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FOSTERING DEVELOPMENT IN HONORS STUDENT PEER MENTORS:

Mentoring's Effects on Leadership Outcomes

Abstract

Undergraduate peer mentorship has the potential to transform mentor and mentee alike. In an effort to understand the potential positive effects of a peer mentorship program on honors peer mentors, paired sample t-tests of data from a pre-test / post-test of at least 69 honors first-year seminar facilitators shows that respondents grew in their leadership efficacy and teaching efficacy. Mentors also show modest gains in their sense of belonging to the honors program. Qualitative analysis of assessment discursive data further indicates that the yearlong facilitation experience is a mechanism for mentors' growth. Results indicate that being a peer mentor is a powerful means of fostering student development across multiple dimensions, including leadership efficacy, while meeting the goals outlined by a transformative honors educational experience.

Introduction

Many American higher education institutions employ peer mentorship programs to promote student retention, enhance student sense of belonging, and foster leadership development (Campbell et al., 2012). Undergraduate peer mentor programs often are created with the express purpose of supporting mentees, but providing mentorship can positively affect mentors as well (Newton & Ender, 2010). Peer mentors note that the experience of supporting other students' development gives them the opportunity to develop important skill sets, foster relationships, and feel intrinsic satisfaction (Colvin & Ashman, 2010).

Collegiate honors programs, like many other postsecondary functional units, use peer mentorship programs toward the ends of promoting community and supporting holistic student development, especially leadership development (Chancey et al., 2019). Honors programs, with their focus on enhanced, enriched, or accelerated pursuit of academics, are a context in which intentional peer facilitation of learning could enhance mentors' skill development as competent facilitators of learning (Chancey & Lease Butts, 2018; Renzulli et al., 2006). Learning how to facilitate peers' learning can have positive effects on those who teach, such as a sense of contributing to an educational community and the ability to see oneself as able to enact leadership for positive change. As honors programs at larger institutions seek to provide a more intimate academic experience for talented students (Ginkel et al., 2012), it would be helpful to know if serving as a peer mentor contributes to honors peer mentors' identification with the community. And, while many peer mentorship programs exist that focus expressly on leadership development (Campbell et al., 2012; Priest & de Campos Paula, 2016), determining if facilitating learning helps peer mentors come to recognize and value their ability to exercise leadership might also be

of interest to collegiate honors programs. for the first prompt and (n=59) for the second.

To determine what effects a yearlong honors peer facilitator experience had on mentors' leadership development, I developed an assessment instrument to explore respondents' self-rated development across three dimensions: leadership efficacy, teaching efficacy, and sense of belonging to the program. Comparison of respondent means on validated scales before and after a yearlong facilitation experience show that mentors make gains in all three areas: they report stronger identification with the honors community, greater confidence in their ability to facilitate learning, and a greater sense of their ability to affect positive change through leadership. To support that the peer facilitation experience is the primary contributor to said gains, I also analyze respondents' answers to discursive questions regarding the facilitation experience. Data show that serving as a peer facilitator has positive effects on honors student mentor development, indicating that peer mentor programs are a means of contributing to students' holistic education while building strong honors communities.

The present study makes two notable contributions to the literature on peer mentors, honors students, and leadership education. First, although the effects of peer mentoring on mentees is widely studied (Newton & Ender, 2010), analyses on the potential benefits to mentors is less well-documented (Priest & de Campos Paula, 2016). As many mentors are solicited for programs on the promise that their skills will improve, evidence to that effect may help all better understand the transformative potential of peer mentoring for mentors. Second, collegiate honors programs are a novel context in which to study peer mentors. Honors students are characterized by their above-average talent, ability to achieve, or creativity (Renzulli, 2002). However, many honors programs may not consider how to capitalize on honors' students enhanced capacity for contributing to leadership both within and outside the formal classroom (Chancey et al., 2019). A more comprehensive understanding of peer mentoring for honors students may offer a way for educators to foster honors students' leadership development to help them leverage their talents toward the social good.

Literature Review

Peer Mentoring Programs. Peer mentor programs are commonplace at American institutions of higher education (Colvin & Ashman, 2010; Priest & de Campos Paula, 2016). First-year seminars are an example of an initiative that employs peer mentor programs with some frequency (Johnson, 2009; Tampke & Durodoye, 2013). First-year seminars typically are offered the first semester or year of an undergraduate students' career as a means to somehow introduce the student to campus or sub-community culture; they can be mandatory or optional, dependent on institution (Kuh, 2008). First-year seminars have been shown to be an efficacious means of generating smaller learning communities that help foster relationships, which translate to higher student persistence (Permzadian & Credé, 2016). Additionally, students of concern can be more readily identified and helped, as there are more stakeholders, including peer mentors, integrated into institutional systems to make appropriate referrals (Colvin & Ashman, 2010).

