Effective mentoring for under-represented, pre-promotion faculty is an urgent issue facing universities. At Indiana University – Purdue University Columbus (IUPUC), 56% of faculty are women, 22% are minorities, and, as an indicator of working-class origins, 48% are first generation college graduates. In 2015-16, IUPUC piloted a mentoring program on career self-efficacy for this faculty cohort funded with a grant from Indiana University – Purdue University Indianapolis’ Mentoring Academy. To inform the pilot, an assessment of mentoring needs was conducted. IUPUC’s under-represented faculty rated mentoring on research, teaching, tenure, and promotion - crucibles of career success – higher than all other suggested needs. The assessment confirmed that for these faculty, charting a career in the unfamiliar world of academia is daunting. Increasing career self-efficacy, defined as confidence in one’s ability to direct their professional career (Anderson, Goodman & Schlossberg, 2012), was a primary program goal. Program elements included recruiting and pairing 10 mentees and 10 mentors, mentor training, an opening retreat, regular group feedback sessions, focus group assessments, and administration of qualitative and quantitative formative and summative assessments. Program assessment showed that mentoring on career self-efficacy addresses faculty needs effectively.

Content

Introduction

This chapter reports on a grant-funded pilot program for career self-efficacy (CSE) mentoring for pre-promotion underrepresented faculty at Indiana University – Purdue University Columbus (IUPUC). Program goals, content, and outcomes are firmly rooted in the unique context of IUPUC and its status as a school of Indiana University – Purdue University Indianapolis (IUPUI). Located 45 miles south of Indianapolis, IUPUC serves the region of south-central Indiana surrounding the city of Columbus. Slightly more than 1,500 undergraduate and graduate students are enrolled in programs ranging from the arts and sciences to business, education, engineering, and nursing. IUPUC’s mission is “to be the first choice for those who seek a small campus experience in south central Indiana emphasizing intellectual and personal development, community engagement, and preparation to enter the global workforce” (IUPUC, 2016). In other words, IUPUC resembles a small teaching-centered college incongruously housed within a large research university. Of particular relevance to faculty mentoring, expectations for faculty work, promotion, and tenure are negotiated with IUPUI and differ from those at typical teaching institutions. Relative to faculty at these colleges and universities, IUPUC’s tenure-line faculty teach less but are held to higher research expectations. Lecturers and clinical faculty at IUPUC bear heavy teaching loads and typically provide a significant amount of service both to the university and the surrounding community.
In 2014, the IUPUI Office of the Executive Vice Chancellor established a Mentoring Academy as part of the university’s strategic commitment to faculty development (IUPUI, 2014). The Mentoring Academy initiated a grant competition among IUPUI’s 17 schools to develop pilot programs meeting the unique mentoring needs of faculty in each school. The authors of this report volunteered to represent IUPUC at the Mentoring Academy and, over the course of the 2014-15 academic year, prepared a program proposal which received full funding of $4,642 which was equally matched with school funds.

Our decision to focus on pre-promotion underrepresented faculty reflects their demographic dominance at IUPUC. While the American professoriate is 45% female, 56% of full-time IUPUC faculty are women. Equal to the national average, 22% of IUPUC faculty are members of racial and ethnic minority populations (National Center for Education Statistics, 2015). Faculty from working class backgrounds are also underrepresented in higher education (Kniffin, 2007). To approximate the social class composition of our faculty colleagues, we assumed that first-generation college graduates are likely to be of working class origins. By this measure, 48% of respondents to our demographic survey of IUPUC faculty self-identified as having working class origins. Similarly, pre-promotion faculty contributes to IUPUC’s distinctiveness. A hiring surge grew the full-time faculty from 49 in 2010 to 64 by 2014. Consequently, as of 2014, only 23% of full-time faculty were tenured. That 77% of faculty members are untenured also reflects IUPUC’s dependence on lecturers and visiting faculty. These non-tenure track faculty comprised 29% of full-time teaching faculty at IUPUC, nearly twice their share at IUPUI’s Indianapolis schools.

