



Mentoring Nurse Faculty: Outcomes of a Three-Year Clinical Track Faculty Initiative



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ABSTRACT

Clinical track faculty often lack mentoring opportunities needed to develop their scholarship which may hinder their academic promotion. The Clinical Track Faculty Mentoring Initiative was designed to foster scholarship development and academic promotion of clinical assistant professors. Fifteen clinical assistant professors in two cohorts and their mentors participated in the Initiative. Each Cohort lasted two years with one overlapping year. Participating clinical assistant professors were required to attend five check-in meetings, a summer writing workshop, school and university promotion information sessions, and mentor-protégé meetings. Program outcomes were assessed quarterly and they included knowledge of promotion processes, mentorship quality, scholarship productivity, and academic promotion. Scores on knowledge of promotion processes and perceived mentorship quality among participating clinical assistant professors were significantly increased. Participating clinical assistant professors published, on average, 3.33 papers and delivered 6.4 presentations in two years. The Initiative demonstrated an effective mentoring program that incorporated a multimethod approach with clear program goals, strong systems support, and high mentorship quality.

Mentoring nurse faculty: outcomes of a three-year clinical track faculty initiative

Higher education presents a distinctive career setting with its own compelling culture and career dynamics. Faculty members are initiated into system processes and are expected to inculcate institutional values. Mentoring strategies demonstrate valuable effects on faculty careers and advancement in scholarship, recognition, and promotion (Luna & Cullen, 1995). According to Thedwell (2008), the presence of non-tenure track faculty in higher education is not new; these faculty members are part of the fabric of US Colleges and Universities for over a century (p. 11). Non-tenure track faculty members are in great demand in health science education that involves heavy clinical teaching and patient care. Some US medical schools appoint clinician educators in the non-tenure track that are clearly distinguished from clinician researchers in the tenure track (Buckley, Sanders, Shih, & Hampton, 2000). Other medical schools divide faculty tracks into clinical and instructional. Clinical track faculty are responsible for clinical care and teaching, and instructional track faculty focus their time on research (Chung et al., 2010). Nursing is no different from other health science disciplines in terms of hiring faculty in both clinical and tenure tracks designed to meet the individual institution's needs. Significantly, Lee,

Kim, Sook, Shin, and Kim (2007) stated that clinical faculty should be distinguished from clinical track faculty. In their definitions, clinical faculty is expected to provide clinical instructions, clinical scholarship, and direct nursing care, whereas clinical track faculty are appointed and promoted by specific criteria by the school and institution. These criteria often require clinical track faculty to provide evidence of peer-reviewed scholarship that is publicly retrievable and can be further developed by others, as well as national or international recognition for their ability to advance the scholarship of teaching or practice (Tschannen et al., 2014). In this paper, we report the outcomes of a three-year mentoring initiative in a nursing school specifically designed for full-time and doctoral-prepared clinical assistant professors in the clinical track who are eligible for academic promotion. The mentoring literature and program tenets are described fully to allow for appreciation and understanding for this important initiative.

Clinical assistant professors participating in this mentoring initiative were not in tenure track. They were in clinical track and eligible for academic promotion, such as from clinical assistant professor to clinical associate professor. Their primary duties were to provide didactic and/or clinical teaching and service.

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Literature review

Needs for mentoring among clinical track faculty

Evidence of scholarship is prerequisite for academic promotion. Many clinical track faculty, however, face barriers to scholarship development. Smesny et al. (2007) found lack of mentors and a work climate that does not promote scholarship being the two common barriers to scholarship development among clinical track faculty in nursing, pharmacy, dentistry, and medicine. Smesny et al. (2007) identified, particularly in nursing and medicine, limited interdisciplinary cooperation and few mentoring opportunities available for writing publications as being major barriers to scholarship development. Similar findings were also reported in other studies. For instance, clinical track faculty in a previous study were found to be less likely to have a mentor (89% vs. 98%, $p = 0.0017$) and more likely to have lower satisfaction scores with mentoring (6.3 ± 2.9 vs. 7.4 ± 2.4 , $p < 0.0002$) as compared to tenure track faculty (Wasserstein, Quistberg, & Shea, 2007). Another study found that clinical track faculty, as compared to tenure track faculty, were less likely to understand promotion processes or to believe that promotion criteria were applied consistently across comparable positions (Chung et al., 2010). In fact, clinical track faculty were found to value anecdotal recognitions by patients and/or students more than peer-reviewed scholarship and national recognitions (Buckley et al., 2000). Furthermore, Bruner, Dunbar, Higgins, and Martyn (2016) conducted a survey on nursing faculty mentorship priorities. They found that clinical track faculty in the assistant professor rank identified, among 27 priority areas, developing a promotion dossier and producing timely publications as the two highest priorities for them.