One of the most important factors in determining whether a student will persist to earn their undergraduate degree is social support: feeling a connection to the institution through faculty, peers, and community (Fine, 2016). Honors students are no different: just as general population students, they need to feel a sense of connection to their institutions or honors programs (Cuevas et al., 2017). At colleges and universities with more students, first-year seminars capped at a smaller class size can

make the institution seem smaller and more manageable, contributing to students' sense of belonging (Knapp et al., 2017). Peer mentors are a critical contributor to first-year seminar relationship building endeavors, as students are able to readily connect with someone near their age with questions or concerns (Colvin & Ashman, 2010; Newton & Ender, 2010). Peer mentor programs, then, have well-documented effects on mentees; compared to mentees, though, mentors are less well-studied.

Peer Mentoring and Leadership. Peer mentoring programs in colleges ask advanced undergraduate students to provide guidance, assistance, or instruction to their colleagues. If leadership is an intentional influence relationship meant to encourage mutually-beneficial change for the better (Komives et al., 2013), then peer mentorship can be a means of furthering mentors' leadership growth. Peer mentorship can help mentors develop the capacity for empathy, a crucial leadership skill (NCLP et al., 2016). Further, Komives and colleagues (2006) describe an important transition in undergraduate student leadership development when the phenomenon is no longer positional and hierarchical, but a shared process. By forming a close relationship with a peer colleague, mentors have the potential to share power, share learning, and work toward commonly desired conditions: in other words, an exercise of leadership.

Seemiller (2014) identifies 60 leadership competencies in which students should demonstrate proficiency as they develop their skills. Peer mentoring has the potential to make contributions toward mentors' growth on many of Seemiller's leadership competency areas, namely self-awareness and development, interpersonal interaction, group dynamics, and communication. An intentional mentorship experience that asks mentors to reflect on how their actions contribute toward a larger purpose can facilitate growth in mentors' efficacy and pay dividends on their belief they can enact meaningful change, just as they have with their university community.

Honors Student Development and Peer Mentorship. Peer mentorship has the potential to transform student mentors and mentees in an honors context, given both the population's great potential and their unique challenges. Honors students generally are capable of great depth of work, exhibit talent across multiple dimensions, are excited by making intellectual connections between seemingly disparate material, and show great concern for large-scale, systemic challenges (Chancey & Lease Butts, 2018; Renzulli et al., 2006). Honors programs and colleges can harness such capacities to cultivate leadership, empathy, and innovation in their students (Chancey & Lease Butts, 2018; Knapp et al., 2017).

Conversely, college honors students as a population exhibit certain behavioral patterns that may require attention to help them realize their full academic potential. Honors students can exhibit levels of perfectionism that can be severe, interfering with student learning and self-concept (Rice et al., 2006). Because honors students may have experienced maturity intellectually asynchronously with other forms of development, including social, psychosocial, or physical, some honors students may find it difficult to integrate into communities and peer groups (Renzulli, 2002). Should they hold more traditional views on leadership (Komvies et al., 2013), it is possible that honors student peer mentors may be less receptive to avoiding treating the role as transactional, as perfectionism, asynchrony, or potential lack of social integration may lead to minimizing the discomfort alternate constructions of leadership may generate.

Fortunately, talented, trained honors peer mentors may be uniquely positioned to offer assistance to their peers, as mentors often identify similar struggles and share perspectives related to efficacious coping strategies. Johnson (2009) notes that honors peer mentorship programs can be valuable contributors to incoming students' education when used in a first-year seminar. Walters and Kanak (2016) examine how a peer mentor-planned retreat contributed toward mentors' leadership skill development. They argue that mentors grow in their capacities to plan, engage with others, and practice leadership for others as a

result of participating in a mentorship experience. Both pieces indicate that peer mentorship is a common practice in honors programs, but that there is potential for exploring in what ways it affects peer mentors.

Peer mentorship can capitalize on its general strengths to create transformative experiences for both mentors and mentees toward the end of reinforcing an honors education. The present study endeavors to strengthen this connection through examining how an honors peer mentorship experience can be a catalyst for growth in terms of leadership, teaching, and community-based efficacy for a student population that has its own leadership education opportunities and challenges.

Methods

Context and Research Design. The present study takes place in an undergraduate honors program at a large public university in the United States. The honors program represents students from every school and college at the institution. The majority of students are admitted to honors upon entrance to the university their first year via the institution's general admissions process; roughly ten percent of the incoming first-year class is invited to join the program. Students may also be admitted as rising sophomores or juniors through an internal application process on a space-available basis. Roughly 500 students are admitted to the honors program each academic year, with about two-thirds of that number completing honors awards by graduation. To earn an honors award, students must complete honors coursework, a thesis project, and several co-curricular requirements, including event reflections and a leadership experience.

