Developing and Sustaining Effective Faculty Mentoring Programs

Joselynn Fountain

George Washington University

Kathryn E. Newcomer

George Washington University

ABSTRACT

How do faculty and universities benefit from mentoring, and what sorts of mentoring programs and policies are most effective? This article reviews existing research on mentoring in higher education and develops a conceptual framework that captures a theory of change regarding expectations about the impact of mentoring on faculty career development and scholarly productivity. We surveyed faculty in U.S. public affairs programs to learn about individual and institutional experiences with mentoring and mentoring programs. We found that informal mentoring is prevalent, as are formal mentoring programs. In line with previous research, we found that both mentees and mentors believe that mentoring is useful for helping mentees with teaching, research, and career planning and that visible support for mentoring is important for its success. Guided by our findings, we offer recommendations for developing and sustaining effective faculty mentoring programs.

KEYWORDS

Faculty mentoring programs, higher education, public affairs programs, faculty retention and productivity

More-senior members of organizations in all sectors are frequently asked informally, or are even required, to socialize and support new and/or more-junior members of their organizations to strengthen the latter's relevant skills, to develop potential leaders, and to build organizational capacity more generally. These relationships are typically called mentoring, for which we adopt the following useful definition: "a reciprocal learning relationship characterized by trust, respect, and commitment in which a mentor supports the professional and personal development of another (the mentee) by sharing his or her life experiences, influence, and expertise" (Zellers, Howard, & Barcic, 2008, p. 555). How mentoring policies and practices evolve

varies, because expectations of the processes in which mentors and mentees are expected to interact are highly dependent on an organization's work culture, context, and mission (Lumpkin, 2011). Mentoring is assumed to be good, but where, when, how, and under what conditions is mentoring likely to produce the expected benefits? We address this question by examining mentoring in university programs designed to develop public servants.

The use of mentoring in higher education, from informal pairings to facilitated programs, has become more prevalent since the 1990s, but private firms have used mentoring in leadership development programs for many years (Kee &

Newcomer, 2008). Studies promoting mentoring in the private sector date back to the 1970s (see, e.g., Collins & Scott, 1979; Dalton, Thompson & Price, 1977; Kanter, 1977; and Roche, 1979). Bozeman and Feeney's (2007, 2009) reviews of research on mentoring in public and private organizations found that few studies focused on its use in public agencies, and even fewer measured outcomes.

Within institutions of higher education, mentoring is typically viewed as a support mechanism that helps faculty mentees acquire and develop the competencies they need to thrive as well as the constructive work relationships they need to build their careers (Bean, Lucas, & Hyers, 2014; Benson, Morahan, Sachdeva, & Richman, 2002; Bland, Taylor, Shollen, Weber-Main, & Mulcahy, 2009; Cunningham, 1999; Files, Blair, Mayer, & Ko, 2008; Gardiner, Tiggemann, Kearns, & Marshall, 2007; Gibson, 2004; Henry et al., 1994; Illes, Glover, Wexler, Leung & Glazer, 2000; Lund, 2007; Madison & Huston, 1996; Mayer, Blair, Ko, Patel, & Files, 2014; Melicher, 2000; Morrison et al., 2014; Pololi, Knight, Dennis, & Frankel, 2002; Tareef, 2013; Thorndyke, Gusic, & Millner, 2008; Varkey et al., 2012; Wasburn & LaLopa, 2003; Wilson, Valentine, & Pereira, 2002; Wunsch, 1994; Zeind et al., 2005). Advocates of mentoring stress the benefits incurred not only by mentees but also by their employers in terms of faculty retention and other advantages for the institution (Benson et al., 2002; Bland et al., 2009; Falzarano & Zipp, 2012; Gardiner et al., 2007; Illes et al., 2000; Lumpkin, 2011; Slimmer, 2012; Smith, Smith, & Markham, 2000; Steele, Fisman, & Davidson, 2013; Thorndyke et al., 2008; Thurston, Navarrete, & Miller, 2009; Wasserstein, Quistberg, & Shea, 2007; Zeind et al., 2005).

Within any organization, but especially educational institutions, "reciprocal learning relationships characterized by trust, respect, and commitment" provide valuable support not only for the mentored faculty members as they develop their careers but also for other members of the university community—especially students. Effective mentors present positive role

models for their mentees in giving useful feedback; the mentees in turn are likely to enact this behavior with their own students and, later, with junior faculty when the mentees themselves become mentors. A sign of the increasing recognition of the importance of mentoring within higher education is the Mentoring Conference, held annually since 2008. The conference, sponsored by the University of New Mexico Mentoring Institute, brings together faculty, researchers, and professionals in higher education to share mentoring best practices (see mentor.unm.edu/conference).

Especially since 2010, researchers have begun to examine how mentees and institutions benefit from mentoring in higher education, as well as what sorts of mentoring programs and policies seem to be most effective (Gaskin, Lumpkin, & Tennant, 2003; Gibson, 2004, 2006; Grosshans, Poczwardowski, Trunnell, & Ransdell, 2003; Gwyn, 2011; Hadidi, Lindquist, & Buckwalter, 2013; Henry et al., 1994; Herr, 1994; Hill, Bahniuk, & Dobos, 1989; Illes et al., 2000; Law et al., 2014; Lumpkin, 2011; Luna & Cullen, 1995; Mayer et al., 2014; Morrison et al., 2014; Sands, 1991; Wunsch, 1994). Many such studies have focused on mentoring's use and success within medical and nursing education.

