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Laura Holt

Trinity College, laura.holt@trincoll.edu

Melva Lopez

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Characteristics and Correlates of Supportive Peer Mentoring:
A Mixed Methods Study

Laura J. Holt and Melva J. Lopez, Department of Psychology, Trinity College, Hartford, CT.

Correspondence concerning this article should be sent to Laura.Holt@trincoll.edu. Please note that this is a post-print of the article. Article citation: Holt, L.J., & Lopez, M.J. (2014).

Characteristics and correlates of supportive peer mentoring: A mixed methods study. *Mentoring & Tutoring: Partnership in Learning*, 22, 415-432.

Abstract

In this mixed methods study, we employed thematic analysis (TA) to examine peer mentors' perceptions of benefits, challenges, and roles they experienced as mentors, as well as benefits and challenges experienced by first-year college students. We also utilized quantitative student ratings to classify mentors as highly, moderately, or minimally supportive in order to determine whether any subthemes from the TA appeared more or less frequently across the three groups. Highly supportive mentors reported greater camaraderie among their seminar students and fewer unmotivated students, but also fewer opportunities to provide support to students. Moreover, mentors' and students' perceptions in the minimally supportive group were discrepant; mentors in this group consistently reported that they provided more support than was perceived by mentees.

Keywords: peer mentoring, mentor support, qualitative analysis, mentor-mentee discrepancy, first-year college students

Mentoring programs have been implemented in institutions of higher education worldwide in order to facilitate first-year student adjustment, increase retention, and improve new students' academic performance (Jacobi, 1991). Peer mentoring in particular is employed frequently on college campuses given that, compared to faculty and administrators, peer mentors may be more accessible and relatable to first-year students, thereby inviting more candid and consistent communication between students and their mentors (Alexitch, 2006; Hall & Jaugietis, 2011; Holt & Berwise, 2012; Kram & Isabella, 1985). The type(s) of assistance provided by peer mentors varies by program; however, most peer mentors provide academic support, such as course tutorials, help with exam preparation, and writing assistance, in addition to psychosocial support, such as the coordination of social events meant to enhance students' sense of connection to one another and to the mentor (see Heirdsfield, Walker, Walsh, & Wilss, 2008, for a review).

Purpose Statement

Despite the ubiquity of these programs, research on the process and outcomes of peer mentoring lags behind research on more traditional mentoring programs in collegiate and secondary school settings. Few studies have employed a mixed-methods approach to evaluate both the process and outcomes of peer mentoring; still fewer have collected data from both mentors and mentees using a conceptually grounded measure of college mentoring. Accordingly, in the current study, we aimed to extend the literature by examining in-depth accounts of mentor-mentee relationships, so as to elucidate peer mentors' roles and determine how supportive mentoring relationships were distinctive from less supportive relationships. We also drew on quantitative data to evaluate the alignment between peer mentors' and mentees' perceptions of relationship quality and correlates of misalignment.

Literature Review

In her seminal article on the shortcomings of mentoring research in collegiate settings, Jacobi (1991) highlighted the need for more clarity and precision in the definition of mentoring and more research into the dynamics of mentor-mentee relationships. In response to the need for a more precise definition of mentoring, Crisp (2009) and Nora and Crisp (2007) proposed a conceptual model of college mentoring informed by educational, psychological, and business theories. Specifically, they proposed four key activities or roles of college mentors: *psychological and emotional support*, which involves the mentor carefully listening, providing moral support, encouragement, and engaging in problem identification with the mentee; *degree and career support*, where a mentor helps a mentee to envision personal and professional goals and means to achieve them; *academic subject knowledge support*, whereby a mentor assists a mentee with the acquisition of content knowledge; and *existence of a role model*, meaning the mentee can emulate the mentor's behavior and also learn from a mentor's successes and failures. Although this model is the most comprehensive to date, it is unknown whether it can account for the activities undertaken in peer mentoring relationships.

In an attempt to specify the roles enacted by peer mentors in college settings, Colvin and Ashman (2010) utilized a grounded theory approach to analyze data from peer mentors, mentees, and instructors. They identified three roles that were aligned with those described by Crisp (2009), but also two roles that were distinct. Nearly one half of Colvin and Ashman's sample described the peer mentor as a "learning coach," which involved the mentor teaching students academic skills and strategies. This role was closely aligned with Crisp's *academic subject knowledge support*. "Peer leader," which referred to the mentor serving as a role model, and "trusted friend," which referred to mentees being able to confide in their mentors, were present in equal frequency (10 percent) and aligned with Crisp's roles of *existence of a role model* and

psychological/emotional support, respectively. However, the second most common role (25 percent) reported by Colvin and Ashman, namely that of a liaison between the student and instructor (i.e., “student advocate”) likely is unique to peer mentoring relationships. “Connecting link” which referred to mentors’ efforts to introduce students to campus resources (20 percent), also was not encompassed by Crisp’s model. In light of both the overlap and differences between Crisp (2009) and Colvin and Ashman’s research, more research on the functions performed by peer mentors is needed to form a more precise definition of peer mentoring in college settings.

In recent years, research on the process of peer mentoring and the mentor-mentee relationship has become more prevalent, largely taking the form of qualitative studies of peer mentors’ experiences with their mentees. These studies have revealed that peer mentors stand to benefit considerably from their experience, but also face numerous common challenges. Interestingly, despite the fact that most peer mentor programs have an academic focus, one benefit identified in nearly every study was enhanced interpersonal skills, such as better communication, listening, and assertion skills for the mentor (Good, Halpin, & Halpin, 2000; Hall & Jaugietis, 2011; Harmon, 2006; Heirdsfield et al., 2008; Hill & Reddy, 2007; Kiyama & Luca, 2013; National Resource Center, 2009, Reyes, 2011). Relatedly, in numerous studies, mentors reported enjoying the ability to expand their social network by forming new relationships with groups such as students (mentees), other mentors, faculty, and administrators (Good et al., 2000; Heirdsfield et al., 2008; Hill & Reddy, 2007; Holt & Berwise, 2012; Kiyama & Luca, 2013, National Resource Center, 2009, Reyes, 2011).