All incoming first-year honors students are required to take a one credit hour first-year seminar course. The course meets twice a week and has two components: a faculty section and a facilitator section. On the faculty day of the seminar, an honors faculty member leads an interdisciplinary seminar on a topic of their choosing. The hope is that such faculty-led small seminars create intellectual communities that encourage critical discourse and respect for multiple epistemologies, hallmarks of an honors education (Renzulli et al., 2006). For the second section, a pair of peer mentors take point in facilitating student learning and development. The peer mentor section of the first-year seminar has three learning outcomes: students should be able to describe and apply strategies to care for their own well-being; describe and, as appropriate, apply campus resources to promote their continued success; and co-develop and reflect on their contributions to an inclusive honors community. Peer mentors strive to meet these learning outcomes through structured community development activities; discussions about campus resources to promote academic and personal success; and peer-led conversations on topics of community interest, such as inclusion, residential community issues, or campus involvement.

At the time of the first-year seminar, the facilitators are sophomore honors students; however, the facilitator process begins the semester prior. At the conclusion of their first fall semester, students apply to take a three credit-hour course on peer mentoring and leadership for the spring term to prepare them to co-lead a facilitator section in facilitator pairs for next year's incoming class. Topics in the spring facilitator training course include exploring the concept of leadership, honors student development, working with students in crisis as a peer mentor, inclusion issues in the classroom, and facilitation techniques. The reflections on leadership throughout help honors students to engage intellectually with the peer mentor role, to construct their own understanding of the role as a leadership opportunity, and to interrogate in what ways they may be able to exercise leadership as they define it as a peer mentor.

The facilitator educational experience continues in the fall semester with a three credit-hour practicum course concurrent with their experience working in the first-year seminar. In the fall course, facilitators continue to reflect on their learning, their students' learning, and their mutual exercise of leadership in tandem with a co-facilitator and their faculty member.

The outcomes of the peer mentor courses focus on developing and implementing learning facilitation techniques; critically analyzing one's own role in a group leadership system, as well as facilitating the leadership development of others; and reflecting on the facilitators' role in co-creating an honors learning community.

To assess any potential value-added from the facilitator experience, I use a pre-test / post-test survey design to compare results between waves of data collection (Fine & Lee, 2017; Wholey et al., 2004). A voluntary assessment instrument is distributed to peer facilitators at two points during their peer facilitator journey that collects both quantitative and discursive data. The pre-test is sent to the aspiring peer mentors within the first week of the spring semester training course. The post-test is distributed at the conclusion of the fall peer mentor practicum course after facilitators have completed their experience and concomitant reflective practicum course. Data are from respondents who took the course during the 2018-2019 and 2019-2020 U.S. academic years. Use of the assessment instrument and subsequent generated research is cleared by the institution's Institutional Review Board.

Quantitative Scales and Analytical Strategy. The assessment instrument uses three pre-validated quantitative scales at both waves related to the learning outcomes devised for the facilitators. To determine to what extent facilitators feel they can exercise leadership effectively as a peer facilitator, respondents answered questions from Kane and Baltes's leadership efficacy scale (Kane & Baltes, 1998; McCormick et al., 2002). The scale uses nine items on a ten-point scale to ascertain respondents' confidence that they can exercise leadership within a group, with lower scores indicating less confidence. Because the ninth question asks about respondents' confidence in their overall leadership ability and is often used as a summative measure in and of itself, the item is excluded from analysis which sums all items, but included in a test of individual item significance.

With regards to the outcomes related to practical facilitation skills, the assessment instrument uses items adapted from the Ohio State Teacher Efficacy Scale (OSTES) (Tschannen-Moran & Hoy, 2001). The original instrument, primarily developed for secondary-level instructors to gauge their self-efficacy in instruction, contains three subscales. The survey instrument respondents completed contained eight items from the student engagement subscale and eight items from the instructional strategies subscale, but omits the classroom management scale, whose items largely focused on managing disruptive students. Respondents are asked to what degree they feel they can influence students' thinking or behaviors on a nine-point scale that ranges from "nothing" to "a great deal." Although teaching and facilitation may not be considered synonymous – a potential limitation in using a teaching efficacy instrument to analyze the development of peer facilitators – the assessment instrument acknowledges that there is a great deal of overlap in skill set between the two (Case et al., 1994).

Finally, as the peer mentorship experience is meant to further contribute to the honors community, it is hoped that participants strengthen their identification with the program. To measure to what degree the participants feel connected to the honors program, the assessment uses an adapted version of Goodenow's (1993) Psychological Sense of School Membership (PSSM) scale. Seventeen of the eighteen scale items were adapted for the instrument by asking participants to rate how integrated they feel in the "honors program" as opposed to their "school;" one item was not included because it could not be rephrased in a way that could be readily applied to a collegiate honors program context. The scale uses five points to measure to what degree respondents agree with statements from "not at all true" to "completely true."