Our study contributes to research on mentoring in higher education by examining current mentoring policies and practice within schools of public affairs in the United States. We examine how mentoring contributes to faculty development in programs devoted to developing public servants. Leaders and managers who work in government, or in other organizations that serve the public interest, are especially well served by exposure to instructors and faculty advisers who have learned how to develop and sustain "reciprocal learning relationships characterized by trust, respect, and commitment." Certainly, effective faculty mentoring in programs devoted to developing public servants' interpersonal competencies can have positive effects on students, as such mentoring models actions and behaviors that students will be called upon to provide in their own careers (Bozeman & Feeney, 2007, 2009). Engaging

citizens to develop mutual respect and trust is a key competency for public servants. Relatedly, demonstrating "respect, equity and fairness in dealings with citizens and fellow public servants" constitutes one of the values expected of all public affairs programs by their primary accrediting body (see NASPAA, Commission on Peer Review and Accreditation, 2014). Thus, it seems that effective mentoring could have extremely valuable consequences for public affairs programs.

Our research addresses three main research questions:

- 1. In what contexts are faculty mentoring programs more likely to be effective?
- 2. For which faculty is mentoring more useful?
- 3. What characteristics of mentors and mentees are viewed as important in ensuring good mentoring relationships?

In this article we first briefly review existing research on mentoring in higher education. We next offer a conceptual framework that captures a theory of change regarding how mentoring is expected to improve the career development and scholarly productivity of faculty members. We then describe our survey of faculty in public affairs schools, including survey respondents and our findings.

RESEARCH ON MENTORING IN HIGHER EDUCATION

We conducted a review of the literature on faculty mentoring in higher education, published 1989–2014, using major research databases (Web of Science, Business Source Premier, ERIC, and Academic Source Premier). Table 1 lists the articles we found. Our search terms included variations of the following key words: faculty, mentoring programs, and university. We included articles that focus on the prevalence of mentoring, the benefits of mentoring, and factors associated with effective mentoring programs. We excluded articles that focused on faculty mentoring of students because our research objective is to examine how mentoring fosters faculty development.

Benefits of Mentoring

The studies reviewed suggest that faculty mentoring has the following benefits:

- facilitates the recruitment, retention, and advancement of faculty (Bland et al., 2009; Falzarano & Zipp, 2012; Gwyn, 2011; McKinley, 2004);
- socializes protégés into an academic unit's culture (Bland et al., 2009; Cunningham, 1999; Lumpkin, 2011; Luna & Cullen, 1995);
- increases collegiality and the building of relationships and networks among protégés and mentors (Benson et al., 2002; Borders et al., 2011; Luna & Cullen, 1995);
- increases productivity among both protégés and mentors (Falzarano & Zipp, 2012);

and

• promotes professional growth and career development for protégés and mentors (Kram, 1985) as well as increased productivity and organizational stability (Bland et al., 2009; Cunningham, 1999; Falzarano & Zipp, 2012).

Developing Effective Mentoring Programs

Given the benefits of mentoring, many academic institutions have adopted faculty mentoring programs. The studies reviewed suggest that several factors appear to be associated with effective mentoring programs, including the following:

- clearly stated purpose and goals (Lumpkin, 2011; Luna & Cullen, 1995);
- support from faculty and leadership (Peters & Boylston, 2006; Zeind et al., 2005);
- evaluation for continuous improvement (Lumpkin, 2011; Luna & Cullen, 1995);
- visible support from senior administration (Zeind et al., 2005);
- adequate resources (Zeind et al., 2005);
- inclusive design that instills mentoring as a cultural value and core institutional responsibility (Bean et al., 2014; Gaskin et al. 2003);

(list continues on p. 492)

TABLE 1. Studies on Faculty Mentoring, 1989–2014

Author(s)	Year	Field	Key research questions/focus	Method	Data
Hill et al.	1989	Multiple	To investigate the relationship of gender/mentee status, communication factors, and organizational success factors in an academic setting	Survey	N = 224
Sands et al.	1991	Multiple	What are the past and current experiences of faculty with respect to mentoring? What is the nature of mentoring between faculty members in this academic setting? Who mentors whom? How often? Under what conditions? What are ideal types of faculty mentors? Which populations prefer which types?	Survey	N = 347
Henry et al.	1994	Multiple	To evaluate a female faculty mentoring program	Multi- method	N = 26
Wunsch	1994	Multiple	To evaluate a comprehensive program designed to support the career development of incoming female assistant professors in tenure-track positions	Interviews and qual- itative analysis	N = 45
Kavoosi et al.	1995	Nursing	What mentoring activities do senior nursing faculty provide in NLN-accredited master's degree programs? How do nursing program administrators support faculty mentoring activities and what level of organizational/institutional support do they identify? How does nursing administrative support for mentoring affect the mentoring activities of senior nursing faculty?	Survey	N = 293 (faculty) N = 96 (administrators)
Madison & Huston	1996	Multiple	To explore the frequency and quality of faculty-faculty mentoring experiences at a northern California and an Australian university	Survey	N = 270 (CA) N = 163 (Australia)
Palepu et al.	1998	Medicine	To determine the prevalence and quality of mentoring relationships for U.S. medical school faculty To determine any variations in prevalence or quality by gender or race To determine the relationship between mentoring and junior faculty members' perception of institutional professional support; research, teaching, and clinical skills development; allocation of time to professional activities; and career satisfaction	Survey	N = 1808
Fox et al.	1998	Psychiatry	To evaluate the effectiveness of a formal mentoring program	Survey & evaluation	N = 8

TABLE 1. Studies on Faculty Mentoring, 1989–2014 (continued)