Peer mentors also report improvements in their academic skills, including sharper critical-thinking and problem-solving skills, better study skills (Good et al., 2000), and improved writing and presentation skills (National Resource Center, 2009), likely because these are the

very skills they are helping their mentees to develop. Improved time management and organizational skills also have been consistent themes in mentors' reflections (Hall & Jaugietis, 2011; Harmon, 2006; National Resource Center, 2009), which relates to a larger theme of enhanced self-awareness (Harmon, 2006; Hill & Reddy, 2007). Other reported benefits, such as enhanced awareness of social justice issues (Kiyama & Luca, 2013), leadership skills (Good et al., 2000), or group-guidance skills (Skaniakos, Penttinen, & Lairio, 2014) may be more program-specific, but significant nonetheless. The numerous common themes that have emerged from these studies are notable given the heterogeneity in program structure, curriculum, and program participants.

Peer mentors also report several common challenges, the most frequent of which are finding it difficult to establish and sustain contact with their mentees and getting their mentees to use them as a resource (Colvin & Ashman, 2010; Heirdsfield et al., 2008; Hill & Reddy, 2007; Holt & Berwise, 2012). A different but related challenge is mentees relying *too* heavily on mentors for academic assistance (Christie, 2014; Colvin & Ashman, 2010). Other common frustrations include mentees disregarding their mentor's advice, mentees' lack of engagement or academic motivation, and mentors balancing their myriad responsibilities (Colvin & Ashman, 2010; Heirdsfield et al., 2008; Holt & Berwise, 2012). It is surprising that only a few recent studies have examined challenges associated with serving as a peer mentor, since research on this topic is needed to provide mentors with a realistic preview of their position and adequate training. Moreover, no studies to date have explored whether certain characteristics of the mentor-mentee relationship are associated with better or worse mentee outcomes. For example, do mentees evidence lower academic achievement when they disregard their mentor's advice or when mentors experience difficulty establishing close relationships with them? Research

exploring this and related questions may illuminate which aspects of the mentor-mentee relationship require the most attention in mentor training and supervision.

Another way to further probe the dynamics of the mentor-mentee relationship is to examine the alignment between mentors' and mentees' perceptions of support and whether a lack of alignment is associated with poorer mentee outcomes. Although several studies have incorporated mentees' perspectives in their investigations of peer mentor activities and experiences (Colvin & Ashman, 2010, Hill & Reddy, 2007), few studies have employed parallel mentee-mentor assessments so as to permit direct comparisons between the two raters (Holt & Berwise, 2012). Doing so may prove valuable as research in organizational settings has shown that mentees reported better relationship effectiveness, career development, and psychosocial support when mentors *underestimated* their leadership skills (i.e., their ratings were lower than those given by mentees) (Godshalk & Sosik, 2000) and that job satisfaction and organizational commitment was highest when mentee and mentors' assessments of psychosocial support were similar (Waters, 2004). In a college setting, higher concordance between mentors' and mentees' ratings of working alliance (i.e., goals and bonding) predicted more positive change in mentees' academic competence, class engagement, academic help-seeking, and academic persistence (Larose, Chaloux, Monaghan, & Tarabulsky, 2010). Similar to the findings of Godshalk and Sosik (2000), Holt and Berwise (2012) reported that first-year college students evidenced lower grades when their peer mentor overestimated the amount of support s/he provided. Interestingly, in this study, mentor and mentee reports of support correlated significantly; however, all mentors reported providing a higher level of support than was perceived by students. Taken together, these findings suggest that consistency between mentors' and mentees' reports of support may be a crucial component of supportive peer mentor relationships. Furthermore, when mentors

overestimate the amount of support they are providing, this may set the stage for poorer mentee outcomes.

Research Approach and Questions

In the current study, we aimed to advance the literature on collegiate peer mentoring in several ways: First, we recruited a markedly larger sample than most previous studies of peer mentors, so as to capture a wider range of peer mentors' experiences. Second, we drew on both qualitative and quantitative data from mentors and students; specifically, we utilized quantitative data from first-year students to classify peer mentors as highly, moderately, or minimally supportive. After making these classifications, we examined whether any of the subthemes from the qualitative analyses of mentors' reflections appeared more/less frequently across the three support groups, so as to illuminate any distinguishing characteristics of higher and lower functioning mentor-mentee relationships. The large amount of qualitative data also afforded us the opportunity to identify challenges related to the mentor-mentee relationship, a topic that has received minimal attention in the mentoring literature, perhaps on account of the *assumption* that mentoring enhances mentors', mentees', and institutional functioning (Christie, 2014). Third, we evaluated the extent to which the five peer mentor roles identified by Colvin and Ashman (2010) (e.g., learning coach, trusted friend) were apparent in our sample and whether any of these roles were reported more/less frequently for highly, moderately, or minimally supportive mentors. Finally, we explored the dynamics of the mentoring relationship by examining whether mentors' and mentees' reports of support were correlated and/or whether one party reported higher ratings than the other.

To our knowledge, this is the first study to examine whether students' ratings of their mentors are associated with qualitatively different experiences as reported by mentors;

accordingly, we did not make any *a priori* hypotheses about which subthemes would be more prominent among mentors who were characterized as providing higher, moderate, or lower levels of support. With respect to peer mentor roles, we expected the greatest number of mentors to identify their role as that of a “learning coach,” both because our mentoring program had an academic focus and because this was the most frequent role reported by Colvin and Ashman (2010). Finally, based on the research of Holt and Berwise (2012), we hypothesized that mentors’ and mentees’ support ratings would be correlated but that mentors’ ratings would be higher than those of mentees’.

Method

Program Description

All first-year students were matched with a peer mentor(s) through their first-year seminar, which was a writing intensive course during the fall semester at a small, private liberal arts college in the northeastern United States with an average of 14.65 ($SD=2.55$) students per seminar. We included two cohorts of mentors and students from consecutive years to maximize our sample size; the cohorts did not differ on any of the study variables. Typically, seminars had one peer mentor, although a small percentage (15% in Year 1 and 18% in Year 2) had two peer mentors. Candidates for the peer mentorship were selected based on their academic skills and achievement (e.g., GPA, writing skills, verbal communication skills) and their leadership and interpersonal skills (e.g., responsibility, maturity, and sensitivity). Their responsibilities included: serving as a liaison between the seminar instructor and the seminar students, familiarizing students with campus resources, commenting on students’ writing, assisting students with course selection, offering emotional support, and planning social events. Mentors received training over two days prior to the start of the semester; first-year program faculty provided additional support throughout the semester during 75-minute, biweekly colloquia. In

these sessions, mentors engaged in problem-solving and were exposed to additional strategies/resources for assisting first-year students. The peer mentorship counted as 1.5 credits, which was equal to one and a half courses.