Respondents are included in the analysis if they had pre- and post-test data on that particular scale, leading to varying sample sizes for each scale and each individual question. The lowest sample size is (n=69), which means just over half (51.11 percent)

of the 135 students in the two years completed the assessment instruments in full at both waves. Because student completion of the instrument was voluntary, the study sample is a convenience sample, meaning it is possible data are not missing at random. Student data are anonymized by the survey system; however, student self-reports of race and gender on the survey permits chi-square tests against the demographics of all course students to determine if data are not missing at random across key demographic characteristics. Chi-square statistics for race and for gender were not significant, supporting the claim that data are representative of the course demographically despite the survey instrument being voluntary (results not shown). The lowest Cronbach's alpha of all scales used is 0.87, indicating the scales are reliable.

As any change that may occur in students' leadership efficacy, teaching confidence, and sense of belonging as a result of the Honors peer mentorship experience is of interest, I use paired-sample t-tests for analysis to compare mean values on scale items between waves of data collection in student responses (Welch, 1947). In testing the significance of individual scale items, I present both the uncorrected t-test results and those with a Bonferroni correction, where the typical significance threshold of < 0.05 is divided by the number of scale items to ensure a more conservative threshold for significance that is more robust against item clustering (Bender & Lange, 2001). Because Bonferroni corrections trade type-II error for type-I (Perneger, 1998), I report both Bonferroni-corrected and uncorrected tests of significance for individual items. Although it is assumed that the course would have a positive effect on students' results on the assessment instrument, all t-tests use more conservative two-tailed tests.

Qualitative Data and Analytical Strategy. The quantitative analysis endeavors to draw conclusions about the effects of the peer facilitation experience on honors student peer mentors. However, relying solely on analysis of pre-test / post-test quantitative data alone would be problematic. College students are exposed to myriad development opportunities through their undergraduate careers, and the analysis here does not compare the respondents' results to a control groups – either to honors students who did not go through the facilitation experience, or to general population students at the campus. Therefore, for a yearlong experience such as the one studied here, it is possible forces other than the program could be contributing to any change in students' responses across waves (Rosch & Schwartz, 2009).

In an effort to demonstrate that the course is a driver of change for students' growth across the dimensions of interest, I analyze respondents' discursive data from the survey instrument as well. At each wave of data collection, students were asked to complete short answer essays on several questions related to leadership development and the peer facilitator role. Here, I provide analysis of differences between pre-test and post-test responses to two short essay questions: "What skills, qualities, attributes, or strengths do you have that you feel will make you an excellent peer facilitator for first-year students?" is included as it may speak to respondents' teaching efficacy and leadership development. "Why is being a peer educator an important role?" is examined as responses may speak to peer mentors' ideas related to leadership development and identification with the honors community.

Student discursive responses are analyzed using Weiss's (1994) issue-focused analysis, which is useful for locating patterns across narratives. In issue-focused analysis, the researcher reads all responses, develops general codes of interest based on patterns observed across narratives, then sorts and integrates codes to draw conclusions. Because the analysis is concerned primarily with change between waves of narratives as a potential result of the facilitation experience, if students expressed a theme of interest at both waves of data collection, their responses were not coded. I shared initial coding results with colleagues as themes emerged to promote trustworthiness that the issue-focused analysis method was capturing valid themes (Morrow, 2005; Weiss, 1994). Respondents were included in analysis if they had completed both pre-test and post-test

Results

Quantitative. Table 1 shows the results of t-tests on all three scales' summative values. Facilitators show large, statistically significant gains in their leadership efficacy and teaching efficacy between pre- and post-test waves of data collection. Leadership efficacy scale scores increase an average of eight points between the pre-test and post-test (8.2778, $p < 0.001$), which translates to roughly a point increase in confidence per scale item. Respondents' teaching efficacy sees gains of roughly three-quarters of a point per item, with peer mentors showing results of about twelve points higher in total between the pre-test and post-test (12.3188, $p < 0.001$). Respondents did report higher scores on the adapted PSSM sense of belonging scale between waves of data collection, though gains were modest in magnitude. On a seventeen-point scale, students exhibit a gain of just under two points (1.9578, $p < 0.05$), indicating that there are small gains in a sense of belonging to the honors community. The change in scores is statistically significant.

Tables 2, 3, and 4 explore the magnitude and significance of change between individual scale items for all three scales. Table 2 shows that all eight items from the leadership efficacy scale, as well as the separate summative question regarding respondents' confidence in their overall leadership ability, see gains of at least three-quarters of a point between waves. All items show statistically significant change even when the Bonferroni correction is employed.