Author(s)	Year	Field	Key research questions/focus	Method	Data
Goodwin et al.	1998	Education	To identify faculty members' attitudes, perceptions, and experiences about faculty-to-faculty mentoring in order to better understand operational definitions of mentoring and views about effective mentoring	Survey	N = 125
Cunningham	1999	Multiple	What are the past and current experiences of faculty with respect to mentoring? What is the nature of mentoring between faculty members in this academic setting? Who mentors whom? How often? Under what conditions? What are ideal types of faculty mentors? Which populations prefer which types?	Survey	N = 287
Illes et al.	2000	Radiology	To evaluate a mentoring program	Evaluation	N = 40
Melicher	2000	Finance	To determine the extent to which academic mentoring takes place in finance academia To determine whether having an academic mentor provides a "benefit" to the academic career of a finance faculty member	Survey	N = 603
Smith et al.	2000	Multiple	Do women and minorities make comparable use of mentors as do males and whites? Do mentored women and minorities experience higher levels of affective commitment and lower intentions of turnover than their nonprotégé counterparts? Are protégés in diversified mentoring relationships mentored differently than protégés in homogeneous mentoring relationships?	Survey	N = 765
Wutoh et al.	2000	Pharmacy	To determine the existence and extent of faculty mentoring programs at U.S. schools/colleges of pharmacy	Survey	N = 60 (schools)
Tillman	2001	Multiple	What are the experiences of African American faculty in formal and informal mentoring relationships in predominantly white institutions?	Interviews	N = 10 (mentor/ protégé pairs)
Benson et al.	2002	Medicine	Can a voluntary mentoring program be established with minimal resources and be effective in the context of major organizational change?	Multi-method	N = 34
Pololi et al.	2002	Medicine	To evaluate a collaborative mentoring program	Quantitative & qualitative analysis	N = 18

TABLE 1. Studies on Faculty Mentoring, 1989–2014 (continued)

Author(s)	Year	Field	Key research questions/focus	Method	Data
Wilson et al.	2002	Social work	To explore the perceptions of new educa- tors about the mentoring they experienced in their first years as social work faculty after completing their doctoral degree	Interviews	N = 18
Miller & Noland	2003	Health	To identify the knowledge, behaviors, and skills senior faculty believe are important for the success of new junior faculty	Interviews	N = 11
Schrodt et al.	2003	Commu- nication	What behaviors associated with faculty mentoring relationships are most closely associated with organizational satisfaction during the scialization process? How protégés described mentoring	Survey	N = 259
Wasburn & LaLopa	2003	Multiple	To evaluate a faculty mentoring program	Survey	N = 24
Gibson	2004	Multiple	What is the experience of being mentored like for women faculty?	Interviews	N = 9
Tracy et al.	2004	Medicine	To determine whether a junior faculty mentoring program is beneficial to participants To identify particular positive and negative aspects of such a program to enable others to institute similar programs	Survey and focus groups	N = 25
Leslie et al.	2005	Medicine	What is the mentoring experience of junior faculty? In what areas do junior faculty seek career assistance and advice?	Interviews	N = 20
Zeind et al.	2005	Pharmacy	To identify keys to developing a sustainable mentoring program to support professional development of faculty	Evaluation survey	N = 48
Gibson	2006	Multiple	What is the experience of being mentored like for women faculty?	Interviews	N = 9
Gardiner et al.	2007	Interna- tional	To evaluate the success of mentor- ing in terms of benefits for the women mentees and the university	Survey and univer- sity research database	N = 64
Lund	2007	Multiple	What is the nature of successful mentoring relationships between senior and junior faculty?	Interview	N = 6

TABLE 1. Studies on Faculty Mentoring, 1989–2014 (continued)

Author(s)	Year	Field	Key research questions/focus	Method	Data
Wasburn	2007	Multiple	To determine the lived experiences of mentors and protégés in the mentoring program	Case study	N = 6
			To determine whether protégés found strategic collaboration helpful in advancing their careers		
			To determine what changes mentors' and protégés' experiences might suggest		
Wasserstein et al.	2007	Medicine	To explore multiple aspects of mentoring at an academic medical center in relation to faculty rank, track, and gender	Survey	N = 1,046
Files et al.	2008	Medical	To describe the outcomes of a facilitated peer mentorship pilot program developed to meet the unique needs of women faculty	Survey	N = 4
Moss et al.	2008	Psychiatry	To evaluate the initiation of a mentoring model for junior faculty utilizing a peer group approach rather than the traditional dyadic model	Focus groups	N = 8
Okurame	2008	Social science	To ascertain the extent to which members of academic staff in the faculty perceive mentoring as a crucial component of academic development	Survey	N = 48
			To find out the form and extent of mentoring relationships among academic staff in the faculty		
			To find out how existing mentor- ing relationships were initiated		
			To find out the focus of mentoring activities in existing relationships		
			To identify barriers experienced by senior academic members to being mentors of junior/new faculty members To identify challenges experienced by protégés in mentoring relationships		
Thorndyke et al.	2008	Medicine	To evaluate a functional mentoring program	Survey	N = 97
Foote & Solem	2009	Geog- raphy	To describe the social and professional dimensions of the mentoring process at the early stages of faculty development To identify the range of positive, neutral, and negative experiences	Interviews and survey	N = 46 (interviews) N = 100 (surveys)

TABLE 1. Studies on Faculty Mentoring, 1989–2014 (continued)