The pilot program’s emphasis on pre-promotion underrepresented faculty is also responsive to their desire for mentoring. During the 2014-15 academic year, we surveyed full-time IUPUC faculty regarding mentoring satisfaction and needs. Dissatisfaction with mentorship among under-represented faculty is indicated by results from three survey questions about the adequacy and amount of mentorship. We used the three questions to create a satisfaction variable scored from 3 (strong dissatisfaction) to 15 (strong satisfaction) with a midpoint value of 9 (neutral). Under-represented faculty averaged 7.8. A further indication of their current dissatisfaction is the finding that scaled scores for 63% of the under-represented faculty fell below 9. In contrast, none of the white male faculty with college graduate parents scored below 9 and their group mean was 11.3.

In this survey, we also asked about 13 mentoring needs ranging from those specific to an academic career - research, teaching, service, and tenure/promotion - to general concerns including work-life balance and time management (Bland, Taylor, Shollen, Weber-Main, & Mulcahy, 2009). Respondents rated mentoring on the three career-specific issues of research, teaching, and tenure and promotion as much more important than any of the other 10 items. Thus, faculty at IUPUC, particularly under-represented faculty, seek guidance in areas directly related to career success. These findings led to our focusing mentoring efforts on CSE.

Concepts and Measurement

Self-Efficacy

The general concept of self-efficacy is based in Bandura’s social cognitive theory, “Self-efficacy depends on the individual’s belief that he or she can cause an intended event to occur and can organize and carry out the course of behavior necessary to deal with various situations”
Through mentoring, we hoped to increase participants’ level of CSE, that is, their measurable perceptions of their ability to direct their career trajectories. Well-established measures of general self-efficacy and factors influencing career transitions were distributed to faculty at the start of the study.

The General Self-Efficacy Scale (GSE, Schwarzer & Jerusalem, 1995) is a ten item measure of one’s belief in their ability to cope with a wide variety of life stressors and problems. Responses are measured using a four-point Likert scale resulting in a range of scores between 10 and 40 with higher scores indicating greater general self-efficacy. Internal consistency of the GSE has been reported with Chronbach’s alphas between .75 and .91 with a test-retest reliability of \( r = .55 \) to \( r = .75 \) (Scholz, Gutiérrez-Doña, Sud, & Schwarzer, 2002). There is also evidence of convergent validity with several other measures of mood and personality (Schwarzer, 2014). For this study, the baseline GSE measure produced \( \alpha = .85 \) and a mean score of 33.78 (SD = 4.265). Test-retest reliability for the GSE was \( r = .80, p < .05 \) over a nine month interval.

Schlossberg’s “4 S” model provides a framework for successfully navigating life transitions such as beginning a new faculty appointment and also forms a useful scaffold for mentoring activities (Schlossberg, 2008). This systemic model includes:

- situational variables that capture external factors (e.g., concurrent stressors) which influence the individual’s acquisition of a new role;
- social supports which are important for emotional coping and rational coaching and are typically disrupted by the transition from one role to the next;
- strategies for coping with stress that are vital in making successful transitions; and
- self variables which include one’s outlook on the transition into the new role which will vary, in-part, upon individual self-efficacy.

The Transition Guide & Questionnaire Modified (TGQ-M, Schlossberg, 2008) is a reliable measure of Schlossberg’s “4 S” model. This 56 item measure is responded to using a five point Likert scale. Higher scores are assumed to represent greater coping resources for managing transitions. For this study, internal consistencies (Chronbach’s \( \alpha \)) of the initial administration of the four subscales of Situation, Social Supports, Strategies, and Self-variables were .86, .72, .91, and .81 respectively which are similar to past findings (Bundy, 2004; McAtee & Benshoff, 2006). Test-retest reliability of the four scales were \( r = 0.72, p < 0.001; r = 0.90, p < 0.001; r = 0.67 p < 0.01; \) and \( r = 0.58 p < 0.05 \) respectively over a nine month interval. Baseline GSE scores were moderately to strongly correlated with the TGQ-M situation, self, and strategies scales \( (r = 0.79, p < 0.05, r = 0.87, p < 0.01, \) and \( r = 0.86, p < 0.01 \) respectively) but not the supports scale \( (r = 0.66, ns) \).