Mentoring benefits and relationships

Mentoring as a strategy is empowering and may significantly boost professional growth for junior faculty. Teaching and research improve when junior faculty are connected with talented prominent mentors. Findings from a previous study on the positive aspects of mentoring programs point to organizational benefits, protégé success, as well as protégé access to influential faculty mentors who assist with understanding the unique tenets of the higher education environment (Kahle-Piasecki, 2011). However, many faculty members may require special consideration, which may affect the mentoring process such as gender, ethnicity, organizational culture, and mentoring program purposes and goals (Athey, Avery, & Zemsky, 2000; Gersick, Bartunek, & Dutton, 2000).

Mentoring should be theory-based and aimed to develop the human potential. Powerful role models and mentoring relationships are well described by life-cycle theorists. In *The Seasons of a Man's Life*, Levinson, Darrow, Klein, Levinson, and McKee (1978) elaborate on the mentoring concept. Significantly, the relationship typically focuses on work-related teaching of skills and knowledge, provisions and help to advance the protégé, and guidance through an intricate social hierarchy (Kram, 1985).

Both the mentor and the protégé must work to cultivate their mentoring relationship. Protégés may achieve improved status by association with a more senior faculty person who is well-respected and accomplished. Furthermore, protégés receive coaching, feedback, and a wider variety of opportunities through mentoring (Kram, 1985). The dyad directs their efforts purposefully to achieve goals and outcomes. Allen and Poteet (1999) provided pivotal insight into the mentoring relationship in a qualitative study that asked what mentors and protégés could do to enhance the relationship. Allen and Poteet found that trust, open communication, and shared goals were highly valued by all participants. Further exploration into relationship dynamics between mentor and protégé found that mentor's perceived similarity was associated with reports of relationship learning and quality (Allen & Eby,

2003). Similarly, a nursing systematic review found that "... non-tenure track faculty experienced vigorous meaningful mentoring relationships and positive outcomes from structured programs" (Cullen et al., 2017, p. 292). Noted also in the systematic review was the finding that relationship and communication between faculty protégés and their mentors were fundamental to successful mentoring. This finding is supported by current mentoring approaches and theory-based mentoring (Allen & Eby, 2007; Ghosh & Reio, 2013).

Background of Indiana University School of Nursing Clinical Faculty Mentoring Initiative

In 2009, the Indiana University School of Nursing (IUSON) administrative leadership provided masters-prepared clinical track faculty, particularly at the clinical assistant professor rank, with reduced workloads and tuition stipends that allowed them to complete their doctorates. A total of 17 faculty members took advantage of this offer at a cost of \$678,190 with 13 having completed and four faculty members still finishing doctoral studies by 2015. After completion of their doctorates, clinical assistant professors may receive a two-year reduced workload to support their efforts toward advancing scholarship and knowledge dissemination. Given the time toward scholarship, IUSON hoped that this would result in greater numbers of assistant clinical professors applying for promotion. The workload reduction for clinical assistant professors in the first two years upon appointment was considered comparable to that of new assistant professors in the tenure track, and the time allotted was expected to generate scholarship consistent with campus criteria for advancement in clinical rank. The university promotion guidelines for clinical track faculty specify that published scholarship (typically non-data based) is required for promotion related to teaching and/or service. Research is not required for clinical track faculty. Before the start of this clinical mentoring initiative in 2015, clinical faculty promotion remained zero.

Clinical track faculty put forth limited effort toward scholarship in the past. As of October 2014, clinical assistant professors with doctorates ($n = 16$) represented 16.8% of full time IUSON faculty ($n = 95$) but only 5% of all faculty papers published from July 2012 through September 2014 (12 out of 233 publications). This translated to 0.375 paper/faculty/year, which was lower than the number of publications among faculty peers in other universities. Tschannen et al. (2014) found that 23 clinical assistant professors of 6 Schools of Nursing published approximately one paper/faculty/year in the 6 years leading up to promotion.

In November of 2014, a needs assessment survey was conducted by IUSON on clinical track faculty. Survey results from clinical assistant professors ($n = 15$) pointed to a desire for scholarship mentoring (90%), a desire to promotion to the next rank (90%), and a need for scholarship collaborators (82%). The survey also found several barriers to achieving promotion among clinical assistant professors, such as an overextended work life (91%), lack of mentoring (82%), and promotion process complexity and unclear expectations for promotion (73%).