Author(s)	Year	Field	Key research questions/focus	Method	Data
Haynes & Petrosko	2009	Law	Does law faculty mentoring include both formal and informal mentoring? What are the organizational socialization dif- ferences between mentored and nonmen- tored tenured and tenure-track law faculty?	Survey	N = 298
			Is formal mentoring perceived as more ef- fective than informal mentoring and/or no mentoring for organizational socialization?		
Sawatsky & Enns	2009	Nursing	To complete a mentoring needs assessment to establish the foundation for a formal mentoring program	Survey	N = 29
Thurston et al.	2009	Education	To evaluate a 10-year faculty mentoring program	Multi- methods	N = 32
Feldman et al.	2010	Medical	To determine the characteristics associated with having a mentor, the association of mentoring with self-efficacy, and the content of mentor-mentee interactions	Survey	N = 466
Searby & Collins	2010	Education	To describe the mentoring relation- ship of a new female faculty mem- ber as she was mentored by a se- nior member in her department	Case study	N = 1 case
Bagramian et al.	2011	Dentistry	How did mentoring change faculty members' perception of collegiality and mentoring expectations?	Survey	N = 62
Cho et al.	2011	Medicine	What are key characteristics of outstanding mentors from the perspective of their mentees?	Qualitative analysis	N = 53
Gwyn, P. G.	2011	Nursing	To examine whether having a mentor or not was related to nursing faculties' occupational commitment To examine how the affective and normative dimensions of occupational commitment among nursing faculty were affected by the quality of mentoring relationships and by their number of years employed as faculty	Survey	N = 133
Marcellino	2011	Education	How did a pilot mentoring program evolve over the academic year, and what can be learned from its application?	Multi-method evaluation	N = 7
Blood et al.	2012	Medicine	To determine the role of academic rank, research focus, parenting, and part-time work on mentoring importance, needs, and gaps	Survey	N = 1179
Falzarano & Zipp	2012	Occu- pational therapy	What is the nature and frequency of mentoring for occupational therapy faculty?	Survey	N = 107

TABLE 1. Studies on Faculty Mentoring, 1989–2014 (continued)

Author(s)	Year	Field	Key research questions/focus	Method	Data
Fox	2012	Multiple	To evaluate levels of satisfaction with a faculty peer mentor program	Survey	N = 228
Slimmer	2012	Nursing	To describe the Teaching Mentorship Program within the College of Nursing Department at a midwestern state university	Survey	<i>N</i> = 10
Varkey et al.	2012	Medicine	To describe a facilitated peer mentoring program	Survey	N = 23
Zafar et al.	2012	Multiple	To explore the mentoring perceptions and experiences of achieving tenure for foreign national faculty members as they transitioned into the professoriat	Interviews	N = 6
Steele et al.	2013	Medicine	To understand factors that may be barriers to recruitment and retention of academic junior faculty.	Multi-method	N = 175 (surveys) N = 8 (focus groups) N = 19 (interviews)
Tareef	2013	Education	To determine the extent to which the professional career development of educational faculty has been influenced by mentors To determine the relationship between mentoring influence and select indicators of career development To determine the relationship between satisfaction with current position, satisfaction with career progress, satisfaction with influential monitors, and satisfaction with overall performance	Survey	N = 45
Bean et al.	2014	Multiple	How satisfied are mentors and mentees with the mentoring program?	Evaluation survey	N = 31
Mayer et al.	2014	Medicine	To evaluate the long-term impact of a facilitated peer mentoring program on academic achievement	Survey and curriculum review	N = 16
Morrison et al.	2014	Medicine	To evaluate the impact of a for- mal mentoring program on time to academic promotion and differ- ences in gender-based outcomes	Quantitative analysis	N = 611
Shollen et al.	2014	Medicine	What are the relationships among mentor type, mentoring behaviors, and the outcomes of satisfaction and productivity?	Survey	N = 354

- alignment with organizational goals and objectives (Zellers et al., 2008);
- intentional strategies for matching pairs on the basis of professional compatibility (Lumpkin, 2011); and
- orientations for both mentors and mentees concerning the dynamics of mentoring (Lumpkin, 2011; Luna & Cullen, 1995).

A THEORY OF CHANGE FOR FACULTY MENTORING

Studies of mentoring in higher education have tended to assume, and sometimes measure, how mentoring benefits mentees through improving their career development and scholarly productivity. We have drawn upon this research to construct a model describing the process through which mentoring may affect the behavior of faculty members to produce benefits for mentees as well as for mentors and the institutions involved, also known as a theory of change. Our model appears in Figure 1.

Inputs to the mentoring process consist of institutional factors such as administration buy-in, resources, formal rules requiring mentoring, and an institutional culture that supports and values mentoring (Cunningham, 1999; Gibson, 2006; Marcellino, 2011; Slimmer, 2012). In addition, leadership support at both the university/ college level and the departmental level is critical, as are the priority and capacity devoted to supporting faculty development at both levels (Foote & Solem, 2009; Kavoosi, Elman, & Mauch, 1995; Wilson et al., 2002).

Developing mentoring relationships includes adequate mentor training, the provision of clear expectations, and the provision of rewards for mentors; interactions between mentors and mentees are also expected to produce positive results for mentees (Wasburn, & LaLopa, 2003). Illes et al. (2000) note that "a mentoring program must be customized to meet the specific needs of the faculty" (p. 723). The theory underlying mentoring is that mentees will receive helpful advice from mentors to inform the protégés' choices about research, teaching, and service efforts (Bean et al., 2014; Falzarano & Zipp, 2012; Marcellino, 2011;

Miller & Noland, 2003; Okurame, 2008; Palepu et al., 1995; Sawatsky & Enns, 2009).

However, important characteristics of both the organizational context and the faculty who participate in mentoring affect the mentoring relationships and outcomes, mediating the ability of mentoring to produce the desired (and expected) benefits. At the organizational level, authentic and ongoing support for mentoring from leadership at both the department and decanal levels matters, as do rewards and recognition given to mentors for their participation (Bagramian, Taichman, McCauley, Green, & Inglehart, 2011; Kavoosi et al., 1995; Sawatsky & Enns, 2009; Slimmer, 2012; Wilson et al., 2002). In addition, clarity and consistency in promotion and tenure processes can affect how helpful mentoring is in any context, as mentors need to know the university's expectations and reward systems in order to provide useful and informed advice (Borders, et al., 2011; Illes et al., 2000). The very practical factors of capacity also matter: how many senior faculty, who possess the will and nurturing natures to mentor, are available and for how much time?