Participants

Mentors. Nearly all (98%) of the peer mentors from Years 1 and 2 participated (one refused and one did not submit a final report), yielding a total of 91 peer mentor records. However, the final sample for the qualitative analysis consisted of 78 mentor records given that one reflection from each of the two-mentor seminars ($n=13$) had to be excluded randomly to ensure that a single seminar was not represented twice. One mentor from Year 2 did not rate him/herself at the end of the semester, so a mentor-mentee discrepancy score could not be calculated. However, because this mentor submitted a final reflection and his/her mentees rated him/her, these data were included. A small percentage ($n=5$, 11%) of mentors from Year 2 previously served as first-year mentors in Year 1. Only Year 2 demographic data were retained for these mentors; however, their reflections from both years were included given that all but one of the mentors mentored for a different seminar and professor from Years 1 to 2. The sample was 71% female, the mean age was 20.53 ($SD = 0.92$), and mentors reported their race/ethnicity as: 81% White, 9% Asian, 4% Black, 4% Hispanic, and 2% other. Over two thirds (71%) were in their last year of college, 16% were in their third year, and 13% in their second year.

Mentees. In Year 1, 518 of the 557 eligible first-year students completed ratings of their peer mentor(s) and thus were eligible for inclusion in the current study. In Year 2, 549 of the 587 eligible first-year students completed ratings of their peer mentor, for a total of 1067 first-year students (93% participation rate overall). The anonymous nature of the ratings precluded us from pinpointing the demographic characteristics of mentees. However, given that a large percentage

of the class submitted evaluations, the sample likely was similar to the first-year class (51% female; 67% White, 9% non-resident alien [this includes students on a visa, but not dual citizens or US citizens raised abroad], 6% Black, 8% Hispanic, 4% Asian, 4% unknown, and 3% other).

Measures

Mentor-mentee relationship quality – Mentee report. The College Student Mentoring Scale (CSMS; Crisp, 2009) was used to assess first-year students' perceptions of how their mentor assisted them. We made several modifications to the CSMS to ensure its relevancy to our program: we excluded the Degree and Career Support subscale items; we added nine new items related to advising (e.g., "She/he was helpful when I needed to choose courses for the spring semester."), closeness (e.g., "I trusted him/her."), and approachability (e.g., "My mentor was available and approachable outside of the seminar."); and, we added the phrase "for the first year" or "first-year seminar" to three items (e.g., "helped me work toward achieving my academic aspirations *for the first year*"). Mentees responded on a 5-point scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Because Crisp (2009) found that the CSMS subscales were highly correlated and a higher-order factor analysis of the CSMS showed that the different types of support were recognized as a second-order construct of "mentoring", a total CSMS score was obtained by averaging all 27 items ($\alpha = .98$).

Mentor-mentee relationship quality – Mentor report. We administered a parallel version of the CSMS for first-year mentors ($\alpha = .90$) so that we could draw a direct comparison between mentors' and mentees' reports. In contrast to the mentee form, which referenced the mentee's individual mentor, the mentor form instructed mentors to think about how they were perceived by all of their mentees. The questions were modified to reflect this difference (e.g., "My mentees admired me" versus "I admired him/her").

Mentor-mentee report discrepancy. Consistent with the approach of Waters (2004), we subtracted mentees' CSMS scores from mentors' CSMS scores, resulting in a mentor-mentee difference score for each seminar. Positive values indicated the mentor reported providing more support than mentees reported receiving, whereas negative values indicated that mentees reported higher mean levels of support.

Mentor-mentee contact. Using a 5-point Likert-type scale: 1 = *Never* to 5 = *More than 8 times*, mentees reported how much contact they had with their mentor outside the seminar class during the semester. The average amount of mentor-mentee contact outside of the seminar was: Never, 5%; 1-2 times, 29%; 3-5 times, 32%; 6-8 times, 14%; and more than 8 times, 20%.

Mentees' academic performance. We obtained the mean grade for each seminar from institutional records. There was a slight bias in this measure given that the mean grade reflected all students' grades in each seminar, yet a small percentage of mentees (7%) did not rate their mentor. The mean grade was a 3.31 ($SD = .25$) on a 0 (F) to 4.33 (A+) scale.

Peer mentor reflections. As part of their final assignment, mentors provided written responses to five open-ended reflection questions, namely (1) To what extent was your experience as a mentor consistent with, or different from your earlier expectations? (2) Which aspect(s) of mentoring was most challenging or frustrating? (3) Which aspect(s) of mentoring was most rewarding and why? (4) Which aspects of the transition from high school to college seemed to be most difficult for your mentees? Did you feel adequately prepared to assist them with those issues? What type of support/information could the first-year program have provided to you that might have helped you to feel even more prepared? (5) Did your experience as a mentor lead you to approach your own academic work differently? If so, how? In order to create the reflection questions, we took Jacobi's (1991) suggestions into account, as well as key themes

identified by Heirdsfield et al. (2008), Hill and Reddy (2007), and Storrs, Putsche, and Taylor (2008).

Procedure

Mentors filled out a paper form of the CSMS during their final peer mentor colloquium and submitted their written reflections at the end of the semester; all identifying information in the reflections was deleted prior to data analysis. Mentors were entered into a drawing for a gift certificate to an online merchant for participating in the study. As part of their first-year seminar evaluation, first-year students completed the CSMS at the end of the first semester. Most students ($n = 1054$) completed the survey online; one instructor elected to use an in-class course evaluation and, thus, a small number ($n = 13$) of student evaluations were completed on paper.