Overall, data from related literature and the IUSON survey suggest that clinical track faculty are often disadvantaged in academic promotion because they lack faculty development and mentoring opportunities (Chandran, Gusic, Lane, & Baldwin, 2017). Mentoring programs with good quality can enhance faculty career development and are desired by clinical track faculty specifically to help them develop scholarship and advance academic promotion. The IUSON Clinical Faculty Mentoring Initiative (shortened to the Initiative) was established in 2015.

Planning and implementation of the clinical faculty mentoring initiative

Purpose of the initiative

The main goals of the Initiative were to enhance scholarship development and academic promotion of clinical assistant professors. Scholarship and promotion highlighted in the Initiative were commensurate with the School and the University guidelines and were focused on education or clinical scholarship evident in peer-reviewed publications and presentations.

In this paper, we report outcomes of this Initiative related to (1) knowledge of promotion processes; (2) mentorship quality; (3) scholarship productivity; and (4) academic promotion.

Initiative team

An Initiative Team, composed of a full professor and two associate professors, led the Initiative. The full professor, a former department chair and familiar with campus tenure and promotion guidelines, was charged by the School Dean to develop a mentoring program for clinical faculty. The two associate professors were also assistant department chairs (one from each of the two departments) and their duties were to assist department chairs in the administration, teaching, and scholarship activities of the departments. The Initiative Team members were all tenured faculty. The school did not have enough senior clinical faculty available to lead the Initiative and therefore, the three members in the Initiative Team were all tenure track faculty.

Length of the mentoring initiative

The Initiative was a three-year program implemented in two cohorts and each cohort lasted two years with one year overlapped. Cohort I was implemented between August 2015 and May 2017 and cohort II in August 2016 – May 2018. The Indiana University Human Subjects Review Board approved the Initiative.

Faculty protégés

A total of 15 faculty protégés participated in the Initiative (eight in Cohort I and seven in Cohort II). Inclusion criteria were that a full-time faculty who was in a clinical assistant professor rank, had had a doctoral degree (PhD, DNP, or EdD) upon enrolment in the Initiative, and was willing to commit two years to the Initiative. Faculty who had had a doctoral degree and preferred to start early were placed in Cohort I.

In spring of 2015 before the start of the Initiative, all clinical assistant professors were invited to participate in the Mentoring Initiative. A formal interview was conducted with each clinical assistant professor in May 2015 by the Initiative Team members. After the interview, each clinical assistant professor was assigned to either Cohort I or II and was carefully matched to a faculty mentor who was an associate or full professor in either clinical or tenure track. Each clinical assistant professor after formally enrolled in the Initiative was addressed as a faculty protégé.

Mentors

The three members in the Initiative Team served as mentors. Additionally, 12 senior faculty members in either tenure or clinical track also volunteered to serve as mentors. No financial or workload compensation was given to the mentors. Mentoring a junior faculty was considered a service to the school.

Procedure

Program activities

Each faculty protégé was required to attend five check-in meetings in two years (about one per four to six months) with their mentors. Check-in meetings were organized and prepared by the Initiative Team members. Meetings were in a group and face-to-face format. The first check-in meeting was designed to give protégés and their mentors an overview of the Initiative, goals to achieve (quarterly, yearly, and end of the program), and suggested activities to accomplish between check-in meetings. The Initiative Team members delivered presentations and answered questions in the first check-in meeting.

In each of the four subsequent check-in meetings, protégés reported their scholarship progress and barriers. Suggestions to overcome barriers were offered by all who attended the check-in meetings, including the Initiative Team members, mentors, and faculty protégés. During check-in meetings, formal presentations on promotion guidelines, how to write personal statements, how to address scholarship impacts, CV preparation, publication quality and quantity, school and campus resources, and promotion procedures were delivered by the Initiative Team or mentors. Peer review of personal statements for promotion was also included in the last check-in meeting.

Within the first year, faculty protégés needed to participate in many activities and achieve goals. First, they needed to attend school and campus promotion workshops. School promotion workshops were held once a year in November and were organized by the IUSON Tenure and Promotion Committee. The workshops focused on school-wide promotion guidelines, timeline, and procedure (internal, campus, and external reviews). The University Office of Faculty Affairs also had promotion workshops several times a year focusing on different topics related to campus promotion guidelines and resources, promotion review, and dossier preparation. Second, faculty protégés needed to connect with the IUSON Office of Research Support. This office offered scholarship support services for faculty in all tracks and ranks, including biostatistician assistance, manuscript editing, grant submission, budget assistance, and research assistant support. Any faculty who was planning to submit a grant proposal for internal or external funding was expected to fill out an “intent to submit” form and sent it to the Office of Research Support. Third, faculty protégés were to connect with the University’s Center for Teaching and Learning and Center for Service and Learning, either by attending their presentations, symposiums, and workshops or by finding grant opportunities for teaching evaluation and curricular development. Fourth, faculty protégés were expected to have one draft of paper completed for publication by the end of the first year. Fifth, faculty protégés were required to attend protégé-mentor scheduled meetings, which did not include the check-in meetings. In the meetings, mentors and faculty protégés identified ways to achieve goals and resources to support scholarship.