Traits of individual mentees and mentors are also likely to affect whether mentoring helps junior faculty thrive and succeed in their careers. Research shows that mentees' self-confidence and self-efficacy will affect their career choices and successes (Feldman, Arean, Marshall, Lovett, & O'Sullivan, 2010; Mayer et al., 2014; Tareef, 2013; Tracy, Jagsi, Starr, & Tarbell, 2004). Mentors need the capacity and time to mentor effectively as well (Cho, Ramanan, & Feldman, 2011; Sawatsky, & Enns, 2009; Thurston et al., 2009; Wasburn, 2007). Mentors and mentees need to be matched along a variety of dimensions, including internal incentives, expectations of mentoring, temperaments, and time management skills (Wasburn, & La-Lopa, 2003; Wilson et al., 2002).

The research on mentoring suggests that these such mediating factors should be taken into account when attributing benefits to mentoring for achieving the desired goals of individual scholarly productivity and faculty retention for

FIGURE 1.
Theory of Change Model for Faculty Mentoring

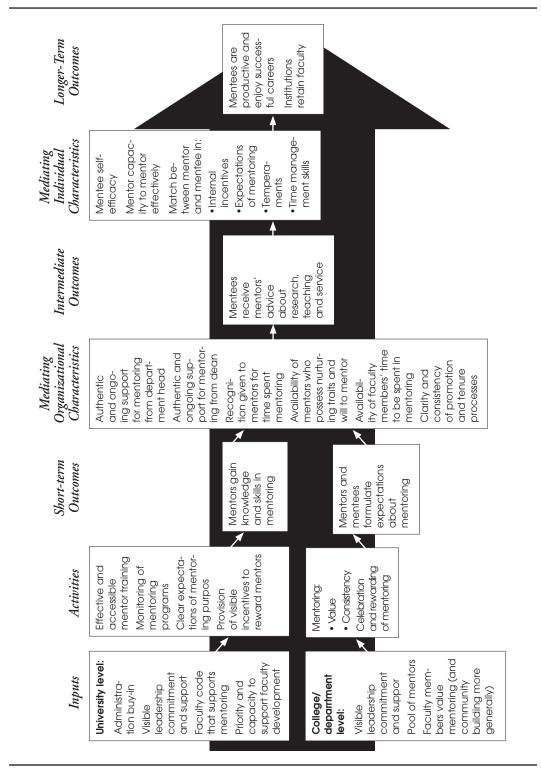


TABLE 2. Profile of Survey Respondents

Role in faculty mentoring program (n=130)	Mentor Mentee Informal role as mentor of mentee Both mentor and mentee Program coordinator/developer/trainer	41% 38% 11% 8% 2%
Gender (n=1135)	Men Women	57% 43%
Race (n=1131)	White Asian Black or African American American Indian or Alaska Native	90% 6% 3% 1%
Rank (<i>n</i> =134)	Pre-tenure-track assistant professor Tenured associate professor Tenured full professor Nontenure-track contract professor Part-time professor	37% 26% 35% 1% 1%
Years teaching at the university level (n=1135)	< 3 years 3-5 years 6-10 years 11+ years	13% 18% 16% 53%

the institution. Using the model in Figure 1, we designed a survey to administer to faculty in U.S. universities, asking about faculty experience with mentoring and mentoring programs.

SURVEY OF FACULTY IN PUBLIC AFFAIRS PROGRAMS

We developed an electronic survey to examine the practice and perceived benefits of faculty mentoring in public affairs programs. Our questions measured aspects of the mentoring relationship, mentoring policies and programs, and the university setting in which the respondents worked. We pretested the survey on five faculty members to ensure its clarity. In September 2014, we sent the survey to a randomly selected sample of five faculty members (at all ranks) at each of the first 100 schools on the 2012 *U.S. News and World Report* list of top public affairs schools in the country (see Appendix). We e-mailed a follow-up survey 2 weeks after the initial request.

We received 176 surveys, and 13 e-mails were returned as undelivered, giving us a response rate of 36%. With a response rate this low, we need to be concerned with selection bias, that is, that respondents may differ systematically from nonrespondents, thus giving an unrepresentative view of the phenomena studied. It is certainly possible that those choosing to respond to the survey are those already involved in mentoring. Anecdotal data—such as nonrespondents telling us they did not respond because they did not participate in mentoring at their school—suggests this may be the case. However, while our findings may overestimate the amount of mentoring and support for mentoring in the targeted programs, quantifying the existence of mentoring programs was not a key research objective. Our inquiry is more concerned with how and when mentoring is most likely to be useful for mentees, and our findings in these areas may well be transferrable to locations where mentoring programs are not present.

SURVEY RESULTS

Profile of Respondents

Table 2 provides a profile of survey respondents. The vast majority of respondents are either mentors or mentees, and there are slightly more men than women in the sample. The vast majority (90%) of the respondents are white. The majority have been teaching for more than 11 years (53%) and are tenure-track or tenured professors (98%).

Current Mentoring Practices

Table 3 provides a profile of the mentoring practices described by respondents. A high proportion (83%) of respondents report that faculty mentoring occurs at least to some extent within their academic unit; 51% report that it occurs to a great extent. About half of respondents have formal mentoring policies in place either at the university level or within their academic unit, and most of those reporting formal policies are at least somewhat familiar

with the policy. When asked about their mentoring relationship, more than half of mentees report that their mentor was formally assigned, and 47% have a mentor who is the same race and gender.

Facilitators of Effective Mentoring

Tables 4, 5, and 6 show the institutional and organizational factors and the attributes of the mentor-mentee relationship that survey respondents find to be facilitators of effective mentoring. Respondents identify the academicunit head's support for mentoring as far and away the most important institutional factor supporting effective mentoring (83% report "highly important"); faculty leadership commitment is almost as important (76% report "highly important").