Data analysis

Qualitative analysis. Thematic analysis (TA) is a qualitative data analytic approach that allows researchers to identify and describe emerging patterns within a dataset (Braun & Clarke, 2006). This technique was utilized to analyze the content of peer mentors' reflections. We largely employed an inductive approach to TA, in that our identification of the themes and subthemes was informed by the data, as opposed to theory (Braun & Clarke, 2006). However, in examining the different roles occupied by mentors, we employed a theoretical approach; that is, because we wished to evaluate the prevalence of the five peer mentor roles identified by Colvin and Ashman (2010), we utilized these researchers' specific codes and definitions when identifying mentor roles in our data.

We followed the steps for TA recommended by Braun and Clarke (2006): First, we (the two authors) independently reviewed all of the mentors' final reflection reports. Second, we developed initial codes based on this review. In the third step, we agreed upon two distinct

themes, namely: (1) *benefits of mentoring* and (2) *challenges of mentoring* and created a map of subthemes, or codes falling under each of the two larger themes. Fourth, we reviewed and refined the codes, which led us to collapse some of the codes into one subtheme. For example, we initially coded mentees' difficulty with college level writing and their difficulty adjusting to expectations for higher quality work as separate codes (subthemes), but opted to collapse them into the subtheme of "adjusting to academic rigor of college." During this phase, we also elected to eliminate some subthemes (e.g., mentees expressing gratitude to mentors) because they were not adequately patterned. In the finalized coding framework, we retained subthemes with frequencies >10%. Although Braun and Clarke (2006) discourage the use of cutoffs based on frequencies, this cutoff allowed us to focus on a reasonable number of subthemes that elucidated distinct, yet patterned aspects of the mentoring experience. In step five, we further refined the names of the subthemes to ensure that they captured the essence of mentors' quotes. It was during this stage that both coders (the two authors) independently coded all of the data and, following this independent coding, we calculated inter-rater reliability using percent agreement and Cohen's kappa coefficients. The calculations yielded an overall robust inter-rater reliability, with an average agreement of 89% and an average kappa coefficient of 0.78, which is regarded as a "substantial" level of agreement, according to Landis and Koch (1977, p. 165). We resolved disagreements through discussion until a consensus was reached. All data were coded using the qualitative data analysis software *Atlas.ti* Version 6.

Creation of support subgroups. Three groups of mentors (i.e., highly, moderately, and minimally supportive) were created by sorting the 78 CSMS-Mentee Report mean scores from highest to lowest, then dividing the scores into tertiles, yielding three groups of 26 mentors. We made these classifications only after we had coded all of the qualitative data and resolved coding

disagreements. We classified mentors based on mentees' CSMS scores given that previous research demonstrated that mentee, rather than mentor reports of relationship quality were better predictors of mentee outcomes (Goldner & Mayseless, 2009).

Results

Thematic Categories and Subthemes

Reported benefits. Table 1 lists the subthemes and respective frequencies that we identified from the TA of peer mentors' reflections. In terms of benefits, nine subthemes emerged. Mentors noted that providing assistance to their mentees (58%) and seeing them improve throughout the semester (42%) were two of the most rewarding aspects of mentoring. One mentor stated:

"It felt great to see them employ different methods I had taught them and really see them excel."

Another frequently reported benefit was the formation of close relationships with their mentees, a subtheme reported by more than half of mentors (51%), as exemplified by this statement:

"The most rewarding part of being a mentor by far was the relationships I developed with the students in the seminar."

Mentors not only enjoyed forming relationships with students, but also witnessing the formation of relationships among students. About a fifth (19%) of mentors reported that observing camaraderie among their seminar students made mentoring markedly more enjoyable.

The remaining five subthemes related to personal benefits mentors gained from their mentoring experience. Almost half of mentors reported improved time management (40%) and improved writing skills (29%), which they largely attributed to their efforts assisting students in these areas. Over a third of mentors (37%) stated that their self-awareness in regards to their own academic and social integrity had been heightened, as indicated by this quote:

"I also held myself to a very high standard so that I didn't feel like a hypocrite for preaching about responsibility, integrity, and self worth in education."

Finally, a smaller percentage of mentors reported enjoying opportunities to teach and develop class material (21%), as well as forming a relationship with the seminar instructor (14%).

Reported challenges. Mentors not only identified challenges they experienced directly, but also challenges experienced by their mentees (Table 1). We identified ten subthemes within this theme – it was notable that the three most prevalent subthemes related to challenges mentees experienced adjusting to college, as observed by mentors. Nearly two-thirds (64%) reported that their mentees had difficulty adjusting to the academic rigor of college (i.e., increased workload and higher standards for their work), as evidenced by this statement:

“It seemed clear to me that the hardest aspect of the high school to college transition for my mentees was getting used to the volume and the expected quality of college work”.

Likewise, mentors perceived mentees as lacking organizational skills (62%), especially when it came to balancing their time between academic demands and deadlines, leisure activities, and extracurricular commitments (e.g. athletics). Another prominent challenge reported by nearly half of mentors (46%) was an apparent lack of motivation among their mentees, which was reflected by mentors’ statements about mentees’ inadequate seminar participation, lack of responsiveness to mentors’ e-mails, and inconsistent attendance to class and scheduled meetings. Twenty mentors (26%) reported social adjustment issues among their mentees, such as difficulty establishing friend groups and persistent feelings of homesickness.

With respect to challenges mentors experienced directly, numerous mentors (39%) indicated that mentees often failed to use them as a resource, as exemplified by this statement:

“I was, however, expecting that students would constantly utilize me as a resource for paper reviews, editing, and advice, but that did not happen as much as I expected.”

Some mentors found it challenging to establish close relationships with their mentees (17%).

Even when mentors were able to offer support, it was not always well received, as evidenced by

mentors' perceptions that mentees were disregarding their advice (18%). Nearly a third of the sample (32%) indicated feeling unprepared to provide adequate assistance to students who required additional academic support or students who were experiencing transitional issues (e.g., desire to transfer). Twenty-eight mentors (36%) found it challenging to define their role(s) in terms of the type of support they were expected to provide (e.g., academic, personal) as well as defining boundaries between being a mentor and friend in their interactions with mentees outside of the classroom (e.g. at social events). A similar, though distinctive subtheme was the perception that mentoring responsibilities were very time intensive, which resulted in difficulties balancing responsibilities (23%). Specifically, mentors indicated that mentees often would require assistance outside of the mentor's designated office hours, which impinged upon the mentor's ability to complete his/her work.

