Does Our Peer Mentoring Program Help? Effects on Probation Students' Academic Possible Selves, GPA, and Retention

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This investigation includes an initial, quasi-experimental mixed methods study in to the effects of peer mentoring for at-risk, first year probationary students. Two treatment groups (weekly and bi-weekly peer mentoring) and no peer mentoring group were compared to measure group differences. No positive impacts on students' GPA or retention from peer mentoring were found. One treatment group had significantly lower Persistent Academic Possible Selves. Qualitative data from the peer mentors was analyzed to provide context. A replication study with a refined treatment grouping, again did not demonstrate that the peer mentoring program had a statistically significant impact on student retention.

Keywords: academic probation students, peer mentoring, Academic Possible Selves, retention, GPA, first-year

INTRODUCTION

Peer mentoring in our college settings is such common practice that it demands rich investigation. To address this need, this paper has two aspects. The first seeks to contextualize the rise and intent of peer mentoring programs, while also offering a narrative on one program's journey. The second part questions if the practice necessitates evaluation, if it has been properly evaluated, and then uses three studies that build upon themselves to demonstrate if peer mentoring is effective for at-risk probationary students.

Arguably, the national dialogue on higher education is often dominated by the set of common concerns: the rising cost of a college education (value proposition: Brown, 2018), improving the success outcomes for historically under-represented groups (retention: Field, 2018), and creating inclusive, safe environments on college campuses (justice: see Booker & Campbell-Whatley, 2018). For many institutions, peer mentors (also called peer instructors, peer facilitators, and literally dozens of other titles often incorporating campus specific information like mascot names) are a common answer to the value proposition, retention, justice intersect. By definition peer mentoring is a relationship in which two similarly aged students come together with the intent to provide career-related or psychosocial help (Terrion & Leonard, 2007).

Peer mentorship programs are relatively easy tools for institutions to craft and deploy. With thousands of students on campus, programs have a readily available hiring pool, a pool that is inexpensive compared to recruiting professionals. Peer mentors, particularly undergraduates, often do not require the overhead costs of benefits packages. Decades of academic success research emphasizes the importance of social integration for college success, especially for traditionally under-represented groups (Astin, 1993; Tinto, 1993). By their very nature, peer mentors as *peers* present a simple and logical solution to the integration/inclusivity challenge. When taking into consideration the ease of developing peer programs and the inexpensiveness of staffing them, peer mentoring programs are a convenient way for institutions to build-in and project value to stake-holders.

The breadth of application of peer mentorship programs appear to be spreading. Where peers may have once been relegated to student government, Greek life, or tutoring centers, they are now in every corner of a university. Peer mentors now find themselves working for inclusions efforts, advancing health and wellness (even mental health: Kirsch et al., 2014), academic support, supporting at-risk students, in addition to dozens of other campaigns reflecting an institution's particular priorities, and are a common intervention to retain first-year students (Casey, 2013; Habley, Valiga, McClanahan, & Burkum, 2010; Lane, 2018).

Studies on peer mentoring programs for at-risk students can suggest this proliferation carries some modest benefit. For instance, peer mentoring for at-risk students has shown to significantly increase of GPA from the previous semester (Pagan & Edwards-Wilson, 2003), and to increase social integration and positive connections to the university (Yomtov, Plunkett, Efrat, & Marin, 2017). Contrarily, it could be argued that peer mentoring programs are in truth, understudied. Lane (2018) reviewed literature for peer mentoring and found that generally the existing literature absent of longitudinal design, theoretical grounding, and studies having reliability and validity issues. Given the growth in peer mentorship, not to mention the proliferation of types of peer mentoring programs, it may be the case that higher education does not fully understand the impact of peer mentorship. Put simply, higher education should likely more closely scrutinize one of its favorite tools. A simple question that educational professionals likely need to ask more often: "What if our peer mentoring program doesn't work?"

OBJECTIVES

For nearly a decade, the peer mentoring program under study here was a flagship component to a campus effort supporting academically at-risk, first-year students for success and retention. The objective of the investigation was to determine if the delivery of program was helping retain at-risk students, the underlying purpose of peer mentoring initiative. The initial intended outcomes were to determine which dosage was most impactful on probationary first-year, at-risk students' academic possible selves, GPA, and retention. These findings helped shape a modified replication study with new participants to determine if the program's effects on retention.