When asked to rate factors affecting the mentoring relationship, both mentees and mentors report that the most important benefit mentors provide is advice on how to navigate

TABLE 3. Profile of Faculty Mentoring Programs

Extent that faculty mentoring occurs within academic unit	High Medium Low	51% 32% 17%
Formal mentoring policy in place	Yes, within academic unit only Yes, university-level policy No Not yet, but in consideration	34% 14% 49% 3%
Familiarity with formal mentoring policy	High Medium Low	57% 28% 15%
Means of establishing mentoring relationship (mentee)	Formally assigned Approached mentor Approached by mentor	60% 35% 5%
Means of establishing mentoring relationship (mentor)	Formally assigned Approached by mentee Approached mentee	40% 31% 29%
Shared mentor-mentee traits (asked of mentees only)	Mentor and mentee of same race AND gender Mentor and mentee of same race but NOT gender Mentor and mentee of same gender but NOT race Mentor and mentee NOT of same gender NOR race	47% 27% 11% 15%

TABLE 4.Important Institutional Factors for Effective Mentoring

Institutional factors	Level of importance			
Institutional factors	High	Medium	Low	
Academic-unit head's support for mentoring	81%	12%	7%	
Adequate resources to support faculty mentoring	52%	25%	23%	
High-level administration buy-in for faculty mentoring	48%	32%	20%	
Faculty code and/or regulations that require formal mentoring	35%	32%	33%	

TABLE 5. Important Organizational Factors for Effective Mentoring

Overenizational factors	Level of importance			
Organizational factors		Medium	Low	
Leadership commitment and support for faculty mentoring	76%	17%	7%	
Clear mentoring program guidelines	50%	28%	22%	
Adequate mentor training	37%	33%	30%	
Rewards for mentors	29%	26%	45%	

 TABLE 6.

 Important Attributes of Mentor-Mentee Relationship for Effective Mentoring

	Dolationship attributes	Leve	el of importo	Level of importance				
	Relationship attributes	High	Medium	Low				
Type of	Provides information on how to navigate the university system	91%	4%	5%				
mentor	Promotes professional advancement and visibility	90%	5%	5%				
support	Provides constructive feedback and promotes collaboration	88%	8%	4%				
	Provides socioemotional, personal, and interpersonal support	49%	26%	25%				
Mentor	Mentor capacity	82%	15%	3%				
and	Consistency in mentoring	64%	29%	7%				
mentee	Mentee self-efficacy	50%	42%	8%				
traits	Mentee self-confidence	29%	49%	22%				
	Mentor and mentee are of the same gender	7%	17%	76%				
	Mentor and mentee are of the same race	5%	19%	76%				

the university system and how to promote their own professional advancement and visibility. Mentees also highly value the constructive feedback and collaboration offered by mentors. The mentor trait rated most important in facilitating effective mentoring is mentor capacity (i.e., a mentor's available time). When responses are broken down by respondent's faculty rank, the only difference across rank is that tenured faculty are significantly more likely than pretenure faculty to find socioemotional, personal, and interpersonal support as important as other factors for a successful mentoring relationship. This suggests that mentors attach more importance to soft support (socioemotional, personal, and interpersonal) than do mentees, who may be more focused on getting the "hard," practical advice they need to succeed.

STATISTICAL ANALYSIS

We conducted chi-square tests to examine the bivariate relationship between context and mentoring practices, as well as the relationship between contextual factors and personal traits (gender, race, and academic rank) and the perceived usefulness of mentoring. We report the statistically significant results here.

Context for Mentoring

In terms of the university setting for mentoring programs, in our sample private universities are more likely to have formal mentoring programs in place than public universities (85% versus 44%), and faculty in larger public affairs programs (more than 250 students) are more likely to have formal mentoring programs than faculty in smaller programs (55% versus 40%).

In terms of leadership support, schools rated highly for high-level administration buy-in of faculty mentoring are more likely to have formal mentoring policies in place than schools with lower ratings. Additionally, schools rated highly for the academic-unit head's support for mentoring are more likely to have formal mentoring policies in place than schools with lower ratings.

Perceived Usefulness of Mentoring

We investigated predictors of the reported usefulness of mentoring in helping mentees succeed in three aspects of academic life: teaching, research, and career planning. Regarding support of their teaching, minority faculty are more likely to find mentoring useful for improving teaching skills than are nonminority faculty. In addition, faculty who report high ratings for adequate mentor training within the academic unit are more likely to find mentoring useful for improving teaching skills than those who report lower ratings.

Regarding help in succeeding with research, faculty who report high levels of leadership support for mentoring, adequate resources to support mentoring, and adequate mentor training within the academic unit are more likely to find mentoring helpful for formulating and carrying out a research agenda than those who report lower ratings. In terms of help in planning an academic career, women are more likely than men to find mentoring useful for planning their academic careers. In addition, faculty who report higher levels of support for mentoring from the academic-unit head and adequate resources to support mentoring are more likely to find mentoring helpful for planning their academic careers than faculty who report lower ratings.

Effects of Academic Context and Personal Characteristics on Perceptions of the Usefulness of Mentoring

To examine the relative effects of context and personal traits on perceptions of the usefulness of mentoring, we first ran a correlation of the important contextual factors (see Table 7); then we ran logistic regressions to identify the relatively more important predictors of perceptions of usefulness of mentoring for three different areas: teaching, research, and career planning.

Among the contextual factors, "adequate resources" was (not surprisingly) highly correlated with other key support factors such as highlevel administrative support, leadership support, training and rewards; thus, we did not include "adequate resources" in the final regression models. In addition, high correlations between other pairs of variables, such as mentor training

TABLE 7. Correlation Matrix for Characteristics of the Academic Unit

	High-level admin. support	Academic- unit head support	Adequate resources	Leadership commitment and support	Program guide- lines	Adequate mentor training	Rewards for mentoring
High-level admin. support	1						
Academic- unit head support	.64**	1					
Adequate resources	.62**	.57**	1				
Leadership commitment and support	.71**	.76**	.72**	1			
Program guidelines	.62**	.53**	.68**	.63**	1		
Adequate mentor training	.51**	.49**	.55**	.53**	.72**	1	
Rewards for mentoring	.41**	.36**	.63**	.45**	.51**	.60**	1

Note. **Denotes statistical significance at the 99% level.

