Sel	Hi Res	72	75	3
Lake Forest College	IL	Priv	1626	Bacc AS	VH Und	M Sel	Hi Res	68	71	3
Lycoming College	PA	Priv	1353	Bacc AS	Ex Und	Sel	Hi Res	67	65	-2
Fitchburg State Univ	MA	Pub	6810	Mstr Lrg	H Und	Sel	Pr Res	52	51	-1
U of Arkansas - Ft Smith	AR	Pub	6830	Bacc Div	Ex Und	Incl	Pr NR	18	23	5
Univ ofTexas - El Paso	TX	Pub	23079	D Higher	H Und	Incl	Pr NR	29	40	11
Univ of Colo - Colo Springs	CO	Pub	11761	Mstr Lrg	H Und	Sel	Pr NR	46	47	1
Franklin & Marshall College	PA	Priv	2209	Bacc AS	Ex Und	M Sel	Hi Res	79	87	8
SUNY Geneseo	NY	Pub	5658	Mstr Sml	VH Und	M Sel	Hi Res	78	82	4
Boise St Univ	ID	Pub	22227	D Mod	VH Und	Sel	Pr NR	26	39	13
Augusta Univ	GA	Pub	7988	D Higher	M Und	Sel	Pr NR	21	30	9
Sacred Heart Univ	CT	Priv	7781	Mstr Lrg	M Und	Sel	Hi Res	66	64	-2
Pace Univ	NY	Priv	12857	D Mod	M Und	Sel	Pr Res	58	53	-5
Univ of Michigan - Flint	MI	Pub	8574	Mstr Lrg	H Und	Sel	Pr NR	39	37	-2
Pratt Institute	NY	Priv	4690	SF Arts	M Und	M Sel	Hi Res	62	70	8
IUPUI - Indianapolis	IN	Pub	30690	D Higher	H Und	Sel	Pr NR	34	46	12
UC Santa Cruz	CA	Pub	17866	D Highst	VH Und	M Sel	Hi Res	74	77	3
Univ ofVirginia - Wise	VA	Pub	2183	Bacc AS	Ex Und	Incl	Pr Res	39	46	7
Fairleigh Dickinson - Metro	NJ	Priv	8777	Mstr Lrg	M Und	Incl	Pr NR	41	39	-2
Cal St Stanislaus	CA	Pub	9045	Mstr Lrg	H Und	Incl	Pr NR	49	53	4
New Jersey Institute ofTech	NJ	Pub	10646	D Higher	M Und	M Sel	Pr NR	54	64	10
Univ of San Francisco	CA	Priv	10689	D Mod	M Und	M Sel	Pr Res	70	77	7
Brooklyn College	NY	Pub	17390	Mstr Lrg	H Und	Sel	Pr NR	48	58	10
Rogers State Univ	OK	Pub	4030	Bacc Div	VH Und	Incl	Pr NR	9	17	8

Sources: Carnegie Classification of Institutions of Higher Education (2019), Chronicle of Higher Education (n.d.), National Center for Education Statistics (n.d.), University System of Georgia (n.d.).

Appendix C

Key to abbreviations used in Appendix B

Type

- Pub - Public Institution
- Priv - Private Institution

Enroll - Enrollment

- Carnegie - Basic Carnegie Classification
- Bacc AS - Baccalaureate Colleges: Arts & Science Focus
- Bacc Div - Baccalaureate Colleges: Diverse Fields
- Mstr Sml - Masters Colleges & Universities: Small Programs
- Mstr Md - Masters Colleges & Universities: Medium Programs
- Mstr Lrg - Masters Colleges & Universities: Larger Programs
- D Mod - Doctoral Universities: Moderate Research Activity
- D Higher - Doctoral Universities: Higher Research Activity
- D Highst - Doctoral Universities: Highest Research Activity
- SF Arts - Special Focus Four-Year: Arts, Music & Design Schools

Profile

- M Und - Majority Undergraduate Population
- H Und - High Undergraduate Population
- VH Und - Very High Undergraduate Population
- Ex Und - Exclusively Undergraduate Population

Adm - Admissions Standards

- Incl - Inclusive Admissions Standards
- Sel - Selective Admissions Standards
- M Sel - More Selective Admissions Standards

Setting

- Pr NR - Primarily Nonresidential
- Pr Res - Primarily Residential
- Hi Res - Highly Residential

- GR Before - Graduation Rate before the addition of a fraternity and sorority community
- GR 6 Later - Graduation Rate 6 years after the addition of a fraternity and sorority community
- Chg - Change in Graduation Rate over time