**Faculty Development**

As a means of augmenting self-efficacy, we sought to engage participants with faculty development resources available through IUPUI. Specifically, we encouraged them to participate in IUPUI’s Intergroup Dialogue Community of Practice (IGD) program. IGDs are weeklong discussions that bring faculty together with other university constituents to better understand issues facing the academic community. For example, a mentee and a mentor joined an IGD on faculty-staff relations. We also invited mentees and mentors to apply for grants through two IUPUI programs that are responsive to the mentoring needs of under-represented pre-promotion
Our pilot program consisted of a preparation phase in the summer of 2015 and program implementation over the course of the 2015-16 academic year. During the preparation phase, we recruited participants and trained mentors. In preparing our proposal, we determined that a cohort of ten mentees would be appropriate given the size of IUPUC’s faculty and available resources. At the end of the spring 2015 semester we invited eligible faculty to apply to be mentees. As IUPUC has a limited number of tenured faculty, we asked all veteran faculty who had demonstrated excellence in teaching, service, or research to consider applying to serve as a mentor. In recognition of their service, prospective mentors were informed that they would be awarded $250 in faculty development funds. By late May, we had identified the pilot’s 10 mentees and 10 mentors.

Mentor training consisted of self-study and group sessions. For self-study, mentors were given two “how-to” books, Zachary’s (2012) all-purpose The Mentor’s Guide, and Johnson’s (2006) On Being a Mentor: A Guide for Higher Education Faculty. In reference to our program’s specific emphases, mentors received Schlossberg’s (2008) Overwhelmed: Coping with Life’s Ups and Downs, which speaks to the self-efficacy challenges involved in a variety of life transitions such as launching an academic career. Muzzatti and Samarco’s (2005) edited volume, Reflections from the Wrong Side of the Tracks, was distributed to provide background on, as the book’s subtitle puts it, “Class, Identity, and the Working Class Experience in Academe.”

In July and August, we held three mentor training sessions. The first two meetings drew upon the readings that addressed mentors’ motivations, expectations, and responsibilities. Project leaders and mentors discussed roles and relationship boundaries, goals and accountability, and, evaluating progress and results. While we considered the utility of requiring contracts with mentees that would document expectations, we agreed that mentors would have the flexibility to adapt their mentoring relationships to their mentee’s needs and dispositions. The final meeting reviewed psychological perspectives on life transitions, self-efficacy, and Schlossberg’s “4 S” model for understanding life transitions. The session concluded with mentors building listening and communication skills through the review of case studies and role-playing.

Our commitment to finding matches for all participants produced two dilemmas. First, as the participants represented academic disciplines spread across four IUPUC Divisions - Education, Liberal Arts, Nursing, and Science – most mentees could not be matched with a mentor in their field. Second, mentors and mentees were matched based on their prioritized interest in mentoring on teaching, research, service, and university culture instead of being encouraged to pair off on their own. This decision heeded Johnson’s (2006) warning that when mentors recruit mentees, they tend to pick “clones” and those who do not fit mentors’ profiles may be rejected. Two matches were made based on faculty members petitioning to work together. Thus, the matching process was also informed by research indicating that mentee and mentor input to selection criteria produces better matches (Nick, Delahoyde, Del Prato, Mitchell, Ortiz, Otley, Young, Cannon, Lasater, Reising, & Siktberg, 2012).

The pilot program was launched with a retreat on September 1, 2015 that brought all of the mentors and mentees together for the first time. Our goals for the retreat included reinforcing
the overarching program goal of increasing CSE and creating a shared sense of purpose and identity. Led by Dr. Deanna Reising, a mentoring scholar in Indiana University’s School of Nursing, we talked about the elements of mentoring relationships including roles, boundaries, goals, and accountability. Mentors and mentees also had the opportunity to chat informally at the retreat and then continue their conversations at a subsequent social event.

Over the 2015-16 academic year, mentoring pairs met separately each month and were convened for five program meetings. Three fall program meetings were designated as status update sessions designed to provide timely informal feedback and formal program assessment. In February, we used our time together to share strategies and provide encouragement regarding challenges facing all faculty at mid-year like the performance review process and maintaining student engagement. Our last meeting, held in April, divided mentors and mentees into separate focus groups to assess the program’s success and sustainability.