 TABLE 8.

 Logistic Regression Estimates of Perceptions of Usefulness of Mentoring

	(1) Improving teaching	(2) Carrying out research agenda	(3) Planning academic caree
Academic-unit head's support for mentoring			1.48*
Leadership commitment and support for mentoring		1.27	
Adequate mentor training	2.00**	1.84*	
White	.10**	.38	.47
Men	.34	.48	.24**
Pre-tenure faculty	.73	1.84	1.39
Observations	94	93	101

Note. Estimates represent odds ratios. Adequate resources dropped from specifications (2) and (3) due to collinearity.

^{*}Denotes statistical significance at the 95% level. **Denotes statistical significance at the 99% level.

and rewards, led us to run multiple models to remove one of each such pair at a time to more fairly test the relative effects of those correlated variables.

Table 8 provides the results of the logistic regression models. We defined "highly useful" as a 4 or 5 on the 5-point scale for the purpose of predicting "useful" as present or not (thus using a logistic regression model). For our predictor variables, we used the contextual factors that were identified as important from our chi-square tests. Regression estimates are reported as odds ratios, and the statistical significance and magnitude of the odds ratios indicate which variables are more predictive of mentoring being perceived as useful. Odds ratios greater than 1 suggests higher odds of finding mentoring useful, whereas odds ratios less than 1 suggest lower odds.

The regression results show that adequate mentor training is the strongest predictor of mentees' finding mentoring useful for helping them improve their teaching; and minority faculty members are more likely to find mentoring useful for improving teaching. Adequate mentor training is the only strong predictor of mentees' finding mentoring useful for helping them plan and implement a research agenda. The support of the academic-unit head is the strongest predictor of mentees' finding mentoring useful for academic career planning; and women are significantly more likely than men to feel that they benefit from mentoring in this area.

Challenges to the Effective Use of Mentoring for Faculty Development

We asked an open-ended question about what faculty think presents challenges to the effective use of mentoring for faculty development, and we received 73 responses. Respondents most frequently noted these challenges: time constraints (42%), unclear expectations (16%), a lack of interest/motivation by faculty (15%), insufficient resources (14%), and the lack of incentives/rewards for mentoring (7%).

CONCLUSIONS AND IMPLICATIONS

We found that within public affairs programs in U.S. universities, informal mentoring is prevalent, as are formal mentoring programs. Both mentees and mentors believe that mentoring is useful for helping mentees with teaching, research, and career planning and that visible support for mentoring matters a great deal. Visible and consistent support from above is critical: support from the academic-unit head is a critical institutional factor affecting mentoring's success, and leadership commitment and support is a critical organizational factor affecting its success. Support in terms of ensuring adequate training and rewards for mentors is also important, and that support affects an institution's ability to ensure mentor capacity and consistency in mentoring. Consistent with the literature, we found that the biggest challenge to effective mentoring stems from time constraints for both mentors and mentees (Bagramian, Taichman, McCauley, Green, & Inglehart, 2011; Bean et al., 2014; Fox, 2012; Sawatsky & Enns, 2009; Tracy et al., 2004). It is likely that solid mentor training and rewards can help mentors allocate adequate time to quality mentoring.

We found that mentees find the following support from mentors most valuable:

- information on how to navigate the university system;
- advice on professional advancement and visibility; and
- constructive feedback and collaboration.

Interestingly, tenured faculty (the mentors) are more likely than pre-tenure faculty to find socioemotional, personal, and interpersonal support important for a successful mentoring relationship. Thus, mentors are more likely than mentees to believe that such soft support is important; but because mentors have the benefit of hindsight, training mentors to provide both hard and soft support appears to be important.

Our survey findings suggest that the logic underlying mentoring programs described in the literature and graphically portrayed in our theory of change model seems applicable for faculty in public affairs programs. Our findings are also in line with previous research on mentoring in universities. Visible and consistent support for mentoring matters, and effective mentor training and rewarding of mentors can make a difference in ensuring effective mentoring processes—at least both mentors and mentees surveyed think so.

What are the implications of our findings and potential lessons for developing and sustaining effective mentoring programs? First, visible and authentic support from the highest levels of the university, as well as from unit -level leaders, is vital. Simply issuing a mentoring requirement from a provost's office is not enough. Ongoing support should entail effective and accessible mentor training, rewards for mentors (e.g., money or course relief), awards to acknowledge particularly effective mentors, and guidance and resources for ongoing monitoring and evaluation of mentoring as implemented. Administrative support for mentoring is probably most efficiently located centrally rather than at each department or college, as a systematic campus-wide approach for all the above supports is likely to be most consistent and helpful. It is possible that smaller departments may not have enough senior faculty who can serve as mentors, so a centrally located office can help identify senior faculty from other departments who can serve as mentors.

In addition, mentor training should address both hard and soft mentoring knowledge and skills. Training should be offered in a manner in which faculty are likely to partake. For example, tools such as brief podcasts and webinars, websites that offer brief articles and advice, and coaches available upon request are more likely to be used than in-person workshops. Schools that do not yet have mentoring programs do not need to start from scratch, as there are resources available. (For more on promising mentoring practices, see the Mentoring Institute's annual conferences at mentor.unm.edu/conference.)

Second, the objectives and protocols for monitoring and evaluating mentoring programs merit careful consideration and administration. Ongoing monitoring should be transparent, not overly burdensome, and not used for blaming or shaming. For example, asking both mentors and mentees to report on their experiences at some regular interval—like on their annual report—perhaps prompting them to report interactions or supports they found especially useful, is a reasonable way to gain feedback and reinforce the importance of mentoring. Likewise, there should be a mechanism for participants to report that a mentoring relationship is either not working in general or that one of the dyad is unable to devote adequate time; such information should be handled in a manner that is not overly critical or public, so that mentees especially are not afraid of reporting.