In the summer between the first and second year, protégés participated in a writing workshop held in school and coordinated by the Initiative Team. A nationally known expert was invited by the Team to conduct a two-day writing workshop at IUSON. Each faculty protégé received a book, purchased by the Initiative Team, about writing for publication. Before the writing workshop, faculty protégés must have their literature reviews for their papers finished. A few days before the workshop, protégés were required to watch videos and review slides provided by the expert. During the workshop, they wrote, revised, received feedback, revised again, and then submitted papers at the end of the workshop or a few weeks after the workshop. To help faculty protégés focusing on writing, hotel rooms were reserved and paid for them so that faculty protégés could continue to write in the evenings and to avoid travel time for those who lived far from campus. Lunch was served for faculty protégés during the workshop. During the writing workshop, at least one Initiative Team member was in attendance to assist with administrative needs.

During the second year, protégés continued to create scholarship

collaboration identified in their plans, attended protégé-mentor meetings and the check-in meetings, continued to write for publications, and sought out grant funding and award opportunities. They also started to write a personal statement to be included in promotion dossier and received feedback for the statement from mentors, the Initiative Team members, and protégé peers. In the last check-in meeting, each protégé was given a certificate that signified their completion of the mentoring program.

Systems engagement

To engage systems in the Initiative, several activities were conducted. First, the Initiative Team secured a campus mentoring grant as well as a matching fund from the School of Nursing. The team members demonstrated to the campus and the School that the Initiative was aligned with the missions of the University and the School and that development of clinical assistant professors would benefit faculty, school/university, and students. The fund was spent in supporting protégé scholarship development activities, such as writing workshop, books for publication, etc. Second, the Initiative Team sought support from the IUSON Associate Dean for Research and other senior faculty. The team presented the Initiative in school wide meetings and recruited senior faculty members to serve as mentors. Third, IUSON allocated annually travel fund for faculty to disseminate scholarship at professional conferences. The travel fund was available to all faculty not just faculty protégés. However, the Initiative Team urged faculty protégés to use this travel fund to disseminate their work. Fourth, faculty protégé scholarship outcomes were integrated in annual faculty performance reviews. Department Chairs were made aware of faculty intention for promotion and a timeline for promotion was documented in annual reviews. Additional resources (e.g., teaching assistants) were allocated at the department level, if necessary and available, to help faculty achieve goals.

Evaluation of the clinical faculty mentoring initiative

Measures

Knowledge of promotion processes. Faculty protégés' knowledge was assessed at the beginning of the first check-in meeting (Time 1) and then every 4–6 months during check-in meetings until the end of a two-year period in each cohort (Time 2 to Time 5). Four questions developed for the Initiative asked faculty protégés the extent (none, somewhat, moderately, greatly, and extensively) of their understanding regarding school and campus scholarship and promotion resources, promotion processes, personal statement, and dossier preparation. Their responses from “none” to “extensively” were coded using a 0 to 4 scoring system. Summative scores were used during analysis. A higher score indicated a higher level of knowledge perceived by protégés.

Mentorship quality. Mentorship quality was assessed in two aspects: relationship satisfaction and reciprocal learning. Questions in the Mentoring Quality Scale (five questions) asked each protégé and mentor to rate the extent of their satisfaction with the mentoring relationship. The Mentorship Learning Scale (five questions) measured the extent to which the protégé and the mentor had a reciprocal learning relationship that both parties shared information and benefited from each other. Both scales, developed by Allen and Eby (2003), included a 5-point response format, ranging from strongly disagree (score of 1) to strongly agree (score of 5). Summative scores were used for analysis and a higher score indicated a higher level of perceived quality. Protégés and mentors filled out these scales at the beginning of the first check-in meeting (Time 1) and then every 4–6 months during check-in meetings until the end of a two-year period (Times 2 to 5). The Mentorship Quality Scale had an adequate internal reliability as reported by Allen and Eby (2003; Cronbach's alpha = 0.85) and based on our study (Cronbach's alpha = 0.97 from combined data on protégés and mentors). Allen and Eby (2003) also demonstrated a

Cronbach's alpha of 0.88 for the Mentoring Learning Scale. The Cronbach's alpha calculated for this scale based on the data collected from protégés and mentors was 0.97.