We sought to answer the following research questions:

RQ 1: *Which peer mentoring treatment will increase probationary students' future academic possible selves (FOM and FOSRL)?*

RQ 2: *Which peer mentoring treatment will increase probationary students' GPA?*

RQ 3: *Which peer mentoring treatment leads to higher retention to the next semester and two semesters following?*

RQ 4: *What are the peer mentor's thoughts on the impact of the treatment?*

THEORETICAL FRAMEWORK

Tinto (1993) theorized that student dismissal due to academic failure is a result of the of student's inability and/or unwillingness to meet college demands. Nearly half of all students will not graduate in four-years (Institute of Education Sciences, 2018), and one college found that only 5% of students graduated after academic probation within four years (Mathies, Gardner, & Webber Bauer, 2006). First year GPA is a significant predictor of graduation (Titus, 2004), and students on academic probation are at-risk of leaving the university before graduating voluntarily or due to continued academic struggles (Espinoza & Genna, 2018). Renzulli (2015) found that students on academic probation were not academically prepared for the rigors of higher education and lacked goal-setting skills and time management. Tinto's theory also holds that that a lack of integrative peer-group interactions contributes to ineffective social integration, and students with low social integration lose institutional commitment. The incongruence of institutional and personal goals effectively leads to a student leaving the university. Motivational attitudes, a sense of belonging, and peer support are significant predictors to second year persistence (Morrow & Ackermann, 2012). Institutional retention initiatives such as peer mentoring seek to address known at-risk factors and theorized deficiencies.

Academic Possible Selves and the PAPSS

Students on academic probation are in need of goal setting with a focus on future academic performance after recently experiencing academic setback. The academic domain of possible selves theory focuses on the individual's aspiration to become a positive envisioned self, based on current self-concepts, and to avoid becoming an unwanted possible self. Underperforming college students have more superficial goals, compared to high achieving students that have more philanthropic goals (Beattie, Laliberte, & Oreopoulos, 2018). Lee and Blankenship (2019) found that at-risk students' future oriented factors, including Future Oriented Motivations (FOM: development of and commitment toward academic goals) and Future Orientated Self-Regulated Learning (FOSRL: the use of self-regulated strategies to achieve academic goals), are an understudied area of higher education.

Lee and colleagues have developed and validated the Persistent Academic Possible Selves Scale (PAPSS: Lee, 2013; Lee, Husman, Green, & Brem, 2016). The scale is theoretically founded in academic possible selves, identity based motivation, and self-regulated learning and combines FOM and FOSRL to measure the persistent academic possible goals of adolescents. Recently Lee and Blankenship (2019) conducted a CFA using the PAPSS for at-risk probationary students, and validated the measure for at-risk student's FOM and FOSRL in academic settings.

METHODS

Procedures and Measures

The initial quasi-experimental mixed methods investigation, comprised of two studies, was an investigation of dosage and effect and considering data in three ways. The first study utilized the PAPSS seeking any differences in student's FOM and FOSRL between the peer mentoring treatments using a one way between subjects ANOVA and post hoc analyses. The next study gathered GPA data the semester following the treatment, and retention data for the next two semesters. The data was analyzed through OLS and logistical regressions to find differences between the treatment groups. Additionally, qualitative data gathered from the peer mentors was inductively coded to categorize the experience as either positive or negative for the student experience to contextualize the treatment mentoring experiences.

Participants

Participants were first-year students, from a large southwestern university, who had cumulative GPA of 2.0 or below after their first semester. They were recruited from a required course for probationary students. Students were automatically enrolled by the registrar in a section of the course that best fit their schedule. We used this course enrollment process to determine the level of peer mentoring for our

treatment groups. The study design included three treatment groups. First, regular weekly peer mentoring model, where students would meet with a mentor for 30 minutes every week for eight weeks, for a total of eight meetings. The second group received bi-weekly peer mentoring. This group of students would meet every other week for 30 minutes throughout eight weeks, for a total of four meetings. The third treatment group of students received no peer mentoring, and served as a comparison group. We followed the participant's GPA for one semester and retention for a year after the treatment.

Peer mentors were recruited from the university's student population. Barring rare exceptions, all recruits were academically successful holding a 3.0 minimum cumulative GPA. Moreover, the recruitment mechanism put particular emphasis on recruiting diverse candidates. Recruits completed a written application process, a group interview with faculty and staff, and an individual interview, often completed by a current peer mentor and faculty member, as part of the selection process. Candidates with strong interpersonal and problem-solving skills, knowledge of campus resources, empathy, formative life experiences, and demonstrated success both academically and socially in the university were desired.

