

A Scoping Review of Mentoring Programs for Academic Librarians

Diane L. Lorenzetti^{1,2} and Susan E. Powelson³

Affiliations:

1. The Department Community Health Sciences
Teaching Research and Wellness Building
3280 Hospital Drive NW
Calgary Alberta T2N 4N1
2. Institute of Health Economics
1200, 10405 Jasper Avenue
Edmonton Alberta T5J-3N4
3. Health Sciences Library
University of Calgary
3330 Hospital Dr NW
Calgary Alberta, Canada T2N 4N1

Corresponding author:

Diane L Lorenzetti
Department of Community Health Sciences
University of Calgary
3280 Hospital Drive NW
Calgary Alberta, Canada T2N 4Z6
dllorenz@ucalgary.ca

ABSTRACT

Introduction

The purpose of this study was to comprehensively review the best practices and current trends for mentoring programs in academic libraries.

Methods

The authors conducted a scoping review of the existing literature on academic library mentoring programs. The following sources were searched to identify relevant studies: ERIC, Education Research Complete (Ebsco) LISA, Library & Information Sciences Source (Ebsco), Scopus, the TRIP database, Web of Science and the grey literature.

Results

Among 802 unique abstracts, 42 studies reporting on 40 unique programs were selected for inclusion in this review. Of these, 28 programs were specifically designed to facilitate the development of junior or untenured librarians. Common program elements included participant input into mentor/mentee selection, written guidelines, mentor training, and senior administration support. Notably, only 18 authors (42.8 percent) reported on program evaluation methods and outcomes.

Conclusions

Despite the prevalence of the literature that exists on this topic, mentorship programs in academic libraries have been insufficiently explored. Rigorous and ongoing evaluation is required to determine the importance of mentoring programs to the career development of academic librarians, and identify design elements critical to their success.

Keywords: Academic Libraries; Librarians; Mentoring; Scoping Reviews

INTRODUCTION

Academic faculty “represent intellectual capital, and....distinguish an institution’s uniqueness more so than any other resource” (Zellers, Howard, & Barcic, 2008, p.553). Consequently, universities can benefit from supporting the ongoing professional development efforts of their faculty. Mentoring has long been a means of facilitating both emotional and behavioral resiliency, and academic and career advancement. It has been linked to outcomes such as tenure, career development, job satisfaction, and organizational and professional connectedness (Allen, Eby, O'Brien, & Lentz, 2008; Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005; Noonan, Ballinger, & Black, 2007; Zellers et al., 2008). A meta-analysis of mentoring programs in education, business, psychology, nursing, and law enforcement found that mentoring was positively associated ($p < .05$) with job satisfaction, self-esteem, promotion/career advancement, organizational commitment, and was instrumental in reducing “work stress, and work-family conflict” (Underhill, 2006, p.295).

Historically, academic faculty mentoring relationships have largely been informal or naturally occurring, requiring little in the way of institutional support. Research indicates, however, that not all faculty benefit from such relationships (Zellers et al., 2008). Prior studies reveal that finite numbers of senior mentors, in proportion to those who desire to be mentored, and the tendency of mentors to gravitate towards those who exhibit qualities similar to their own, present barriers to many who might otherwise wish to participate in informal mentoring (Gagliardi et al., 2009). In response, many academic institutions have implemented formal mentoring programs to promote faculty retention, professional growth, and research success (Zellers et al., 2008; Schonwetter & Nazarko, 2009).

The mentoring needs of academic librarians mirror those of other academic faculty. Mentoring programs have been introduced into academic libraries to facilitate the socialization of new librarians into the profession, assist them in obtaining tenure and promotion, and promote the development of teaching and research skills (Mavrincac, 2005; Nankivell &

Shoolbred, 1997). In a 2013 survey of the members of the Association of Research Libraries Directors' listserv, researchers reported that 83.3 percent of tenure-granting and 66.7 percent of non-tenure granting academic libraries provided librarians with some form of mentoring support (Smigielski, Laning, & Daniels, 2014). In contrast, a recent survey of library graduates, librarians, and library administrators in Canadian college and university libraries revealed that the majority (84.5 percent) of librarians do not have access to institutionally-supported mentoring programs (Harrington & Marshall, 2014). Researchers have speculated that the absence of mentoring programs in some institutions may reflect a lack of consensus on best practice with respect to the design and implementation of these programs (Harrington & Marshall, 2014). The purpose of this study was to explore, in the context of academic librarianship, practices and trends in library mentoring program design, implementation, and evaluation.