Scholarship productivity. Four types of scholarship outcomes were tracked during a two-year time period in each cohort: peer reviewed publications, refereed conference presentations, awards/recognitions, and grants received. Publications were peer reviewed and published in professional journals as a first author or a co-author. If a paper was accepted for publication during program participation, it was counted toward publications. Presentations could be local, national or international, but they must be peer reviewed. School, campus, and external awards and recognitions could be related to teaching or service. Grants were also tracked, but they must have been received not just submitted. When a grant was awarded to two faculty protégés, the grant was counted only once to avoid overinflating the scholarship outcome.

Academic promotion. Planned dossier submissions and actual promotion to the rank of associate professors were tracked. Planned dossier submission was confirmed at the end of a two-year period. Tracking of actual promotion was only possible at least one year after a dossier was submitted because it took one year for the School and the University to complete dossier review and grant promotion.

Data analysis

Knowledge of promotion processes and mentorship quality (relationship satisfaction and reciprocal learning) at each time point were assessed. Differences in mentorship quality between protégés and mentors were also examined. First, the Sign Test was used to assess a change from first time point (Time 1) to last time point (Time 5) on non-missing data, meaning a change from the beginning to the end of the Initiative. The Sign Test was appropriate for a small sample size. Second, if a significant change in knowledge or mentorship quality was detected, then a further test was conducted to assess change over time (change at each time point as compared to Time 1). In the first step, we found knowledge and mentorship quality were statistically improved from the beginning to the end of the Initiative based on the Sign Test. Additional tests were performed to assess changes over time in the second step.

To assess changes over time in knowledge of promotion processes and mentorship quality, linear regression model with repeated measures was used. Model assumptions of normality and homogeneity of variance were examined and outliers were removed. The random intercept incorporated into the model the correlation induced by repeated measurements for the same protégé or mentor. At each time point, we calculated least square mean and standard error, difference in least square means between a time point and Time 1, 95% confidence interval, and the *p*-value, which was adjusted by a Sidak adjustment to control the type 1 error rate (the rate of finding a difference when in truth there isn't one). The significance level was set at *p*-value < 0.05.

Results

Faculty protégés and mentors

A total of 15 faculty protégés and 15 mentors (eight pairs in Cohort I and seven pairs in Cohort II) participated in the Initiative. Table 1 shows that faculty protégés were largely white women, 50–59 of age, and had been in the clinical assistant professor position for 5.7 years at the time of enrollment to the Initiative. Faculty protégés in Cohort I had a longer employment history as an assistant professor (8.1 years) than that for Cohort II (2.5 years). Cohort II had a longer time lap since receiving a doctoral degree (5.7 years) than Cohort I (2.4 years), but after removing an outlier (20 years) from Cohort II the difference was not evident (2.4 vs. 2.3 years). Mentors were also largely white women in

Table 1
Demographic and academic information of protégés and mentors.

	Protégées			Mentors		
	Total (n = 15) n	Cohort I (n = 8) n	Cohort II (n = 7) n	Total (n = 15) n	Cohort I (n = 8) n	Cohort II (n = 7) n
Age (years)						
40–49	2	1	1	2	1	1
50–59	9	6	3	6	4	2
60–69	3	1	2	7	3	4
Missing	1		1			
Ethnicity						
Non-white	1	0	1	2	1	1
White	14	8	6	13	7	6
Gender						
Female	14	7	7	15	8	7
Male	0	0	0	0	0	0
Missing	1	1				
Years in clinical assist professor rank (mean and SD)	5.7 (5.4)	8.1 (5.8)	2.5 (1.6)			
Years post doctoral degree (mean and SD)		2.4 (1.3)	2.3 (1.5) 5.5 (7.2)*	15.6 (7.3)	17.4 (5.4)	13.6 (9.0)

SD: Standard deviation.

* After one outlier (20 years post doctoral degree) was removed.

the age categories of 50–59 and 60–69, and had received their doctoral degrees for an average of 15.6 years.

Knowledge of promotion processes

Scores on knowledge of promotion processes among faculty protégés were significantly higher at each time point (Times 2–5) as compared to Time 1 (see Table 2).

Mentorship quality

Mentorship quality data on protégés and mentors across five time points are shown in Table 2. Among protégés, mentoring quality and mentoring learning scores were significantly higher at Times, 3, 4, and 5 as compared to Time 1. Among mentors, changes over time on mentoring quality and mentoring learning scores were not significant except that the mentoring learning score at Time 5 was significantly increased as compared to Time 1. We also compared differences in

Table 2
Model estimates of knowledge of promotion processes and mentorship quality scores by protégés and mentors.

