Goal Attainment, Retention and Peer Mentoring

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Abstract

A holistic peer-mentoring project at a small, urban university was evaluated for its impact upon goal attainment and student retention for 34 freshmen and sophomores who were mentored by 12 juniors and seniors. The analyses utilized goal-progress tracking data, a pre-post survey, mentor journals, and university re-enrollment data. Protégés made significant progress toward achieving self-established goals and had a retention rate exceeding that of non-participants. Findings underscore the value of holistic, relationship-intensive, and goal-oriented peer mentoring for enhancing goal attainment and retention among early undergraduates.

Introduction

Each year, post-secondary educational institutions devote significant sums of money in recruiting new students. Yet, they also continue to face the challenge of serving and retaining many talented students who struggle to make the critical transition from high school to college (Lotkowski, Robbins, & Noeth, 2004; Swail, Redd, & Perna, 2003). Wirt et al. (2004) reported that only 53 percent of students in four-year post-secondary education institutions graduated after five years. Some students who struggle in making the transition to college life belong to demographic populations that have a higher likelihood of feeling or being marginalized because of race/ethnicity, gender, sexual orientation, and/or socioeconomic background (Budge, 2006; Crisp & Cruz, 2009; Dennis, Phinney, & Chuateco, 2005). For example, Wirt et al. (2004) noted that only 17 percent of blacks and 18 percent of Hispanic undergraduates enrolled in four-year colleges graduate within five years. Student retention is strongly influenced by academic factors such as high school GPA and ACT and is also influenced by non-academic factors including socioeconomic status and the development of academic self-confidence, academic goals, and social support and involvement (Lotkowski et al., 2004).

Mentoring serves as a means of enhancing student goal attainment and maintaining and increasing student retention. It does this by fostering academic and social integration and social support for students, including the most vulnerable students. Wallace, Abel and Ropers-Huilman (2000) noted that mentoring can mitigate the barriers to academic involvement and success experienced by students from disadvantaged backgrounds. Many students, because of their social backgrounds, lack direction, resources, or support critical to success in college. Mentoring can provide an ongoing relationship with a supportive person or peer who can more easily assist novice students with maneuvering challenges and opportunities with which many students, due to their inexperience, may be unaccustomed. Research has documented the positive impact of mentoring upon measures of academic goal attainment (e.g., unit completion rates per semester, grade point averages, and graduation rates) and student retention (Campbell & Campbell, 2007; Freeman, 1999; Kahveci, Southerland, & Gilmer, 2006; Mangold,

170

Bean, Adams, Schwab, & Lynch, 2003; Pagan & Edwards-Wilson, 2003; Sorrentino, 2007; Wallace, Abel, & Ropers-Huilman, 2000). In addition, researchers have explored the role of a number of environmental social support variables that represent intermediate factors, influenced by mentoring, that ultimately affect goal attainment and student retention. Such factors include sense of peer support, encouragement of friends and family, social growth and social integration (e.g., Dennis et al. 2005; Strauss & Volkwein, 2004; Thomas, 2000).

Nora and Crisp (2007-2008) proposed a valuable conceptual framework of four domains that they believed formed the multidimensional foundation of any effective mentoring experience for college undergraduates. In testing this framework among 200 students attending a two-year institution, they found three constructs to be statistically reliable as elements of the mentoring experience: 1) psychological/emotional support; 2) goal setting or career pathing; and 3) academic subject knowledge support. They concluded that mentoring programs intending to help students make the transition to college life and to fully participate in the classroom experience as well as extracurricular pursuits need to intentionally provide the holistic support encompassed by these three significant dimensions (Nora & Crisp, 2007-2008).

The purpose of this article is to sensitize faculty to the value of holistic peer-mentoring in assisting undergraduates with negotiating the critical transition from the high school to the college experience. We present results from a peer-mentoring study used to evaluate the project's impact on student goal attainment and student retention. We then discuss these results in the light of current research on mentoring, underscoring the value that such a project potentially has for enhancing the integration of early undergraduates into an institution's academic and campus experience.