Table 1. Changes in Honors Student Responses After a Yearlong Peer Facilitation Experience

Construct	n	$\Delta\bar{x}$		s.d.	Bonferroni threshold: 0.05 / # of scale items
Leadership Efficacy	72	8.2778	***	8.8050	a < 0.0063
Sense of Belonging to Honors	71	1.9578	*	7.9542	a < 0.0029
Teaching Efficacy	69	12.3188	***	14.2782	a < 0.0031

* = p < 0.05, ** = p < 0.01, *** = p < 0.001, all two-tailed.

Table 2. Analysis of Changes in Honors Student Responses on Kane's Leadership Efficacy Scale Items After a Yearlong Peer Facilitation Experience

Scale Item	n	$\Delta\bar{x}$	t-test Significance Uncorrected	Bonferroni	s.d.
Perform well as a leader across different situations	73	1.192	***	+	1.391
Motivate group members.	73	1.055	***	+	1.563
Successfully build group members' confidence.	73	1.055	***	+	1.527
Develop good performance strategies for complex tasks.	73	1.082	***	+	1.597
Develop the teamwork of my group members.	73	0.932	***	+	1.575
Take charge when I have to.	73	0.890	***	+	1.514
Communicate effectively.	72	0.750	***	+	1.599
Accurately assess the strengths and weaknesses of my group.	73	1.137	***	+	1.539
Confidence in my overall leadership ability.	73	1.192	***	+	1.421

Uncorrected: * = p < 0.05, ** = p < 0.01, *** = p < 0.001, all two-tailed.
Bonferonni: + = significant under threshold (a < 0.0063).

Very few individual items on the adapted PSSM scale for sense of belonging show statistically significant gains even when using uncorrected results. Only the items "people affiliated with honors notice when I'm good at something" (0.4384, $p < 0.01$) and "There's at least one faculty or staff member I could talk to if I had a problem" (0.7945, $p < 0.001$) show gains that are statistically significant after employing a Bonferroni correction. "I am included in lots of honors activities" shows significant change uncorrected, but does not meet the Bonferroni standard for significance (0.2329, $p < 0.05$). Some PSSM items show change in a negative direction, though not at levels of statistical significance: respondents on average report feeling slightly less proud to be a part of the honors program (-0.0274, n.s.) and less sure that honors peers liked "me the way I am" (-0.0274, n.s.).

Table 3. Changes in Honors Student Responses on Goodenow's PSSM Scale Items After a Yearlong Peer Facilitation Experience

				t-test Significance		
Scale Item	Reverse coded?	n	$\Delta\bar{x}$	Uncorrected	Bonferroni	s.d.
I feel like a real part of the honors program.		73	0.137			0.694
People affiliated with honors notice when I'm good at something.		72	0.438	**	+	1.105
It is hard for people like me to feel accepted in the honors program.	Yes	73	-0.110			1.137
Other students in honors take my opinions seriously.		73	0.151			0.811
Most teachers and staff affiliated with honors are interested in me.		72	0.153			1.030
Sometimes I feel as if I don't belong here in honors.	Yes	73	0.014			1.149
There's at least one faculty or staff member affiliated with honors I could talk to if I have a problem.		73	0.795	***	+	1.201
People in honors are friendly to me.		73	0.027			0.745
Faculty and staff affiliated with honors are not interested in people like me.	Yes	73	-0.041			0.857
I am included in lots of honors activities.		73	0.233	*	n.s.	0.965
I am treated with as much respect as other honors students.		73	0.041			0.824
I can really be myself in honors.		73	0.027			0.957
The faculty and staff affiliated with honors respect me.		73	0.151			0.794
People in honors know I can do good work.		72	0.153			0.781
I wish I were not in the honors program.	Yes	73	-0.069			0.694
I feel proud of being a part of the honors program.		73	-0.027			0.726
Other honors students like me the way I am.		73	-0.027			0.726

Table 4. Changes in Honors Student Responses on OSTES Scale Items After a Yearlong Peer Facilitation Experience

Scale Item: I have the ability to...	n	Δx̄	t-test Significance Uncorrected	Bonferroni	s.d.
Get through to the most difficult peers	71	0.5211	**	n.s.	1.4625
Help someone else think critically	71	0.6056	**	+	1.5351
Motivate someone who shows low interest in coursework	71	0.3803			1.5799
Get someone else to believe they can do well to college	71	0.2817			1.5601
Respond to a difficult question from a peer	71	0.7606	***	+	1.4877
Help someone else value learning	71	0.2817			1.6749
Gauge whether or not someone else comprehended something you tried to teach them	71	0.6479	***	+	1.5316
Craft good questions for the people you're trying to teach	71	0.8873	***	+	1.7200
Foster creativity in someone you're trying to teach	70	0.9571	***	+	1.7231
Improve the understanding of someone who does not understand what you're trying to teach	69	0.6377	***	+	1.2715
If trying to teach multiple people at once, adjusting your teaching to reach as many students as possible	69	1.0145	***	+	1.8027
Use a variety of techniques when teaching or facilitating	69	1.2754	***	+	1.6881
Provide an alternative explanation or example when someone is confused	69	0.7971	***	+	1.3889
Connect people with other resources if you can't help them	69	1.1159	***	+	1.6045
Implement alterative plans if you're facilitating and your original plan isn't working out	69	1.2754	***	+	1.4939
Provide appropriate challenges for very capable people you are trying to teach	69	0.7681	***	+	1.4767

* = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$, all two-tailed.
Bonferonni: + = significant under threshold ($a < 0.0031$), n.s. = not significant.