		Model based estimates				
		Time 1	Time 2	Time 3	Time 4	Time 5
K protégés	LS mean(SR)	3.3 (0.8)	6.3 (0.8)	7.7 (0.8)	10.2 (0.8)	10 (0.8)
	vs. Time 1		-3.0 (0.8)	-4.4 (0.8)	-6.9 (0.9)	-6.7 (0.8)
	95% CI		(-4.7, -1.3)	(-6, -2.7)	(-8.6, -5.1)	(-8.3, -5)
	p-value		0.0034	< 0.0001	< 0.0001	< 0.0001
MQ protégés	LS mean(SR)	18 (0.9)	19.9 (0.9)	21.1 (0.9)	21.7 (0.9)	21.2 (0.9)
	vs. Time 1		-1.8 (1.0)	-3.0 (0.9)	-3.6 (1.0)	-3.2 (0.9)
	95% CI		(-3.7, 0.1)	(-4.9, -1.2)	(-5.6, -1.7)	(-5, -1.3)
	p-value		0.2271	0.0083	0.0018	0.0055
Mentors	LS mean(SR)	18.1 (0.9)	20.5 (0.9)	18.6 (1.1)	18.9 (1.0)	19.5 (1.0)
	vs. Time 1		-2.4 (1.0)	-0.5 (1.2)	-0.8 (1.1)	-1.4 (1.1)
	95% CI		(-4.5, -0.4)	(-2.9, 2)	(-3.1, 1.5)	(-3.7, 0.9)
	p-value		0.0785	0.9920	0.9189	0.6559
Mentors-protégés	LS mean(SR)	1.2(1.6)	0.5(1.6)	-3.8(1.9)	-4.6(1.8)	-3.9(1.8)
	vs. Time 1		0.8 (2.0)	5.0 (2.3)	5.8 (2.2)	5.1 (2.2)
	95% CI		(-3.3, 4.9)	(0.3, 9.6)	(1.3, 10.3)	(0.7, 9.5)
	p-value		0.9926	0.1356	0.0482	0.0896
ML protégés	LS mean(SR)	18.3 (0.8)	20.2 (0.8)	20.9 (0.8)	21.9 (0.9)	21.6 (1.0)
	vs. Time 1		-1.9 (0.8)	-2.6 (0.8)	-3.6 (0.9)	-3.3 (1.0)
	95% CI		(-3.5, -0.2)	(-4.2, -0.9)	(-5.3, -1.9)	(-5.3, -1.3)
	p-value		0.1003	0.0107	0.0005	0.0067
Mentors	LS mean(SR)	16.4 (1.1)	17.9 (1.0)	18.1 (1.2)	17.5 (1.1)	20.3 (1.4)
	vs. Time 1		-1.5 (0.8)	-1.7 (1.0)	-1.1 (0.9)	-3.9 (1.2)
	95% CI		(-3.2, 0.2)	(-3.7, 0.3)	(-2.9, 0.7)	(-6.4, -1.4)
	p-value		0.2713	0.3200	0.6557	0.0116
Mentors-protégés	LS mean(SR) vs. Time 1	-0.2(1.3)	-2.3(1.3)	-3.9(1.5)	-3.8(1.5)	-2.4(2.2)
	95% CI		2.1 (1.9)	3.7 (2.0)	3.6 (2.0)	2.2 (2.6)
	p-value		(-1.7, 5.8)	(-0.5, 7.8)	(-0.6, 7.7)	(-3.0, 7.3)
			0.7298	0.2846	0.3100	0.8717

K: Knowledge of promotion processes; MQ: mentorship quality; ML: mentorship learning; LS mean: least square mean; SR: standard error; CI: confidence interval. Bolded number indicates a significant change from Time 1.

Table 3
Scholarship and Promotion Outcomes of Faculty Protégés in the Mentoring Initiative ($n = 15$).

	Total n	Cohort I August 2015–May 2017 n	Cohort II August 2016–May 2018 n
Publications	50	35	15
First author	33	23	10
Co-author	17	12	5
Presentations	96	73	23
Awards/recognitions	25	12	13
School and campus wide grants	9	6	3
Confirmed to submit dossiers by the end of the mentoring initiative	6	5	1
Promoted to clinical associate professors one year after finishing the mentoring initiative	5	5	N/A

N/A: not applicable.

mentorship quality scores between protégés and mentors over time. In general, protégés had higher scores on mentoring quality and learning across five time points than mentors, but only the mentoring quality score at Time 4 was significantly different between protégés and mentors as compared to the magnitude of difference at Time 1.