Upon their selection, peer recruits were invited to a community building event. In this space, peers were ceremoniously welcomed into the community by current peers, motivational addresses were offered, a meal was served, and new recruits had opportunities to dialogue with current peer mentors. This community building event emphasized the important role peer mentors would be playing in supporting academic success and access. For many in the group, this was a moving and meaningful experiences.

Recruits then entered a credit-bearing semester long training course. The curriculum of the training course intended to develop effective and supportive peer mentoring practices. Holt & Fifer, (2018) posited that supportive at-risk peer mentors should assist students in all areas of college transition, serve as a role model, and foster development of student autonomy. The course was taught by a senior faculty member in the department with regular guest presentations/workshops lead by department faculty, staff, and campus partners. Anywhere from six to 10 current peer mentors served as teaching assistants. The training course was perceived by many students to be relatively rigorous. The training curriculum included instruction on building classroom credibility, student development theories, active listening skills, conversational techniques (open-ended questions, affirmations, reflections, and summarizing), campus resources, suicide prevention training, and self-care. The course also required recruits to participate in at least 10 hours of applied peer mentor practice, often while being observed by department faculty, staff, and current peer mentors on the incorporation of mentoring skill. At the conclusion of the training course, only recruits earning As or Bs were selected to move forward. Some recruits earning As or Bs whom demonstrated concerning lack of skill or commitment, were sometimes not selected to move forward.

Once hired, peer mentors entered a fairly complex system of on-going supervision and professional development. Peer mentors were assigned a staff supervisor who would hold three to four (or more as needed) personal development and supervision meetings throughout the semester. These meetings could be wide ranging, with the dominant intent on providing individualized professional development for peer mentor success. Peer mentors also met once a week with assigned faculty and another peer mentor. In these spaces, peer mentors would review lessons with faculty, discuss particular student concerns, and also focus on professional development. Additionally, peer mentors also met for a "Monday Night Training" session each week. These trainings refreshed mentorship skills, hosted guest speakers, normalized challenges, and built community.

Peer mentors were paid hourly for all of the aforementioned duties. After each year of service as a peer mentor, peers received a raise. Peer mentors in leadership roles could earn even more. Given the student success orientation of the program, peer mentors were assigned to only course sections that best fit their semester schedule. Faculty and staff maintained the focus on peer mentor success throughout the year.

During the treatment, peer mentors worked with between seven and 12 probationary students. Mentoring sessions covered common topics for the needs of first-year at-risk probationary students, such as time management, motivation, goal setting, and navigating students to resources on campus for individual needs.

During the Spring of 2017, two studies were recruiting from the same population receiving the probation intervention, and approval from the IRB allowed for both studies to be combined for the purpose of this investigation. The first study recruited 194 participants, comprised of male (47.4%) and female (52.1%), and those who wished not to report their gender (.5%). Participants reported their ethnicity as White, non-Hispanic (47.4%), Hispanic (22.2%), African-American (10.8%), Asian or Pacific-Islander (5.7%), Native American (4.1%), or another ethnicity (8.2%), and those who wished not to report their ethnicity (1%). This student group completed the PAPSS at the conclusion of the probation course treatment.

The second study student group recruited 130 participants, of which were male (52.3%) and female (47.7%). Participants ethnicity were White (50.8%), Hispanic (26.2%), African-American (1.5%), Asian or Pacific-Islander (3%), Native American (7%), or another ethnicity (5.4%), and those who wished not to report their ethnicity (2%). This student group gave Family Educational Rights Protection Act (FERPA) consent for the collection of their academic records. Academic transcript information was used for GPA and retention analysis.

Finally, peer mentors were recruited to complete an open-ended survey at the conclusion of the eight weeks. Twenty-nine peer mentors completed the open-response prompt, "Given the frequency of the appointments with your students, offer a brief reflection of your experience". Responses were used to contextualize the mentoring experience for both student and mentee.

RESULTS

A one-way between subjects ANOVA was conducted to compare the peer mentoring effect on the PAPSS results across each of three conditions; the no peer mentoring comparison group (n =49), bi-weekly peer mentoring (n=46) and weekly peer mentoring treatment groups (n=99). There was a significant effect of mentoring on PAPSS for the three groups [$F(2,191) = 3.77$, $p = .025$]. Post hoc comparisons using Tukey's HSD indicated that mean scores for bi-weekly peer mentoring (M = 5.85, SD = .73) was significantly differed from no peer mentoring treatment group (M = 6.25, SD = .54); see Table 1). These results suggest that peer mentoring bi-weekly had a negative effect on students' end of the treatment PAPSS compared to no peer mentoring group, and peer mentoring generally lowered the persistent possible academic selves of the probationary students.