Mentor roles. With respect to the roles described by Colvin and Ashman (2010), our analysis confirmed the prediction that "learning coach" would be the most frequently reported theme (96%). Almost all mentors indicated that they provided academic assistance often in the form of editing students' papers and reviewing course content. The role with the second highest frequency was "trusted friend", endorsed by 56% of the mentors. "Connecting link" had a frequency of 41%, followed by "peer leader" (27%), and "student advocate" (15%) (Table 1).

Comparison of support groups. Table 2 shows the comparison of the higher, moderate, and lower support groups in terms of the quantitative study variables and student enrollment. The groups did not differ with respect to mentors' self-ratings of support, mentees' seminar grades, and student enrollment. However, as expected, the high support group showed the highest mentee ratings, the moderate support group reported moderate ratings of support, and the lower support group evidenced the lowest levels of mentee-reported support [$F(2, 75) = 174.33, p <$

.001]. Moreover, the lower support group evidenced more variation in mentee rating scores as compared to the other two groups [$F(2, 75) = 8.23, p = .001$] (Table 2). A similar pattern emerged for mentor-mentee contact, such that the lower support group evidenced the lowest level of mentor-mentee contact; however, the high and moderate support groups did not differ [$F(2, 75) = 19.23, p < .001$] (Table 2).

With respect to the frequencies of the subthemes by support group, we observed three instances in which the groups differed significantly. As displayed in Table 1, mentors who were rated as highly supportive reported the fewest instances of lack of student motivation; the low- and moderate-support groups did not differ [$\chi^2(2, N = 78) = 23.21, p < .001$]. On the other hand, mentors in the lower support group reported providing assistance more often than those categorized as moderately or highly supportive [$\chi^2(2, N = 78) = 5.99, p = .05$]. Lastly, mentors in the high support group endorsed observing camaraderie among their mentees more often than mentors who were rated as moderately supportive, although highly supportive mentors did not differ from less supportive mentors on this subtheme [$\chi^2(2, N = 78) = 10.40, p < .01$].

Correlations of continuous study variables. We correlated mentee ($M = 3.95, SD = .38$) and mentor ($M = 4.32, SD = .32$) ratings of perceived mentor support, mentor-mentee discrepancy of perceived mentor support ($M = 0.36, SD = .45$), level of mentor-mentee contact ($M = 3.15, SD = .51$), and mentees' mean seminar grades ($M = 3.31, SD = .25$). Mentor-mentee contact was strongly and positively correlated with the mentees' ratings of perceived mentor support ($r = .65, p < .01$) and inversely correlated with mentor-mentee report discrepancy ($r = -.45, p < .01$). Both mentee and mentor ratings of perceived mentor support showed no correlation with the mentees' mean seminar grades. Likewise, mentor-mentee discrepancy of perceived mentor support and the level of mentor-mentee contact showed no correlation with mentees'

mean seminar grades; however, mentor-mentee discrepancy scores were highest in the minimally supportive group [$F(2, 74) = 24.14, p < .001$] (Table 2). Contrary to our hypothesis, mentee and mentor ratings of perceived support were not correlated; however, mentors reported providing more support than was perceived by mentees [$t(153) = -6.61, p < .001$], which was consistent with our hypothesis.

Discussion

Our qualitative analysis of mentors' reflections yielded a rich collection of subthemes and peer mentor roles that largely were consistent with previous research, albeit with different frequencies. For example, with respect to benefits reported by mentors, we found that a large percentage of mentors enjoyed providing assistance to, and forming personal relationships with mentees, which was consistent with previous research (Good et al., 2000; Heirdsfield et al., 2008; Hill & Reddy, 2007; Holt & Berwise, 2012; Kiyama & Luca, 2013, National Resource Center, 2009, Reyes, 2011), as was our subtheme of improved writing skills (National Resource Center, 2009). Mentors' perceived improvement in their organizational skills also was consistent with prior research (Harmon, 2006; National Resource Center, 2009), as was the subtheme of enhanced self-awareness (Harmon, 2006; Hill & Reddy, 2007). Developing teaching skills was another prominent subtheme among our mentors, which was similar to Harmon's (2006) research showing that mentors became increasingly able to adapt to different mentee skills and personalities and more comfortable communicating with mentees in a group setting. Our latter two subthemes of observing camaraderie among mentees and forming a relationship with the seminar instructor were consistent with an earlier report from our research group (Holt & Berwise, 2012), likely because both programs were structured around a first-year seminar experience, which might have afforded more opportunities for these benefits to emerge. Contrary

to previous research, our mentors did not report enhanced listening or assertion skills. This finding may reflect the fact that these skills were not emphasized as much as in other programs; alternatively, mentors might not have had ample time to recognize their development of these specific skills.

With respect to mentor challenges, our findings were consistent with previous studies showing that mentors had difficulties establishing relationships with their mentees and felt underutilized (Colvin & Ashman, 2010; Heirdsfield et al., 2008; Hill & Reddy, 2007; Holt & Berwise, 2012). Lack of motivation among mentees and the significant time commitment required to mentor were two other prominent challenges reported in this and other studies (Colvin & Ashman, 2010; Heirdsfield et al., 2008; Holt & Berwise, 2012), suggesting that these are critical issues to address during mentor training. Mentors' difficulty defining their role was consistent with the findings of Storrs et al. (2008). We also identified numerous challenges not reported previously in the literature related to mentees, such as: difficulty adjusting to the academic rigor of college; a lack of organizational skills; and difficulties with social adjustment. These distinct subthemes likely emerged because our study inquired about mentors' perceptions of their mentees' transition to college. Despite not being about the mentors specifically, mentors may benefit from learning about the challenges their mentees are likely to face so that they can proactively formulate strategies to assist their mentees.