Scholarship productivity

Table 3 shows that the 15 faculty protégés published a total of 50 peer-reviewed papers (mean = 3.33; 1.67/faculty/year) during the two years of their participation in the Initiative. Of the 50 publications, 33 were first-authored publications and 17 co-authored. Protégés also disseminated their work through 96 referred conference presentation (mean = 6.4; 3.2/faculty/year). A total of 26 awards/recognitions (mean = 1.73; 0.87/faculty/year) were received and most were internal with a focus on teaching. Faculty protégés secured a total of nine grants (mean = 0.6; 0.3/faculty/year) and mostly internal and campus wide funding related to teaching or curriculum development and evaluation.

Academic promotion

Promotion data are listed in Table 3. Among the protégés in Cohort I, five (62.5%) confirmed to submit their dossiers at the completion of the Initiative and were granted clinical associate professors one year after the Initiative. In Cohort II, only one faculty protégé had confirmed at the completion of the Initiative her intent to submit a dossier by the campus deadline (first day of July). By the time this report was prepared, promotion data for Cohort II were not available.

Discussion

In this paper, we reported outcomes of a mentoring initiative designed for clinical assistant professors with a doctoral degree and aimed to enhance their scholarship development and academic promotion. Overall, this Initiative was effective in increasing clinical assistant professors' knowledge of promotion processes and their scholarship productivity. Knowledge scores on promotion processes among clinical assistant professors in the Initiative were gradually and significantly increased across five time points. This finding has two implications. First, this finding may indicate that the information received by faculty protégés at each check-in session and from other school and campus sources between check-in sessions was new to the protégés. Second, this finding may also be interpreted as that scholarship development and

academic promotion is a long process and a single workshop or information session may not be enough to meet the needs of a faculty or to reinforce key elements of scholarship development and academic promotion. Our finding is also in concert with a previous systematic review in which a longitudinal format was found to be a common characteristic among faculty development programs (Leslie, Baker, Egan-Lee, Esdaile, & Scott Reeves, 2013).

The 15 clinical assistant professors in the Mentoring Initiative produced 1.67 publications/faculty/year. This number of publications was not only improved from what was found (0.375 publication/faculty/year) in a previous internal IUSON survey but also higher than the one publication/faculty/year among clinical assistant professors in nursing schools reported by Tschannen et al. (2014). The average numbers of publications (mean = 3.33) and presentations (mean = 6.4) by the clinical assistant professors within the two years in our Initiative were also comparable to those from a National Educational Scholars Program developed by the Academic Pediatric Association to foster education scholarship of clinician educators. The 24 clinician educators (75% white female non-tenured assistant professors of generalist pediatricians) in the Educational Scholars Program, on average, published 3.42 papers and delivered 5.58 national presentations during their participation in a three-year mentoring program (Baldwin, Gusic, & Chandran, 2017). Even so, it was noted that faculty protégés in Cohort I in our Initiative seemed to perform better than those in Cohort II regarding scholarship productivity and academic promotion. Faculty protégés in both Cohorts did not differ in knowledge of promotion processes or perception of mentorship quality (data not reported in this paper). One possible reason to explain the differences in outcomes of scholarship productivity and academic promotion between the two cohorts could be that faculty protégés in Cohort I were in the clinical assistant professor position longer than faculty protégés in Cohort II (8.5 vs. 2.5 years). A longer time working in an academic setting might have allowed the faculty protégés in Cohort I to better adjust to academic demands and perhaps to intensify their desire to demonstrate scholarship and seek academic promotion. Faculty protégés in Cohort I might also possess the “early adopter” characteristics as described by Chandran et al. (2017) that early adopters were motivated and eager to change. There were only six (40%) faculty protégés confirmed to submit dossiers for promotion at the end of a two-year period. Although this number showed an improvement in promotion outcome (no promotion for clinical assistant professors in 2009–2014), it was not optimal. In 2017–2018, IUSON updated its tenure and promotion guidelines, which required a pre-promotion review one year before submitting promotion dossier. This updated policy might have delayed promotion process of some faculty protégés.