TABLE 1
ANOVA COMPARISONS OF PEER MENTORING GROUPS

				Tukey's HDS Comparisons		
Group	n	Mean	*SD*	Weekly Peer Mentoring	Bi-Weekly Peer Mentoring	No Peer Mentoring
Weekly Peer Mentoring	99	5.97	.80		.639	.081
Bi-Weekly Peer Mentoring	46	5.85	.73	.639		.025*
No Peer Mentoring	49	6.25	.54	.081	.025*	

*statistically significant

For the second study (N=130), an entropy balancing matching method was used to control for the following confounding factors: total enrolled hours, first semester GPA, gender, residency, first generation, low income, and student of color. Entropy balancing is a pre-processing reweighting scheme that builds covariate balance directly into the statistical process, allowing for all observations to be retained in the model and increases the degrees of freedom to incorporate more control variables and superior covariate balance between comparison groups (Hainmueller, 2012). After balancing the samples, ordinary least squares regressions were used to identify differences in students' end of term GPA. Logistic regressions were then conducted to identify the association between mentoring and retention for one semester and the following semester.

Findings from the regression analysis were significant and indicated students who had peer mentoring (weekly and bi-weekly) had a .35 lower end of term GPA than students who had no mentoring (2.08 v 2.43, p = .05; see Table 2). Students who had weekly mentoring had a 0.45 lower end of term GPA than students who had no mentoring at a statistically significant level (2.02 v 2.47, p = .03; see Table 3). Students who had bi-weekly mentoring had a 0.23 lower end of term GPA than students who had no mentoring, but this result was not statistically significant (2.18 v 2.41, p = .29; see Table 4). All logistic regressions found a negative but not statistically significant association between mentoring and retention to the Fall 2017 semester and Spring 2018 semester.

TABLE 2
ORDINARY LEAST SQUARES REGRESSION AND LOGISTIC REGRESSION CONTROLLING FOR CONFOUNDING FACTORS: MENTORING VS. NO MENTORING

	Full and Bi-Weekly Mentoring (n=95)	No Mentoring (n=35)	Difference	Odds Ratio	*p*
End of Term GPA	2.08	2.43	-.35		.05*
Retention to Fall '17	41.1%	52.9%	-11.8%	.62	.30
Retention to Spring '18	32.6%	48.1%	-15.5	.52	.17

*statistically significant

TABLE 3
ORDINARY LEAST SQUARES REGRESSION AND LOGISTIC REGRESSION CONTROLLING FOR CONFOUNDING FACTORS: WEEKLY MENTORING VS. NO MENTORING

	Full Mentoring (n=62)	No Mentoring (n=35)	Difference	Odds Ratio	*p*
End of Term GPA	2.02	2.47	-.45		.03*
Retention to Fall '17	40.3%	54.9%	-14.6%	.56	.27
Retention to Spring '18	32.3%	49.6%	-17.3%	.48	.18

*statistically significant

TABLE 4
ORDINARY LEAST SQUARES REGRESSION AND LOGISTIC REGRESSION CONTROLLING FOR CONFOUNDING FACTORS: WEEKLY BI-MENTORING VS. NO MENTORING

	Bi-Weekly Mentoring (n=33)	No Mentoring (n=35)	Difference	Odds Ratio	*p*
End of Term GPA	2.18	2.41	-.23		.29
Retention to Fall '17	42.4%	50.1%	-7.7%	.74	.54
Retention to Spring '18	33.3%	48.3%	-15%	.54	.22

Peer mentors were asked to provide their feedback of the mentoring experience. An open-ended prompt was distributed electronically, and 29 peer mentors provided responses. Most responses were two sentences to a paragraph long. A two-step process was used to code the responses. First, all responses were inductively coded separately by two of the authors as weekly or bi-weekly. Eleven peer mentors provided bi-weekly mentoring, Responses were then inductively coded as a "positive experience for students" or "negative experience for students". After coding, findings were compared with 100% agreement. All responses from the bi-weekly peer mentors felt that model was negative for the students, and no response provided a positive impact of the bi-weekly model. For example, one peer mentor wrote: "[Bi-weekly mentoring] was very detrimental I believe to the coaching experience on both ends. It was more difficult for me to build rapport with my students, it was far more confusing for my students (especially with snow interruptions and spring break)". The only reoccurring positive response expressed by the bi-weekly peer mentors was that it was less stressful for the mentors' own schedule and time management to meet once every other week. Weekly peer mentors overwhelmingly had positive responses for the weekly model, and they felt they made a positive impact with their students.