Project Description
After reviewing university data and engaging in conversation with university administrators involved in student retention, we realized that among first-time, full-time, baccalaureate degree-seeking freshmen beginning in the years 2000-2003, only 34 percent of white students, 20 percent of Hispanics, and 9 percent of blacks were graduating within four years of enrollment (Saint Xavier University, 2008). In particular, we learned that black females had a retention rate of 52 percent over the 2007-2008 fall-to-fall semester enrollment periods. The rationale for the mentoring project was to foster a community of intense, nurturing relationships between peer mentors (junior and seniors) and protégés (freshman and sophomores) that could potentially, and flexibly, address and support early undergraduate goal attainment with respect to academic, career, social and personal well-being needs, thereby promoting student retention. Based on project design, the study called for 12 mentors and 35 protégés.

Mentor Recruitment. Recruitment of mentors involved a mass emailing to all juniors and seniors with a GPA of at least 2.5. In addition, recruitment posters were strategically placed throughout the university. Mentor selection criteria included the following: having a class standing of junior or senior; having a GPA of at least 2.5; having good interpersonal skills; and having a sincere interest in fostering the development of three freshman or sophomore students. Of the 60 students who applied, 45 were interviewed and 12 were selected.

Protégé Recruitment. Recruitment of the convenience sample of protégés entailed the following strategies: an emailing about the project to all freshmen and sophomores who were currently on academic probation; an emailing to freshmen who had received a mid-term grade of less than C in at least one course during the fall 2008 semester; an emailing to university faculty inviting them to encourage students who they felt could benefit from peer-mentoring services to apply to the project; and recruitment posters strategically placed throughout the university

inviting all interested freshmen and sophomores to apply. Out of 821 freshmen and 560 sophomores in the university, 45 applied, and 31 freshmen and three sophomores eventually completed the enrollment process.

Orientation, Group Assignments and the Core Relationship. During the initial phase of the project, protégés and mentors were invited to a two-hour orientation meeting at which participants learned about common interests while they became acquainted with one another through specific social networking activities. Every mentor was able to network with with each of the protégés. Afterward, protégés were asked to list in order of preference, by secret ballot, five mentors with whom they most preferred to work; similarly, mentors were asked to list their preferences for protégés. Based upon these preferences, mentoring group assignments were made. In order to ensure that a quality relationship occurred between mentors and protégés, a 1-to-3 mentor/protégé ratio was maintained.

Participants engaged in a goal-setting and goal-monitoring activity that served as the primary instrumental task of the mentoring relationship. Mentors and protégés collaboratively developed unique goal plans for each protégé to enact during the project period. Mentors and protégés met weekly for approximately 90 minutes to discuss and revise strategies, monitor goal attainment progress, and address the individual protégé's strengths, weaknesses and unique developmental needs. Mentors encouraged and supported protégés in their pursuit of academic, career-directional, social connectedness and/or personal well-being goals for growth, depending upon the individual protégé's needs. Examples of academic goals included earning a "B" in a biochemistry class, studying at least 15 hours per week, studying in the library versus more distracting locations, etc. Career-directional goals included reassessing whether one had chosen the right major or career direction, or gaining more grounded knowledge about one's career objective. Social connectedness goals included actively planning to establish a more healthy relationship with an intimate. Examples of personal well-being goals included creating a balance between schoolwork, employment, and social activities, practicing healthy eating habits, etc. Finally, mentors assisted protégés with identifying and accessing on-campus resources valuable to supporting protégé goal attainment. This relationship, typically personal and mutual in nature, constituted the core of the peer-mentoring intervention.