Assessment and Outcomes

To assess the outcomes of our program, we applied Schlossberg’s “4 S” model of transitions. As discussed above, evidence suggests that this is a helpful model to understand and improve CSE. Our goals in this program were to augment CSE among pre-promotion faculty, and increase engagement and productivity among mentees. Evidence suggests that the program accomplished these goals. The sample size was quite small (n = 7 mentees who completed both measures), constraining the usefulness of traditional statistical techniques. Using effect sizes and qualitative findings from focus groups helped to frame findings. First, mentees experienced an overall increase in GSE (t(6) = 1.67, ns, d = 0.48). The effect size suggests a moderate impact on trait-level self-efficacy, and evidence from focus groups supports this finding. A number of mentees expressed feeling more confident.

We examined if the mentees experienced a change in the “4 S’s” from the beginning to the end of the program by comparing pre-test and post-test scores on self-variables (positive outlook on the transition); strategies (coping techniques vital to making successful transitions); social supports (people that mentees can rely on to aid with the transition); and situation variables (concurrent stressors to the central transition). Taken individually, mentees reported higher levels of self-variables at the end of the program (t(6) = 1.16, ns, d = 0.26). They reported having more strategies available to them after the program (t(6) = 1.88, ns, d = 0.38), further supported during the focus groups in that many expressed feeling like they had a clearer plan to earn promotion. Mentees reported having more social supports at the end of the program (t(6) = 1.93, ns, d = 0.37) and echoed this sentiment during focus groups when they discussed the value of having a mentor and utilizing different people and offices around campus. Finally, aspects of the situation were not altered during the program (t(6) = 0.62, ns, d = 0.18). In hindsight, this makes sense, our program was designed to provide the tools to better address the situation, but we did not actually intend to remove external stressors, or send participants through promotion this year. Among the “4 S’s”, interpersonal Support emerged as equally if not more highly valued than Strategies for success. In other words, this finding reflects on the relative importance of culture vs. strategy to organizational effectiveness.

In terms of our goal of increasing engagement, there were mixed results in terms of engagement with university professional development resources and short term professional productivity. Most participants did not utilize certain formal resources like the intergroup dialogue (n = 2), nor did they apply for internal grants (n = 0). However, mentees did begin
utilizing other resources like the university’s promotion and tenure online materials and workshops. Additionally, mentees did report having an increased productivity relative to the previous year. In the focus groups, some expressed that they began a collaboration with their mentor ($n = 3$). For example, an Assistant Professor of Nursing is working with her mentor, an Associate Professor of English, on a paper on teaching writing in nursing classes.

Although mentors were not targeted or expected to experience any benefits directly from the program, we examined if they experienced any changes in the “4 S’s”, and found little evidence that they improved over the course of the program, further enhancing our evidence that mentees specifically benefitted from this program. The focus groups suggested other ways that mentors benefited. For instance, mentors reported strengthened faculty culture and morale, bolstered interdepartmental relationships, and even fruitful professional collaborations.

**Future Directions**

Building upon the pilot’s success to establish a more impactful and sustainable program is our next challenge. A first step will be to expand mentee eligibility to include all faculty. Additional modifications draw heavily upon program assessment. Mentors reported that, while they found mentoring to be very rewarding, they are unsure that they will be able to sustain their high level of commitment. Mentors and mentees expressed unease with the closeness of fit of mentoring assignments.

Program leaders and participants have identified two modifications to address these issues. First, we will introduce a mentor bureau. Mentors will identify areas of specialization and mentees will choose mentors to help with specific needs. Not only will the bureau lighten mentors’ burdens, it will lessen mentees’ vulnerability to dysfunction within a single mentoring relationship. Second, we plan to add peer mentoring. Mentees will meet separately to express concerns, provide support, and share strategies for success. These two changes will augment sustainability by sharing the workload previously assigned to a single mentor with peer mentors and fellow bureau mentors. In other words, we hope to simultaneously decrease daunting expectations for mentors and increase mentees’ opportunities to receive effective mentoring.
References