In regards to the roles identified by peer mentors, all five roles described by Colvin and Ashman (2010) (i.e., learning coach, trusted friend, connecting link, peer leader, and student advocate) were apparent within our mentors' reflections and captured the varied responsibilities our mentors discussed. However, the frequencies of the first four roles were markedly higher in our study. This difference might have been due to the fact that Colvin and Ashman analyzed data

from mentors, students, and instructors, whereas we focused exclusively on mentors, who might have been more cognizant of their multiple roles. Consistent with Colvin and Ashman, we found that “learning coach” was the most frequent role identified by mentors. Our findings also were consistent with Christie (2014), who reported that 83% of mentees identified *academic skill enhancement* as a critical outcome from their work with a peer mentor. With respect to “student advocate”, Colvin and Ashman (2010) might have found a higher prevalence for this role if their program placed more emphasis on mentors serving as a liaison.. However, based on their description of “student advocate” as “helping the students with their academic and personal needs”, it is also possible that we coded our data related to these topics as “learning coach” or “trusted friend,” (p. 127).

When considering the relevance of Crisp’s conceptual model to peer mentoring specifically, both our study and Colvin and Ashman’s study found evidence for three of Crisp’s (2009) mentor roles (i.e., psychological/emotional support, existence of a role model, academic subject knowledge support); however, our studies also highlight the significance of the liaison role (“student advocate”), as well as the “connecting link” role. These roles may be unique to peer mentors because they can better assist students in navigating relationships with faculty and may be more knowledgeable about campus opportunities and resources. We did not find evidence for the degree/career support identified by Crisp (2009), which may reflect the fact that many peer mentors work with first-year students. Nonetheless, peer mentors may still play an important role in advising students around course selection, as was the case in our study.

It was surprising that the highly, moderately, and minimally supportive groups differed on only 3 of the 19 subthemes and showed no difference in the roles mentors enacted. Mentors who were rated as being the least supportive reported significantly *more* instances of providing

assistance to their mentees. Along with that benefit, however, came the challenge of more often perceiving their mentees as unmotivated. Perhaps mentors in this group attempted to provide assistance when they noticed their mentees were disengaged and, in turn, mentees perceived this support as unwanted or irritating and thus rated their mentor more unfavorably (Holt & Berwise, 2012). This explanation is not corroborated by the quantitative data, however, which showed the lowest rates of mentor-mentee contact in the minimal support group. Although mentor-mentee contact did not correlate with mentee academic performance in the current study, the importance of contact should be underscored, given that it distinguished our highly and moderately supportive mentors from less supportive mentors, and because prior research has shown that more sessions with a mentor was associated with more effective mentoring (Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011) and better academic performance in mentees (Campbell & Campbell, 1997; Rodger & Tremblay, 2003). A final way in which the support groups were distinctive was the more noticeable mentee camaraderie observed by highly supportive mentors. While it is possible that students in these seminars were more compatible at the outset, mentors in these seminars might also have offered more opportunities for students to connect with one another and with the mentor outside the seminar. Or, camaraderie might be more likely to develop if students were more academically motivated, thus allowing the mentor and instructor to focus on social activities. We are cautious in interpreting these findings, however, given that the less supportive mentors reported a moderate rate of camaraderie.

Our quantitative analyses showed that the majority of mentors overestimated the amount of support they provided to their mentees, which was consistent with Holt and Berwise (2012), Larose et al. (2010), and Waters (2004). Moreover, these overestimations were more common in the minimally supportive group. These findings align with the qualitative data, in that the

minimally supportive mentors reported providing assistance more often to their mentees, but perhaps due to lack of mentee engagement, mentees did not notice or recognize the significance of their mentors' offers to help. Another possibility is that minimally supportive mentors provided a high degree of support to a few students (thereby explaining the high support scores from mentors), but were still perceived as less supportive overall when their mentees' support scores were aggregated. This explanation is supported by our finding that minimally supportive mentors evidenced greater *variation* in their mentees' support scores compared to the two other groups.

Mentors' and mentees' perceptions of support were not correlated, which was discrepant with Holt and Berwise (2012), but consistent with studies on youth mentoring (Goldner & Mayseless, 2009; Herrera, 2004; Karcher, Nakkula, & Harris, 2005). Overall, differences in mentor-mentee reports might have been due to the fact that people's self-ratings often are higher than others' ratings of them (Yammarino & Atwater, 1997). Or, perhaps in group mentoring, mentors report higher levels of support given that they are assisting many students at a time (Holt & Berwise, 2012). The near perfect correspondence between mentor-mentee reports of support in the highly supportive group, however, does not support this explanation.

Limitations

Several limitations of our study are of note. First, our findings may not be generalizable to peer mentors and first-year students at other institutions of higher education (e.g. public universities, community colleges). Presumably, the challenges faced by first-year students at a private residential college (e.g., homesickness) may differ from those faced by students at dissimilar institutions. Second, because we analyzed mentors' written reflections and did not conduct interviews or focus groups, we could not probe mentors' responses. Therefore, we likely

did not capture all of the benefits, challenges, and roles the mentor experienced, and mentors with a high level of verbal fluency might have been overrepresented in our analyses. Regardless of this limitation, we believe there is substantial value in analyzing mentors' spontaneous responses to open-ended questions, as this approach allows us to discern which ideas are most accessible to mentors and characterize the narrative of their mentoring experience.

Recommendations for Future Research

To build on the existing research, future studies might examine mentees' narrative reports about their experiences to determine which themes characterize more supportive relationships. Although several studies have incorporated mentee input, these studies typically have included a small number of mentees, limiting our understanding of the scope of mentor-mentee relationships. Future research also might explore whether the five roles identified by Colvin and Ashman are apparent in other peer mentor programs. If these roles are recurring in other studies, this information could inform the development of a new quantitative, conceptually-based measure of peer mentoring. Finally, given the lack of congruency between mentors' and mentees' perceptions, it would be interesting to test whether allowing mentees to provide mentors with feedback during the course of the semester could enhance mentees' felt support and mentors' ability to support them (Holt & Berwise, 2012). For example, mentees could indicate whether they desire more or less support in the domains of psychological/emotional, academic, or role model support. A formative assessment that addresses both parties' expectations of the mentor's role(s) could result in mentors enacting targeted changes in their behavior (Yammarino & Atwater, 1997) so that their outreach efforts are more consistent with mentees' needs and expectations.