METHODS

The authors conducted a scoping review of the literature on academic library mentoring programs. Scoping reviews are a rigorous approach for systematically mapping “the key concepts underpinning a research area, and the main sources and types of evidence available” (Mays, Roberts, & Popay, 2001, p.194). Whereas systematic reviews typically focus on narrowly defined questions and rigorously assess the quality of a limited number of included studies, scoping reviews address broadly defined questions and often categorize and synthesize large bodies of literature (Brien, Lorenzetti, Lewis, Kennedy, & Ghali, 2010). Scoping reviews “produce a profile of the existing literature in a topic area, creating a rich database of literature that can serve as a foundation” for further research and practice (Brien et al., 2010, p.2). The Arksey and O'Malley methodological framework for conducting scoping reviews guided the conduct of this study (Arksey & O'Malley, 2005). This framework specifies that researchers undertake the following procedural steps: 1) generate relevant research

questions; 2) comprehensively identify studies; 3) screen studies for inclusion; 4) chart data; and 5) thematically analyze and synthesize data.

The research questions addressed in this scoping review were: 1) What are the goals of academic library mentoring programs?; 2) How are these programs structured and delivered?; and 3) To what extent, and in what ways, have programs been evaluated? In the context of this study, mentoring was defined as “a process for the... transmission of knowledge, social capital and psychosocial support perceived by [all participants as] relevant to work, career or professional development”(Bozeman & Feeney, 2007, p.731).

Search Strategy

ERIC, Education Research Complete, LISA, Library & Information Science Source, Scopus, the TRIP database, and the Web of Science were searched to identify peer reviewed literature suitable for inclusion in this review. Grey literature was identified through a structured search of Google, and a hand search of the most recent two years (2011/2012 and 2013) of proceedings from conferences of the American Library Association (ALA), Association of College & Research Libraries (ACRL), Canadian Library Association (CLA) and the International Federation of Library Associations and Institutions (IFLA).

Searches combined terms from three themes: 1) mentorship (mentors, mentoring, mentorship, mentees), 2) librarians (librarians, librarianship, libraries, information professionals, informationists), and 3) academic institutions (academic, college, faculty, universities). Terms were searched as both keywords and database-specific subject headings. No date or study design limits were applied. A copy of the completed search strategy is available, upon request, from the authors.

Study Selection

Search results were downloaded into RefWorks. Both authors independently screened all abstracts and full-text papers for inclusion. Disagreements were resolved through consensus. Studies were included if they were English language publications that reported on

the implementation of mentoring programs for librarians in academic library settings. Studies were excluded if they focused on librarians mentoring library staff or students; reported on mentoring outside of structured institution-specific academic library programs (eg: informal mentoring or national programs), or did not provide a program description. The authors pilot tested the inclusion/exclusion criteria on a sample of studies to ensure consistency in the interpretation and application of these criteria.

Charting of Study Data

A charting template was developed in Excel to capture data from each study. Data charted included: descriptive study information (author, publication date, country of origin), program details (population, program objectives, design and implementation elements), and, where appropriate, evaluation methods and program outcomes. The authors pilot tested the charting form on a sample of included studies to ensure the identification and capture of all relevant information. Charting data was extracted in duplicate and disagreements were resolved through consensus.

Analysis and Synthesis

The authors conducted a thematic analysis and synthesis of included studies to identify key concepts, and themes in the published literature.

RESULTS

Electronic database and other searching identified 802 unique abstracts, 117 of which were selected for full text review. Of these, 42 studies, reporting on 40 academic library mentoring programs in Australia (n=1), Canada (n=1), South Africa (n=1), Sweden (n=1) and the United States (n=36) were included in this review (Figure 1). Studies were published between 1990 and 2013, with a total of 31 (73.8 percent) published in the last 10 years (Table 1).