Method
This 14-week project was implemented in spring 2009. The study's sample was drawn from undergraduates at a small, private university with a fall 2008 enrollment of 821 freshmen and 560 sophomores. The sample consisted of 34 protégés—30 freshmen (88 percent), 3 sophomores (9 percent), and one junior (3 percent)—who were mentored by 12 juniors and seniors in good academic standing. The demographic makeup of the mentored sample consisted of 23 (68 percent) women and 11 (32 percent) men. In racial/ethnic terms, 21 (62 percent) were black, 9 (26 percent) were white, and 4 (12 percent) were "other." Twenty-seven (79 percent) said that they had been encouraged by a faculty member to apply, 8 (24 percent) had received at least one mid-term grade of less than C, and 4 (13 percent) were on academic probation. Comparatively within the university at large, a total of 162 freshmen (20 percent) had received a mid-term grade of less than C, whereas 61 freshmen (11 percent) and 29 sophomores (5 percent) were on academic probation. The mean ACT score for the 30 freshman participants (21.3) was below the mean ACT for all non-participating freshmen at the university (21.9). Also, the mean fall 2008 GPA for 12 black female freshmen participating in the project (2.25) was lower than the mean fall 2008 GPA for the 72 non-participating black female freshmen at the university (2.47).

Instrumentation and Data Collection
The Progress Tracking Form was completed by mentors to record the progress of each protégé toward goal attainment during the fourth, eighth, and twelfth weeks of the project period. The tracking form collected data in the following categories: type of goal established, goal progress, and goal issues. Multiple tracking forms for each protégé over time were summarized in a final single score for goal attainment for each protégé during the project period that was based on the

172

following scale: 0 = goal(s) not established or no progress, 1 = some progress, 2 = significant progress, 3 = goal(s) met. Protégés were allowed to select (in consultation with their mentor) goals in whatever general area(s) they deemed most important to their growth and success. Some participants established more than one goal during the project period.

Participants also completed a researcher-created pre-post survey that asked about approaches to academic attainment, self-efficacy, and social connectedness. The items on this instrument as well as on the progress tracking form were developed in conjunction with conversations with experts and a review of the literature. Psychometric testing will be conducted using additional data from year two. In particular, one item asked participants to indicate their subjective assessment of the likelihood of establishing, pursuing and attaining academic goals. In addition, once per week, mentors recorded reflective notes in a journal that they maintained during the project period. The journal notes captured mentors' weekly experiences and impressions regarding the relationships they were creating with protégés. Most importantly, mentors documented the growth, progress, struggles, and goal attainment of their protégés over the project period.

Results
The purpose of this investigation was to understand if students participating in a holistic mentoring project would experience substantial progress respective to attainment of self-established academic, career-directional, social connectedness and/or personal well being goals. We also wanted to identify if the fall-to-fall retention rate of students would exceed that of students who did not participate in the peer-mentoring project. The following results are based on the data collected from the 34 protégés and 12 mentors over a 14-week project period.

The mean rating by mentors of their protégés' goal attainment (M = 2.0, SD = 0.85) was compared against a hypothesized mean of 1.0 using a one-sample t-test. The difference was statistically significant, t(33) = 6.84, p < .001, indicating that the typical protégé made significant progress during the project period toward achieving their self-established goal(s). A mean goal attainment score of 1.0 (indicating slight progress toward the attainment of a goal) might be expected for a protégé by virtue of mere participation in a peer-mentoring project. However, the mean score for participants was significantly higher, revealing that mentors assessed the typical protégé to have reached a significant landmark in their progress toward a self-defined goal, even though that goal may not have been fully met by the end of the project period. To test the hypothesis that the intervention had an effect on protégé attitudes toward goal attainment, results from a paired t-test indicated that protégés' mean post-test attitudinal scores about their future likelihood of establishing, pursuing and attaining academic goals (M = 3.53, SD = 1.1) were significantly higher than their pre-test scores (M = 3.09, SD = 1.2), t(33) = 2.30, p = .03, r = .59.

Finally, regarding retention during the project period, of the 35 protégés that completed the initial project enrollment requirements, 34 finished the program, resulting in a 97 percent project retention rate. The one student who left the project, and who was also on academic probation, had recently become involved in other extracurricular activities and said that the project was too much of a commitment. Furthermore, the fall-to-fall retention rate of freshmen who participated in the project was 93 percent, as compared with an 81 percent retention rate for all other freshmen at the university. The 19 participating black freshmen had a similar retention rate of 89 percent versus a rate of 73 percent for the 132 non-participating black freshmen at the university.