Implications for Practice

Findings from the current study have several implications for the training and supervision of peer mentors in college settings: First, to enhance mentor recruitment and retention efforts, it might be advisable to explicitly note in recruitment materials how peer mentors may benefit academically, personally, and professionally. Research has shown that mentors largely are unaware of these benefits (Harmon, 2006), so articulating them might attract a broader and even more qualified pool of candidates. At the same time, there should be “truth in advertising” with respect to the time intensive nature of the position and other potential challenges (e.g., not being used as a resource, working with students who are unmotivated or disorganized, etc.) (Strapp, Gilles, Spalding, Hughes, Baldwin, Guy, K. L., ... & Lamb, 2014, p. 205). In support of this idea, Hall and Jaugietis (2011) noted that having prospective peer mentors attend an informational session prior to the interview and selection process was one important innovation that likely accounted for an increase in perceived helpfulness of mentors as reported by mentees.

In light of the challenges identified by our mentors and those in other studies, close attention should be paid to helping mentors define their role(s). Not only should mentors be clear about their role(s), but they also should work with mentees and instructors/supervisors to ensure that role expectations are aligned. As aforementioned, if a quantitative measure of peer mentor roles and activities were to be developed, mentors, mentees, and instructors/supervisors could use this measure at the outset to discuss expectations for the prioritization of roles in a particular program. Also in the realm of challenges, mentors should be prepared for the fact that mentees might not seek them out and/or might be academically disengaged. Mentors may find it particularly challenging to work with disengaged mentees given that mentors often are selected on account of their high level of achievement. If mentors find themselves exerting considerable effort to engage mentees to no avail, this experience could be a valuable sign for mentors to

solicit feedback from mentees about the type(s) of support mentees desire most. Closing the gap between mentors' and mentees' perceptions may be especially important in cases where mentees seem disengaged, or where mentors are having difficulty establishing contact with their mentees. Also, given the apparent significance of camaraderie among mentees in our study, the mentor might aim not only to increase mentor-mentee contact, but also mentee-mentee contact, if the mentor is working within a group mentoring model.

More generally, it seems critical for personnel designing and administering peer mentor training/supervision to describe common challenges experienced by mentors (and those their mentees are likely to face as well) (Holt & Berwise, 2012). If mentors are aware of these challenges, they may be less likely to internalize them and more likely to collaborate with others to devise solutions. In conclusion, although only a small number of differences between our most and least supportive mentors were apparent, our findings suggest that mentors and mentees have differing perceptions of the mentoring relationship and mentees' lack of felt support likely is not due to lack of effort on the part of the mentor. Finding effective ways to close the gap between mentors' and mentees' expectations for mentor support and designing and validating a quantitative measure of peer mentor roles and support are important next steps to improve the mentoring experience both for mentors and mentees.

References

- Alexitch, L. R. (2006). Help seeking and the role of academic advising in higher education. In S. A. Karabenick & R. S. Newman (Eds.), *Help seeking in academic setting: Goals, groups, and contexts*. (pp. 175-202). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.
- Campbell, T. A., & Campbell, D. E. (1997). Faculty/Student mentor program: Effects on academic performance and retention. *Research in Higher Education, 38*(6), 727-742.
- Christie, H. (2014). Peer mentoring in higher education: issues of power and control. *Teaching in Higher Education, 19*(8), 955-965.
- Colvin, J. W., & Ashman, M. (2010). Roles, risks, and benefits of peer mentoring relationships in higher education. *Mentoring & Tutoring: Partnership in Learning, 18*, 121-134.
- Crisp, G. (2009). Conceptualization and initial validation of the college student mentoring scale (CSMS). *Journal of College Student Development, 50*, 177-194.
- Good, J. M., Halpin, G., & Halpin, G. (2000). A promising prospect for minority retention: Students becoming peer mentors. *Journal of Negro Education, 69*, 375-383.
- Godshalk, V. M., & Sosik, J. J. (2000). Does mentor-protégé agreement on mentor leadership behavior influence the quality of a mentoring relationship? *Group & Organization Management, 25*(3), 291-317.
- Goldner, L., & Maysel, O. (2009). The quality of mentoring relationships and mentoring success. *Journal of Youth and Adolescence, 38*, 1339-1350.
- Hall, R., & Jaugietis, Z. (2011). Developing peer mentoring through evaluation. *Innovative Higher Education, 36*(1), 41-52.

- Harmon, B. V. (2006). A qualitative study of the learning processes and outcomes associated with students who serve as peer mentors. *Journal of the First-Year Experience & Students in Transition, 18*, 53-82.
- Heirdsfield, A. M., Walker, S., Walsh, K., & Wilss, L. (2008). Peer mentoring for first-year teacher education students: The mentors' experience. *Mentoring & Tutoring: Partnership in Learning, 16*, 109-124.
- Herrera, C. (2004). *School-based mentoring: A closer look*. Philadelphia: Public/Private Ventures. Retrieved from http://www.ppv.org/ppv/publications/assets/180_publication.pdf
- Hill, R., & Reddy, P. (2007). Undergraduate peer mentoring: An investigation into processes, activities and outcomes. *Psychology Learning & Teaching, 6*, 98-103.
- Holt, L. J., & Berwise, C. A. (2012). Illuminating the process of peer mentoring: An examination and comparison of peer mentors' and first-year students' experiences. *Journal of the First-Year Experience & Students in Transition, 24*, 19-43.
- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research, 61*, 505-532.
- Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors' and mentees' assessments of relationship quality. *The Journal of Primary Prevention, 26*, 93-110.
- Kiyama, J. M., & Luca, S. G. (2013). Structured opportunities: Exploring the social and academic benefits for peer mentors in retention programs. *Journal of College Student Retention: Research, Theory and Practice, 15*, 489-514.
- Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in