Replication Study

In the spring of 2018, the study team revised the study design and aimed recruit more participants. This study compared only weekly peer mentoring treatment to no peer mentoring treatment, stemming from the previous findings. The peer mentors included many experienced mentors and new recruits with one semester experience. The research question was "Does weekly peer mentoring increase probationary student's GPA and retention?" There was an increase in probationary student participants (n=315). The weekly peer mentoring group included 219 students, and 96 students were in the no peer mentoring comparison group.

The participant sample included 154 (48.9%) male and 161 (51.1%) female students. The ethnicities within the sample included 156 White (49.5%), 90 Hispanic/Latino (28.6%), 16 Black/African American (5.1%), 11 American Indian/Alaska Native (3.6%), 30 identified of two or more ethnicities (9.5%), 4 were international students (1.3%). Of the participants, 150 were state residents (47.6%), 156 were first generation college students (49.5%), and 139 were Pell eligible students (44.1%).

OLS regressions were again used to determine GPA difference between the peer mentoring and no peer mentoring groups, after entropy balancing preprocessing and controlling for total enrolled hours, first semester GPA, gender, residency, first generation, low income, and student of color. Then, a logistic regression was conducted using peer mentoring as a predictor for retention after one and two semesters.

Findings from Spring 2018 regression analysis indicated students received peer mentoring had a non-significant .07 higher end of term GPA than students who had no mentoring (2.09 v 2.02, $p = .53$; see Table 5). The logistic regressions found a positive but not statistically significant association between peer mentoring and retention to the Fall 2018 semester compared to no peer mentoring. The analysis also found a negative but not statistically significant association between peer mentoring and Spring 2019 semester retention.

TABLE 5
ORDINARY LEAST SQUARES REGRESSION AND LOGISTIC REGRESSION CONTROLLING FOR CONFOUNDING FACTORS: WEEKLY MENTORING VS. NO MENTORING SPRING 2018

	Weekly Mentoring (n=219)	No Mentoring (n=96)	Difference	Odds Ratio	*p*
End of Term GPA	2.09	2.02	+.07		.53
Retention to Fall '18	52.5%	49.0%	+3.5%	1.15	.57
Retention to Spring '19	39.3%	40.6%	-1.3%	1.06	.83

DISCUSSION

The results for the Spring 2017 study indicate that peer mentoring in any model did not have a positive impact on GPA or retention data. This was a surprise, as we suspected that goal setting and motivational topics would be discussed during peer mentoring sessions and that peer mentoring meeting would increase social integration. Other peer mentoring efforts have demonstrated positive outcomes with students not specifically at-risk (e.g., Collins, Swanson, & Watkins, 2014), our results were unexpected. The bi-weekly model had significantly lower score on the PAPSS than no peer mentoring group, indicating that bi-weekly peer mentoring may negatively affect students FOM and FOSRL to achieve future academic goals. Additionally, peer mentors found that the bi-weekly mentoring model was deleterious for student relationships. This is in line with previous research where feelings of mentee support and more frequent peer mentor contacts are related (Holt & Fifer, 2018). The peer mentoring dosages in this study may have had a negative impact on students' retention and GPA. These findings contribute to the theory development of peer mentoring for probationary freshmen. We think that infrequent meetings (bi-weekly model) may have negatively affected probationary students' time-management.

The study was replicated a year later with more students, focusing on the weekly peer mentoring treatment compared to students not receiving peer mentoring. Results from the confirmatory study did not reveal significant differences in GPA between the two groups. Retention after one semester was higher for those receiving peer mentoring, but then lower a year after treatment. There was not a significant difference between the two group and for a second round, our targeted peer mentoring efforts did not help retain at-risk probationary students.

For those students not receiving peer mentoring a notable phenomenon emerged. While this group did not receive peer mentoring, we do assume that this group, by default, spent more time building rapport with faculty, asking faculty questions, and seeking out faculty for support. Faculty anecdotally often reported having a deeper connection with students in this group and fielding more questions- questions that would have otherwise been directed to a peer mentor. Upon reflection, it could be argued that the inclusion of the peer mentors served to dilute the pool of expertise, while students in this third group could access a more concentrated pool of expertise by working with faculty professionals, thus bringing to bear the benefits accompanying years of experience, training, and professional connections within the institution.