As yet, there are no readily available evidence-based evaluation models for mentoring programs. Clarity in the institution's and leadership's expectations of mentoring programs and of mentors is needed in order to evaluate both mentors and overall program objectives. However, given the many organizational and individual-level mediating variables that can affect how effective mentoring may be for mentees, as well as for faculty retention more generally, institutions should exercise caution in setting overly ambitious faculty promotion or retention targets as mentoring program goals.

Third, mentoring relationships should be kept separate from promotion and tenure processes, or mentors may be held liable for inadequate or inappropriate advice. The admissibility of written and oral advice in deciding on faculty promotion and tenure has become increasingly contentious. Mentors need explicit and written guidelines regarding what they should and should not say to mentees about promotion and tenure decisions. Mentors should also be conversant with the promotion and tenure procedures and rules within their department and university.

Fourth, mentoring processes that target moresenior, tenured (and possibly contract) faculty need additional consideration. University faculty choose to stay in their positions longer than in the past, and thus the time they serve after tenure has increased. This introduces new challenges for their further professional development, presenting yet another arena where we need more intentional and strategic thinking. Departments should openly discuss how to design and provide mentoring for senior faculty, and a centrally located mentoring program office should help facilitate such discussions and processes.

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ABOUT THE AUTHORS

Joselynn Fountain is a PhD candidate in public policy and public administration at the George Washington University. Her research focuses on higher education policy and program evaluation.

Kathryn E. Newcomer is director of the Trachtenberg School of Public Policy and Public Administration at the George Washington University. Her research and teaching focuses on program evaluation and accountability in government.

APPENDIX

2012 U.S. News and World Report List of Top 100 Public Affairs Schools

1.	Syracuse University (Maxwell)	30.	Ohio State University (Glenn)		
2.	Indiana University (Bloomington)	31.	University of Colorado-Denver		
3.	Harvard University (Kennedy)	32.	University of Maryland-College Park		
4.	University of Georgia	33.	Texas A&M University-College Station (Bush)		
5.	Princeton University (Wilson)	34.	University of Missouri (Truman)		
6.	New York University (Wagner)	35.	University of Nebraska-Omaha		
7.	University of California-Berkeley (Goldman)	36.	University of Pittsburgh		
8.	University of Southern California (Price)	37.	Cornell University		
9.	Carnegie Mellon University (Heinz)	38.	University of Arizona		
10.	University of Kansas	39.	University of Delaware		
11.	University of Washington (Evans)	40.	University of Illinois-Chicago		
12.	American University	41.	Virginia Tech		
13.	George Washington University (Trachtenberg)	42.	Cleveland State University (Levin)		
14.	University of Michigan-Ann Arbor (Ford)	43.	George Mason University		
15.	University of Wisconsin-Madison (La Follette)	44.	Johns Hopkins University University of Pennsylvania (Fels) CUNY-Baruch College Naval Postgraduate School		
16.	Arizona State University	45.			
17.	Duke University (Sanford)	46.			
18.	Florida State University (Askew)	47.			
19.	University at Albany-SUNY (Rockefeller)	48.	Northern Illinois University		
20.	University of Kentucky (Martin)	49.	Portland State University (Hatfield) Rutgers, the State University of New Jersey-New Brunswick		
21.	University of Minnesota-Twin Cities (Humphrey)	50.			
22.	University of Texas-Austin (LBJ)				
23.	Georgetown University	51.	University of Connecticut		
24.	Georgia State University (Young)	52.	University of Virginia (Batten)		
25.	25. Rutgers, the State University of New Jersey-	53.	Binghamton University-SUNY		
Newark		54.	Brandeis University		
26.	University of California-Los Angeles (Luskin)	55.	Brown University (Taubman)		
	University of Chicago (Harris)	56.	Georgia Institute of Technology		
28.	University of North Carolina-Chapel Hill	57.	North Carolina State University		
29.	Columbia University	58.	Virginia Commonwealth University (Wilder)		

APPENDIX

2012 U.S. News and World Report List of Top 100 Public Affairs Schools (continued)

- 59. Brigham Young University-Provo (Romney)
- 60. CUNY-John Jay College
- 61. Indiana University-Purdue University-Indianapolis
- 62. Northwestern University
- 63. University of Central Florida
- 64. University of North Carolina-Charlotte
- 65. University of North Texas
- 66. University of Wisconsin-Milwaukee
- 67. Florida International University
- 68. New School (Milano)
- 69. Northeastern University
- 70. Pennsylvania State University-Harrisburg
- 71. University of Maryland-Baltimore County
- 72. University of Oklahoma
- 73. Auburn University
- 74. College of William & Mary (Jefferson)
- 75. Louisiana State University (Baton Rouge)
- 76. Monterey Institute of International Studies
- 77. San Diego State University
- 78. University of Alabama-Birmingham
- 79. University of Baltimore
- 80. University of Massachusetts-Amherst
- 81. University of Missouri-Kansas City
- 82. University of Oregon
- 83. University of Texas-Arlington
- 84. University of Utah
- 85. Wichita State University (Wall)
- 86. Willamette University (Atkinson)
- 87. CUNY-City College

- 88. Pepperdine University
- 89. San Francisco State University
- 90. University of Arkansas (Clinton)
- 91. University of Illinois-Springfield
- 92. University of Louisville
- 93. University of Massachusetts-Boston (McCormack)
- 94. University of Miami
- 95. University of Missouri-St. Louis
- 96. Wayne State University
- 97. Auburn University-Montgomery
- 98. California State University-Los Angeles
- 99. Florida Atlantic University
- 100. Kansas State University