Table 4 shows results from analysis on OSTES teaching efficacy scale items. Although most items are statistically significant even with a Bonferroni correction, those that are not tended to focus on facilitators' feelings that they would not be able to help recalcitrant, difficult, or disinterested students: respondents showed no statistically significant change on the items, "I can help someone else value learning," "I can get someone to believe they can do well in college," and, "I can motivate someone who shows low interest in coursework" are not statistically significant. Additionally, the item asking about respondents' self-rated ability to get through to the most difficult peers is not statistically significant with a Bonferroni correction applied (0.5211, $p < 0.01$). All other items show gains of at least six-tenths of a point between waves and were statistically significant with the Bonferonni correction, indicating that respondents report more efficacy after the facilitation experience in terms of their ability to self-direct a learning process. The items related to using a variety of techniques (1.2754, $p < 0.001$), implementing alternative plans (1.2754, $p < 0.001$), connecting students with resources (1.1159, $p < 0.001$), and adjusting teaching to reach as many students as possible (1.0145, $p < 0.001$) all see statistically significant average gains of over a point between waves.

Qualitative. The first prompt, "What skills, qualities, attributes, or strengths do you have that you feel will make you an excellent peer facilitator for first-year students?" has 32 of 57, or 56.1 percent, of paired responses that demonstrated a coded change from pre-test to post-test. Analysis yielded three major themes. First and most predominant: facilitators report an increased awareness of empathy as a skill they possess that contributed to their success as a first-year seminar peer mentor. Twenty of the 57 responses (35.1 percent) do not mention empathy in their pre-test narratives, but then do so in their post-test:

> PRE-TEST: [I have] organization, passion, [I am] personable, curious, love to learn, love to teach, will take the role of leader and step up to the plate.
>
> POST-TEST: I am empathetic and a conversationalist. I enjoy teaching, as well as learning from others. I am good at collaborative work and bouncing ideas to formulate an outcome. I am also good at listening, which I feel helps build relations. (R 8-24)
>
> PRE-TEST: Probably the number one attribute I have that would make me a good facilitator is that I'm someone who is pretty charismatic or personable. I tend to try to be someone who… can connect with a wide range of folk.
>
> POST-TEST: …Another skill I have developed is empathy, which allows me to put myself in the shoes of my students. With empathy, I can attack any issue from the student's point of view, giving me more of an understanding of the problems faced by my students and better equipping me to provide support and possible solutions. (R 9-20)

Narratives demonstrating a change in the expression of empathy often shift from considering the facilitator the locus of interest in the classroom to exploring ways to invite students to take ownership of class time, as well as considering how outside-of-class issues might affect students' classroom selves. Instead of discussing generalized people skills, responses coded under the empathy theme show a narrow focus on interacting intentionally with others emotions in the third wave response that was not present in their first wave response.

Second, twelve of the fifty-seven narratives (21.1 percent) demonstrate an increase in facilitation skills – namely adaptability, collaboration, and/or awareness of group time management – following the yearlong experience:

> PRE-TEST: Patient, willing to get to know people and provide them with advice or listen to what their problems may be coming [here].
>
> POST-TEST: Also, I think I'm good at adjusting to the mood of the room and being flexible with the schedule in order to create the best possible class in a given day. (R 9-41)
>
> PRE-TEST: I have led a club before that involved extensive planning, organization, and communication to people of all different types which I expect to be extremely beneficial when planning and communicating with the class…
>
> POST-TEST: I have… problem solving skills that help in situations where things aren't going as planned, interpersonal skills to communicate well and create meaningful connections with students, and facilitation skills… that help me give lessons effectively… (R 9-32)

Many of the students report coming in with skills that would make them strong facilitators, such as organization and public speaking. Despite students' wide range of talents before taking the class, the explicit mentioning of the contribution of the experience to further skill development, as well to concepts specifically covered in the course to promote successful facilitation, is notable.