During the latter stages of the study, select departmental faculty and staff assembled in a bi-monthly peer mentor working group to discuss evolutions to the program. At the conclusion of the above study, the working group developed a new model for peer mentorship that was less rigidly structured, provided more student discretion for scheduling mentorship meetings, and reduced the frequency of required mentorship meetings. This new model was conceived as more student-centered with peer resources deployed in response to perceived or clearly articulated student need.

Unfortunately, this new model revealed new and equally daunting logistical and organizational challenges as the model studied above. With data in hand on the limited impact of the program and demands required to maintain any model of the peer mentorship program, the working group and departmental leadership began leaning towards the termination of the program. Unwilling to gamble more institutional resources and without the energy to spend several more years studying a new model, in consultation with the entire department, the peer mentorship program was disbanded in the spring of 2019.

As the program shuttered, departmental conversations revealed a curious estuary of the program's enduring character: the confluence of deep peer-to-peer affinity mixed with the absence of demonstrable outcomes. Many peer mentors were devastated by the conclusion of the program and concerned about the wellbeing of future students. Peer mentors, nearly all of whom had meaningful rapport and connection with their students, were slow to disentangle their deep, positive emotions surrounding their responsibilities and the lack of measurable student success outcomes. In a sense, this circumstance challenges all educational professionals working with peer mentor programs to not allow positive connection to serve as a sort of confirmation bias on the impact of their program.

The studies recorded here do have limitations that may serve as direction for future inquiries. Limitations of this study can be attributed to inevitable inconsistency within individual peer mentors, such as peer mentoring styles, personalities, interpersonal skills, there exists a lack of fidelity in implementation of the peer mentoring intervention. While the program under investigation included a rigorous training program, on-going professional development, and institutional support, fidelity limitations existed. It became clear that there was a need for adherence to a protocol, quality of treatment, and alliance to program goals to ensure each at-risk student receives an on-going standard treatment (see Dunst, Trivette, & Rabb, 2013). This shortcoming highlights a need for future directions in peer mentoring literature and research, in the development of such an instrument and future research in the area of program analysis.

The findings, and the new questions that emerged from research, offered direction for new faculty delivered interventions for the future. The department is bolstering faculty one-on-one meetings with the lessons learned from the defunct peer mentoring program, exploring standard protocols, developing intake instruments, and exploring future opportunities for studying faculty delivered models.

Ultimately, this investigation may act as something of a cautionary tale for future peer mentorship programs. The genesis of the peer mentor program under study was the immediate aftermath of a compelling series of conferences highlighting the potential benefits of peer mentorship. Indeed, prospective conference goers can presently find any number of national and regional conferences focusing exclusively on peer mentorship or generally highlighting its value. This post-conference enthusiasm matched by available resources and administrative will spawned a fairly large peer mentorship endeavor. Within a few years, additional staff and faculty were hired into a growing program in which peer mentorship was a foundational component. Soon to follow, even a particular culture around peer mentors emerged.

While the studies here merely cover three semesters of inquiry, the prolonged conversations leading to that inquiry, the dissolution of the program to follow, and the re-imagination of a peer mentor-less program took many years. In a way, the time and energy committed to evaluating, studying, and dismantling the program dwarfed the initial effort to launch it. The cautionary lesson perhaps lies thusly: it may be infinitely more difficult to study, manage, and ultimately end a peer mentor program than it is to initiate one.

Perhaps there is more wisdom to be earned still. For example, departments and programs should consider matching their peer mentorship goals with the needs of the target population. The study here captures the impact of peer mentors working with academically at-risk students. Perhaps the peer mentor program studied here, working with a more academically prepared target population, could produce stronger results. To test intervention/target population match, programs could initiate smaller pilot studies, introducing peer mentors incrementally and measuring impacts before investing in a substantial program. Creating a measure of risk/reward or even a cost-benefit analysis metrics could assist in the

decision-making process as well to launch a program. In times of increasingly tight budgets and fiscal accountability, demonstrating that dollars invested in peer mentorship sustain continuing student enrollment, and thus tuition dollars, ought to be a predominant concern.

The thorniest issue of all to manage is separating the rapport and deep connection that can naturally emerge from peer-to-peer programs from whether the peer mentor programs is producing the intended student success results. It is possible that the affinity swirling around peer-to-peer programs hinder more formal, rigorous investigations into the value of given programs. The difficulty entailed in the process of investigating and dismantling a beloved program is best avoided on the front end, by building only what research and metrics would support.

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