173

Discussion

Quantitative results suggest that overall goal progress among protégés in this peer-mentoring project was clearly positive, especially in light of the follow-up qualitative data discussed below. This finding resonates with the wider body of findings from other studies that point to the success of mentoring in enhancing various measures of goal attainment (e.g., Campbell & Campbell, 2007; Mangold et al., 2003; Sorrentino, 2007). In addition, a number of themes emerged from our generalizations about the journal accounts of the mentors. All twelve mentors noted significant response by, and growth in, their protégés over the project period within areas that included the following (numbers in parentheses refer to the number of protégés): time management and being organized (13); study habits (13); career change or development (7); becoming more responsible and handling lingering personal business the student had been avoiding (4); surviving extremely difficult life situations while remaining in school (4); overcoming extreme shyness or anti-social patterns through regular interaction with caring others, thereby becoming more comfortable and confident with meeting people and making new friends (4); feeling supported and part of a family on campus (4); proactively communicating with professors (4); exercising regularly (3); improving diet (3); and becoming more motivated to succeed (3). These results have been incorporated into year two of the project; current mentors have more insight into the specific needs of protégés. An outstanding and recurring theme across many journals was the depth of sensitivity and insight, active intelligence, discernment, artfulness and compassion demonstrated by mentors in their efforts to inspire, encourage, challenge, understand and serve their protégés.

Results from pre-post analyses provide additional support for the aforementioned primary finding of substantial protégé progress toward goal attainment during the project period. By the end of the project, protégés reported that they were significantly more likely to establish, pursue and attain academic goals than they had been at the beginning of the project. Pajares (1996) found that belief in one's academic efficacy directly shapes the amount of energy a person expends toward an academic goal and the length of time and level of resilience with which they will endure in the face of challenges to their academic success. Finally, the high rate of fall-to-fall retention among all students mentored in the project (91 percent) and among freshmen in particular (93 percent) may be a reflection of protégés' satisfaction, bonding and growth in the relationships developed with their peer mentors over time. We believed that nurturing relationships would enhance the confidence and growth of students. A number of researchers have documented the significant influence of supportive relationships (i.e., help, guidance, or emotional support) upon the academic and general psychological adjustment of college students, especially the influence of peer support (Rodriguez, Mira, Myers, Morris, & Cardoza, 2003) and the characteristics of students' peer groups (Astin, 1993). Other scholars have found evidence that the lack of peer and social support negatively predicted subsequent college adjustment and GPA (Dennis et al., 2005; Phinney & Haas, 2003). Such findings underscore the value of programs offering peer support, peer mentoring or other activities that provide students with the vital psychological support from peers often needed to cope with the demands of transitioning to college life.

Limitations and Implications

This study was limited to one semester of an academic school year. From a quantitative standpoint, the small sample size limits the statistical power and generalizability of the

174

quantitative results. Conversely, this was expected, and the results are promising, and with program growth and larger sample sizes, further analyses will be conducted with future sets of data, including psychometric validation of instruments. Because this project has university support for an additional year, we plan to address in more detail the potential of the project to enhance the academic and personal self-efficacy of protégés.

Conclusion

The literature on mentoring and peer mentoring of undergraduates suggests that factors supportive of academic confidence, career direction, social connectedness to others, and student well-being have an impact on academic goal attainment and student retention (e.g., Cramer & Prentice-Dunn, 2007; Mangold et al., 2003; Pagan & Edwards-Wilson, 2003; Sorrentino, 2007; Wallace, et al., 2000). In addition, the most effective mentoring programs appear to be those that are holistic in nature, simultaneously providing psychological or emotional support, goal setting and career path development, and academic subject knowledge support (Nora & Crisp, 2007-2008). The findings of the present study provide additional support for these conclusions. It is important to note that the collaborative and supportive relationships established between mentors and protégés during the project served as a powerful intervention that embodied a sense of belonging. We believe this supportive mentoring relationship also fostered goal attainment and student retention. Many institutions of higher education struggle to effectively serve and retain undergraduates and must find innovative ways to proactively integrate students into the academic and campus environment. One way of fostering such integration is through the academically-oriented, skills-oriented, and hospitality-centered relationship that a personal bond with a successful and caring, more experienced peer may provide.