Third, eight of the fifty-seven respondents (14.0 percent) mention leadership as a skill they developed in their post-test responses, though a reference to leadership was absent in their pre-test narratives:

> PRE-TEST: I am a compassionate, optimistic, conscientious, and reliable person. With these qualities, I will be able to provide students not only with tips and tricks to stay organized academically…
>
> POST-TEST: I am enthusiastic, caring, and a good leader. I am able to generate excitement amongst the students so they are motivated to get involved on campus, but I am also a good listener and practice empathy, so the students feel like they have someone to reach out to if they need help with anything. (R 8-73)
>
> PRE-TEST: I believe that I am a good listener and can relate to what the first year students are experiencing. …
>
> POST-TEST: I am a good listener, clear communicator, gentle leader. … (R 9-72)

Students exemplifying this theme often note that they did not consider themselves to be leaders prior to the facilitation experience; the preponderance of them mention their introversion as a reason they hadn't identified as a leader prior. The facilitation experience and concomitant curricular leadership development pieces in the courses reinforce the notion that leadership is a shared social process that can be exercised by multiple actors (Komives et al., 2006). In particular, many of the students mention how they thought their introversion might preclude them from leadership roles, but being a facilitator broadened their understanding of leadership and helped them to develop a leader identity.

The second question, "Why is being a peer educator an important role?" is analyzed for emergent themes between waves of data collection. The second question has fewer respondents demonstrating change between waves of data collection as compared to the first: 13 of 59, or 22.0 percent. Two themes of note emerge in the narratives that show coded change. Nine paired narratives, or 13.5 percent, have facilitators who mention how the role was important for their development in addition to their students' in the post-test, when pre-test narratives focus solely on helping potential students as a facilitator:

> PRE-TEST: [The role is important] because you can relate more to students adapting to college.
>
> POST-TEST: It's important to learn how to lead a group of people and try to get the best out of them. You have a strong influence over the students learning from you, and it's important / feels good when you can make an impact on their lives in a positive way. (R 8-48)
>
> PRE-TEST: A peer educator is an important role because it allows students to connect with [upper-division students] and view them as a resource, friend, and mentor. It allows students to more easily adjust to college.
>
> POST-TEST: Being a peer educator is an important role because it helps to improve the university as a whole. Students in the peer educator role are able to support their younger peers by being in such a role and allows the university to build upon itself as it moves forward into the future. (R 8-69)

Responses coded with the theme of facilitator development show increased awareness of how the facilitation experience is mutually beneficial to themselves, their students, and even to stakeholders beyond the first-year seminar context.

Second, four responses, or 6.8 percent, mention how contributing to the Honors community was an important component of the facilitation experience between the pre-test and post-test:

> PRE-TEST: [Facilitation] offers the incoming students a chance to interact with a friendly face, and it allows the students the opportunity to connect with a student that

has already lived through the first year.

> POST-TEST: Being a peer educator is an important role for the honors program and [the university] as a whole because it helps to build and develop the community… (R 9-62)

Both themes of interest from the second discursive question data show facilitators' increased awareness of the structural role of the facilitation experience as a contributor to communities past the individual first-year seminar classroom.

Discussion, Recommendations, and Conclusion

Discussion. Comparison of means between pre-test and post-test data indicate that students make noteworthy gains in their teaching and leadership efficacy while serving as peer mentors. Honors peer facilitators exhibit much more confidence in their abilities to exercise leadership in a group after their year-long facilitation experience and – with the exception of items related to motivating difficult students – more confidence in their ability to create learning environments. Discursive data support the conclusion that the course has an effect on student learning. For instance, it is notable that a surprising number of students mention empathy as a skill they gained between pre-test and post-test data collection. Empathy is a hallmark of teaching and leadership, as well as an important skill for good peer mentorship (Newton & Ender, 2010). There is a strong connection between leadership and empathy as well, as empathy is necessary for the exercise of socially responsible, inclusive leadership (Fine, 2017; Komives et al., 2013; Seemiller, 2014). Discursive data further demonstrates facilitators' awareness that the year-long experience left them with many tangible skills related to teaching and leadership efficacy: group management, strategic planning, and collaboration.

The themes of the importance of honors community, leadership development, and recognizing self-growth through the facilitation experience speak to the constructs of interest in the present analysis: students' narratives spoke to these points. It is notable that narratives under the themes of leadership development and honors community identification also connote a transition from focus on self-as-leader to considering others in the exercise of one's leadership as a result of engagement in the course (NCLP et al., 2016). Komives and colleagues (2006) refer to such a transition "the turn": a pivotal point in students' leadership development. If an honors peer facilitation experience can help students to think more critically and systemically, they may be left better able to exercise leadership to improve their communities of practice as a result of their time as a peer mentor. However, it is important to note that such transformative change may not represent the typical effects of peer mentorship on honors student development. The majority of discursive narratives did not show a turn away from self-as-leader thinking, and some sense of belonging scale items showed slight decreases between waves of data collection. Future research could disentangle what particular aspects of a peer mentorship process most strongly contribute toward systems- or community-based leadership thinking in peer mentors.