- career development. *The Academy of Management Journal*, 28, pp. 110-132.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159-174.
- Larose, S., Chaloux, N., Monaghan, D., & Tarabulsky, G. M. (2010). Working alliance as a moderator of the impact of mentoring relationships among academically at-risk students. *Journal of Applied Social Psychology*, 40, 2656-2686.
- Leidenfrost, B., Strassnig, B., Schabmann, A., Spiel, C., & Carbon, C. (2011). Peer mentoring styles and their contribution to academic success among mentees: A person-oriented study in higher education. *Mentoring & Tutoring: Partnership in Learning*, 19, 347-364.
- National Resource Center for the First-Year Experience and Students in Transition. (2009). *Peer Leadership Survey*. Columbia, SC: University of South Carolina.
- Nora, A., & Crisp, G. (2007). Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *Journal of College Student Retention: Research, Theory and Practice*, 9, 337-356.
- Reyes, M. E. (2011). A sophomore-to-junior mentoring program that works: the SAM program at the University of Texas Pan American. *Journal of College Student Retention: Research, Theory and Practice*, 13(3), 373-382.
- Rodger, S., & Tremblay, P. F. (2003). The effects of a peer mentoring program on academic success among first year university students. *Canadian Journal of Higher Education*, 33(3), 1-17.
- Storrs, D., Putsche, L., & Taylor, A. (2008). Mentoring expectations and realities: An analysis of metaphorical thinking among female undergraduate protégés and their mentors in a university mentoring programme. *Mentoring & Tutoring: Partnership in Learning*, 16,

175-188.

Strapp, C. M., Gilles, A. W., Spalding, A. E., Hughes, C. T., Baldwin, A. M., Guy, K. L., ... &

Lamb, A. D. (2014). Changes in Mentor Efficacy and Perceptions Following Participation in a Youth Mentoring Program. *Mentoring & Tutoring: Partnership in Learning*, 22(3), 190-209.

Waters, L. (2004). Protégé-mentor agreement about the provision of psychosocial support: The mentoring relationship, personality, and workload. *Journal of Vocational Behavior*, 65, 519-532.

Yammarino, F. J., & Atwater, L. E. (1997). Do managers see themselves as others see them? Implications of self-other rating agreement for human resources management. *Organizational Dynamics*, 25(4), 35-44.

Table 1

Frequencies of Subthemes Identified in Peer Mentors' Reflections

	Frequency in	Frequency by Support Group		
	Overall Sample <i>n</i> (%)	<i>n</i> (% of utterances for subtheme)		
		Higher	Moderate	Lower
Benefits				
Providing Assistance to Mentees*	45 (57.7)	12 (26.7)^b	13 (28.9)^{a,b}	20 (44.4)^a
Personal Relationships with Mentees	40 (51.3)	12 (30.0)	16 (40.0)	12 (30.0)
Observing Improvement in Mentees	33 (42.3)	9 (27.3)	11 (33.3)	13 (39.4)
Improved Time Management	31 (39.7)	10 (32.3)	9 (29.0)	12 (38.9)
Greater Self-Awareness	29 (37.2)	10 (34.5)	10 (34.5)	9 (31.0)
Improved Writing	22 (28.6)	5 (22.7)	7 (31.8)	10 (45.5)
Developed Teaching Skills	16 (20.5)	7 (43.8)	3 (18.8)	6 (37.5)
Camaraderie among Mentees*	15 (19.2)	10 (66.7)^a	1 (6.7)^b	4 (26.7)^{a,b}
Relationship with Professor	11 (14.1)	5 (45.5)	3 (27.3)	3 (27.3)
Challenges				
Mentees Adjusting to Academic Rigor	49 (63.7)	13 (26.5)	18 (36.7)	18 (36.7)
Mentees' Lack of Organizational Skills	48 (61.5)	18 (37.5)	14 (29.2)	16 (33.3)
Lack of Motivation among Mentees*	36 (46.2)	2 (5.6)^b	17 (47.2)^a	17 (47.2)^a
Not Using Mentor as a Resource	30 (38.5)	10 (33.3)	8 (26.7)	12 (40.0)
Difficulty Defining Mentor Role	28 (35.9)	12 (42.9)	8 (28.6)	8 (28.6)
Providing Adequate Assistance	25 (32.1)	8 (32.0)	6 (24.0)	11 (44.0)
Mentees' Social Adjustment	20 (25.6)	7 (35.0)	4 (20.0)	9 (45.0)
Mentor Balancing Responsibilities	18 (23.1)	9 (50.0)	5 (27.8)	4 (22.2)
Disregarding Mentors' Advice	14 (17.9)	6 (42.9)	7 (50.0)	1 (7.1)
Difficulty Establishing Relationships	13 (16.7)	3 (23.1)	3 (23.1)	7 (53.8)
Roles Identified				
Learning Coach	75 (96.2)	25 (33.3)	26 (34.7)	24 (32.0)
Trusted Friend	44 (56.4)	14 (31.8)	18 (40.9)	12 (27.3)
Connecting Link	32 (41.0)	14 (43.8)	9 (28.1)	9 (28.1)
Peer Leader	21 (26.9)	7 (33.3)	8 (38.1)	6 (28.6)
Student Advocate	12 (15.4)	1 (8.3)	5 (41.7)	6 (50.0)

Note. Groups with significantly different frequencies for the study variables (according to Chi-square tests) are bolded. Frequencies with a different superscript differed significantly at the .05 alpha level (with Bonferroni adjustment). * $p \leq .05$

Table 2

Comparison of the High, Moderate and Low Support Groups on the Continuous Study Variables

Study Variable	Support Group Type		
	Higher (<i>n</i> =26)	Moderate (<i>n</i> =26)	Lower (<i>n</i> =26)
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Mentor support for mentees	4.40(0.30)	4.30(0.28)	4.26(0.35)
Mentee rating of mentor support	4.32(0.15) ^a	4.03(0.09) ^b	3.50(0.22) ^c
Standard deviation of mentee rating of mentor support	0.65(0.19) ^a	0.69(0.12) ^a	0.82(.18) ^b
Mentor-mentee discrepancy	0.08 (0.38) ^a	0.27(0.26) ^a	0.75 (0.41) ^b
Mentor-mentee contact	3.45(0.45) ^a	3.24(0.41) ^a	2.75(0.39) ^b
Mentee seminar grade	3.40(0.28)	3.25(0.21)	3.28(0.25)
Student enrollment	14.03(3.01)	14.96(2.49)	14.96(2.05)

Note. Means with different superscripts differ at the .05 alpha level. Higher mean discrepancy score denotes mentor reporting higher support score than mentees.