We measured two aspects of mentorship quality in this initiative: relationship satisfaction and reciprocal learning. Overall, faculty protégés and their mentors did not perceive mentorship quality differently. Previous research findings indicate that mentors do receive greater satisfaction from perceived similarity (values and interest) – a trait called cloning by Kram (1985). Faculty protégés in our Initiative, however, had a higher magnitude of increase on mentorship quality scores (mentoring quality and mentoring learning) at Times 3 to 5 as compared to Time 1 and the increase plateaued at Time 3. These findings may imply that it may take about one year (Time 1 to Time 3 was about one year in our Mentoring Initiative) for faculty protégés to develop a higher level of satisfaction with a mentoring relationship and to experience a higher comfort level with which they believed they were co-learners with their mentors in the mentoring process. The findings also steadily support that since mentoring programs typically are produced for the protégés; their view of mentorship quality and mentoring relationship may be more sensitive than mentors to subtle changes (Allen & Eby, 2003).

Limitations

There are some limitations in this Mentoring Initiative. We measured knowledge of promotion processes and mentorship quality in check-in meetings. Although names were not identified in data collection forms, social desirability might have influenced how protégés and mentors responded to the questions in the data collection forms. However, the objective data on scholarship outcomes support the effectiveness of the Initiative. Also, the scholarship productivity collected in this Initiative was measured based on traditional peer-reviewed outcomes. We did not assess course review data, syllabus development, or any other products developed by faculty protégés. Longitudinal experiential intervention is the most common design for faculty mentoring programs (Chandran et al., 2017). Although our Mentoring Initiative followed this design, we did not have a control group to compare outcomes between the intervention group and the control group. Furthermore, the outcomes were assessed by the end of the Initiative (two years) in each Cohort. Long-term scholarship outcomes of the faculty protégés in 5 or 10 years after the Initiative are yet to be studied.

Implications and recommendations

Several implications and recommendation can be drawn from the Initiative. First, before program implementation, the purposes and goals of mentoring should be reviewed for compatibility with the organization's structure and governance, policies and culture. Often mentoring strategies are quickly advanced to fix complex problems. Mentoring is not a remedy and should be reserved for developing human potential in relation to organizational goals. The purposes of our Initiative regarding scholarship and promotion were aligned with the School and the University expectations for clinical assistant professors.

Second, setting clear outcomes is important for program evaluation. In our case, clear and measurable outcomes to be assessed in different time points were threaded in the Initiative. These outcome expectations were important not only for faculty protégés and mentors but also for program evaluation. More importantly, achievements in scholarship were included in a faculty protégé's annual review. Accumulated scholarship outcomes could also be included in a promotion dossier.

Third, mentoring programs can take many forms, such as dyad, distance, peer, group, and constellation models. Currently, no empirical evidence is available to show one mentorship model is more effective than another (Nowell, Norris, Mrklas, & White, 2017). Our Mentoring Initiative combined a dyad model with group workshop and program facilitator approaches. Multimethod approach was also used in the National Educational Scholars Program by the Academic Pediatric Association in which enrolled scholars attended three face-to-face didactic annual meetings, completed six intersession modules and a project, and received feedback from mentors and program facilitators (Baldwin et al., 2017). Nursing schools are encouraged to develop a mentoring format that suits the needs of their faculty.

Fourth, integration of resources is key to a successful mentoring program. Strong administrative vision in combination with systems support is necessary for success. This would include administrative recognition and encouragement of mentoring activities in meeting and reports. Administrative support for the mentoring program should be visible in the fabric of the organization. Our Initiative received administrative and instrumental support such as financial, technology, and staff assistance from the School and the University. However, our Initiative team also made efforts to ensue buy-in from the administrators for the mentoring program by presenting the purpose and progress of the Initiative in various school wide meetings.

Fifth, monitoring the interactions and program expectations in the mentoring relationship is necessary and may prevent emerging problems. Ideally, matching protégés and mentors should be carefully conducted. In our Initiative, volunteer faculty mentors were willing to

contribute their time and efforts to the Initiative without compensation. When they were not available to attend check-in meetings, the Initiative Team members had to give them an update of the Initiative. One mentor resigned during the implementation of the Initiative. The Initiative Team had to make an arrangement to find another mentor. At times, protégés had difficulty meeting their goals and felt embarrassed to communicate with their mentors. The Initiative Team had to play a liaison role and helped both parties reassess potential solutions.

Even though our Initiative received funding support, a mentoring program does not need funding to make it work. Start with a small pilot program for a short time period such as six to twelve months may provide interim data helpful for implementing a longer mentoring program. Different nursing schools may also collaborate on mentoring efforts to share mentors or other resources.

Conclusion

In sum, the Mentoring Initiative addressed in this paper was effective in increasing scholarship productively of clinical assistant professors and their knowledge of academic promotion processes. The success of the Initiative could be attributable to the use of a multi-method approach with clear program goals, strong systems support, and well received mentoring quality.

Declaration of conflict of interest

None.

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