Recommendations for Research and Practice. Some recommendations for both future research and best peer mentorship practice emerge from the findings. Regarding research, it remains problematic that student peer mentors remain understudied (Campbell et al., 2012). Examining in what ways peer mentors benefit from peer mentorship, particularly in terms of their own leadership learning, could provide a more comprehensive understanding of mentorship programs' value. Because the data here examine the scope of the peer mentorship course, it is hard to determine what particular aspects of the course most affected the respondents' change over time. More targeted analysis of specific assignments, or in-depth qualitative methods like individual interviews or focus groups, could identify what portions of the facilitation experience correspond to which changes in efficacy, group identification, or leadership

development.

Regarding practice, the informed implementation of peer mentorship programs is imperative. In developing a program to train mentors, providing ample opportunity to reflect on their experience, particularly in terms of leadership, is imperative to confirm that mentors are able to have space to make meaning of their own development (Ash & Clayton, 2009; Priest & de Campos Paula, 2016). Developing a plan to assess peer mentor learning can be used not only to help measure outcomes, but is yet another means of inviting students to make meaning of their experience while gathering crucial data. For honors programs specifically, the findings indicate that student mentors saw the value of a leadership experience in contributing to a holistic honors education. Honors programs may wish to re-evaluate their requirements or offerings, both curricular and co-curricular, to see if peer mentorship can provide space for further growth, creativity, and intellectual engagement for participants (Chancey et al., 2019).

The findings indicate there are particular leadership competencies (Seemiller, 2014) around which students make demonstrable progress. Competencies related to the areas of self- awareness and development (e.g., helping others and mentoring), interpersonal interaction (e.g., empathy), and group dynamics (e.g., group development in supporting the honors community, group development related to enhanced facilitation skill) saw noticeable change. Those who develop or administer peer mentorship programs may wish to ensure they include trainings, educational components, or conversations that further reinforce mentor leadership learning around such competencies.

Limitations. Quantitative analysis with small sample sizes can be problematic, as there may not be enough power to make a meaningful conclusion about patterns, even if they appear statistically significant (Ghasemi & Zahediasl, 1994). Although paired t-tests were developed for valid comparisons of means for small samples, more respondents could further demonstrate any consistent potential effects on honors peer mentor development and enhance the power of the analysis. Larger sample sizes or directed qualitative research may be able to unpack further any differences between peer mentors related to their experiences.

Perhaps the most problematic limitation of the current quantitative analysis is the absence of control groups (Fine & Lee, 2017). Comparing the leadership efficacy, teaching efficacy, and sense of belonging of the sample to equivalent samples of honors students who are not involved in the peer mentorship experience would make a more convincing case that the change in mentors' results stemmed from their participation. The honors context bears scrutiny, too: because honors students tend to value achievement (Renzulli, 2002; Rice et al., 2006), it is possible that respondents could have rated their own performance and growth in a more positive light. Unfortunately, institutional and design limitations prevented the collection of these data. The combination of both discursive and quantitative results points to the course as a mechanism for fostering change in mentors, and it is to be hoped that, although the current study takes place in an honors program context, the results may translate to other higher education peer mentorship contexts. Future analyses could secure control groups to argue that honors peer mentorship is a singular, meaningful educational intervention.

Finally, it should be noted the program devotes significant resources to the success of the peer mentor experience. The facilitators' development is fostered through an intentional, yearlong process with guided reflection throughout: a spring training course, the facilitation experience itself in the fall, and a parallel fall practicum course, all with intensive reflective writing and group processing components (Ash & Clayton, 2009; Priest et al., 2015). The structure takes time and a financial commitment to initiate and maintain, which means it is all the more valuable that positive outcomes for mentors can be demonstrated. Peer-based practice cannot stop at hoping learning transpires between mentor and mentee; constant training, reflection, and meaning-

-making for mentors can be an invaluable part of their development, adding to the educational potential of peer mentorship programs.

Conclusion. Peer mentorship has the potential to transform honors mentors into more confident leaders, facilitators, and community members. Respondents in the analysis report higher levels of leadership efficacy, teaching efficacy, and sense of belonging to the honors program. Additionally, several narratives from respondents indicate the yearlong peer mentorship experience made them more empathetic, increased their abilities to manage group dynamics, and gave them a sense of purpose.

The peer mentorship experience makes a strong contribution to the institutional honors education framework. If honors programs and colleges endeavor to create citizens, scholars, and leaders ready to tackle complex, global problems (Chancey et al., 2019; Knapp et al., 2017), then peer mentorship's ability to generate efficacy makes a strong contribution toward this effort. Peer mentorship pays dividends for mentees, but is also a powerful learning opportunity for mentors. As undergraduate honors programs seek to develop their students' capacities at multiple points throughout the educational experience, peer mentorship may be a sound means of meeting such educational goals.

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