References

Astin, A. W. (1993). What matters in college: Four critical years revisited. San Francisco: Jossey-Bass.

Budge, S. (2006). Peer mentoring in postsecondary education: implications for research and practice. Journal of College Reading and Learning, 37(1), 71-85.

Campbell, T. A., & Campbell, D. E. (2007). Outcomes of mentoring at-risk college students: Gender and ethnic matching effects. Mentoring & Tutoring, 15(2), 135-148.

Cramer, R. J., & Prentice-Dunn, S. (2007). Caring for the whole person: guidelines for advancing undergraduate mentorship. College Student Journal, Dec2007 Part A, 41(4), 755-770.

Crisp, G., & Cruz, I. (2009). Mentoring college students: a critical review of the literature between 1990 and 2007. Research in Higher Education. doi: 10.1007/s11162-009-9130-2

Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. Journal of College Student Development, 6(3), 223-236.

Freeman, K. (1999). No services needed? The case for mentoring high-achieving African American students. Peabody Journal of Education, 74(2), 15-26.

Kahveci, A., Southerland, S. A., & Gilmer, P. J. (2006). Retaining undergraduate women in science, mathematics, and engineering. Journal of College Science Teaching, 36(3), 34-38.

Lotkowski, V. A., Robbins, S. B., & Noeth, R. J. (2004). The role of academic and non-academic factors in improving college retention: ACT policy report. ACT Office of Policy Research. Iowa City, IA: ACT.

Mangold, W. D., Bean, L. G., Adams, D. J., Schwab, W. A., & Lynch, S. M. (2003). Who goes who stays: An assessment of the effect of a freshman mentoring and unit registration program on college persistence. Journal of College Student Retention, 42(2), 95-122.

Nora, A., & Crisp, G. (2007-2008). Mentoring students: conceptualizing and validating the multi-dimensions of a support system. Journal of College Student Retention, 9(3): 337-356.

Pagan, R., & Edwards-Wilson, R. (2003). A mentoring program for remedial students. Journal of College Student Retention, 4(3), 207-225.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. Review of Educational Research, 66(4), 543-578.

Phinney, J., & Haas, K. (2003). The process of coping among minority and immigrant first-generation college freshmen: A narrative approach. Journal of Social Psychology, 143(6), 707-726.

Rodriguez, N., Mira, C. B., Myers, H. F., Morris, J. K., & Cardoza, D. (2003). Family or friends: Who plays a greater supportive role for Latino college students? Cultural Diversity and Ethnic Minority Psychology, 9(3), 236-250.

Saint Xavier University (2008). SXU retention and graduation rates: Report on data for first-year cohorts beginning years 2000-2003. SXU Office of Research, Planning and Assessment, Saint Xavier University, Chicago, IL. Retrieved from Datatel Colleague on Sept. 10, 2008.

Sorrentino, D. M. (2007). The SEEK mentoring program: an application of the goal-setting theory. Journal of College Student Retention, 8(2), 241-250.

Strauss, L. C., & Volkwein, J. F. (2004). Predictors of student commitment at two-year and four-year institutions. The Journal of Higher Education, 75(2), 203-227.

Swail, W. S., Redd, K., & Perna, L. W. (2003). Retaining minority students in higher education: A framework for success. ASHE-ERIC Higher Education Report, 30(2).

Thomas, S. L. (2000). Ties that bind: a social network approach to understanding student integration and persistence. The Journal of Higher Education, 71(5), 591-615.

Wallace, D., Abel, R., & Ropers-Huilman, B. R. (2000). Clearing a path for success: deconstructing borders through undergraduate mentoring. The Review of Higher Education, 24(1), 87-102.

Wirt, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., & Tobin, R. (2004). The condition of education 2004 (NCES 2004-077). U.S. Department of Education, National Center for Educational Statistics. Washington, DC: U.S. Government Printing Office.