Program Design

Four basic models characterized the 40 programs included in this review (Table 1): dyads, comprised of one senior and one junior or two peer librarians (n=21); peer mentoring, where peers meet in a group setting to exchange ideas, provide feedback and encouragement, and participate in group learning (n=14); group mentoring, characterized by a senior librarian mentoring multiple junior librarians in a group setting (n=2), and co-mentoring, wherein a junior librarian is co-mentored by a team of senior librarians (n=3). Thirty-nine programs relied on face-to-face interactions between participants as the primary means of facilitating the development of mentoring relationships. In contrast, one multi-campus institution initiated an electronic peer-mentoring program for librarians situated at geographically dispersed campus libraries (Finlayson, 2009).

Although most programs were formally recognized by their respective institutions, not all originated with, or were established by, senior management. Ten peer-mentoring initiatives were conceived as grass-roots programs, only later receiving administrative recognition (Exner & Houk, 2010; Finlayson, 2009; Fyn, 2013; Henrich & Attebury, 2010; Keener, Johnson, & Collins, 2012; Level & Mach, 2005; Martorana, Schroeder, Snowhill, & Duda, 2004; Miller & Benefiel, 1998; Ortega, Walker, Young, Bee, & Jones, 2011; Tysick & Babb, 2006).

Participants & Participation

The authors of 28 studies described mentees as new, junior, pre-tenured, untenured, early career stage and/or assistant librarians/faculty (Table 1). Three programs were open to all staff (librarians and non-librarians); and the authors of nine studies described program participants simply as librarians (Table 1). One institution specifically designed a multi-level program to address the unique mentoring needs of junior, mid-career and advanced-career librarians (University of Delaware Library Assembly of Professional Staff, 2009; Wojewodzki, Stein, & Richardson, 1998). Mentee participation in dyad mentoring programs was almost evenly split between mandatory (n=9) and voluntary (n=10), with two authors not reporting on

this aspect of program design. Mentee participation was mandatory for two co-mentoring, and voluntary for one group and all peer-mentoring programs.

Mentor/Mentee Selection

Mentoring theory suggests that interpersonal compatibility is fundamental to the success of any mentoring relationship (Allen, Eby, & Lentz, 2006). While program coordinators of dyad and co-mentoring programs matched mentors with mentees, a number of dyad programs incorporated features that encouraged participant input into the matching process (Table 1). Six institutions encouraged participants to nominate individuals they would or would not prefer to be paired with; 13 provided an opt-out clause for mentees, mentors or both; 10 required that mentors and mentees not be based in the same department; and four stipulated that mentors not be in a supervisory relationship vis-a-vis their mentees as it was felt that this could "[inhibit] the risk-taking, stretching and honest communication necessary for a successful partnership" (Boers, 1997, p.11). In stark contrast, the authors of a report on a dyad program at Penn State described this initiative as one where mentors and supervisors regularly communicated to ensure that "the advice from both....is consistent...and assess whether the supervisor feels that particular attention might be needed in a specific area" (German, 2010, p.7).

Goals/Objectives

Twenty unique program goals were identified in the studies included in this review (Table 1). These goals included: orientation, professional development, promotion, and tenure. As noted in Table 1, distinct language (eg: "assimilation", "integration", "cultural climate") was often adopted by the authors to describe goals that, conceptually, appeared to be similar to those of other programs. Eight peer-mentoring programs were designed to facilitate the development of participants' research, writing and publishing skills. This reflects an increasing focus, within the profession, on the importance of evidence-based practice (Table 1). Notably, the authors of a study on the University of California at Santa Barbara peer-mentoring initiative reported that

their program's goal was to "contribute to ongoing professional development by promoting a culture of mentoring throughout the library" (Martorana et al., 2004, p.198).

Program Guidelines

Fifteen authors explicitly reported on the development of program guidelines (Table 1). These guidelines addressed: program goals, participant characteristics, roles and responsibilities, mentoring timelines, meeting frequency, suggested activities, and methods of program evaluation. Eight authors included copies of mentoring program documentation in their published reports (Boers, 1997; Farmer, Stockham, & Trussell, 2009; Ghouse & Church-Duran, 2008; Haglund, 2004; University of Delaware Library Assembly of Professional Staff, 2009; University of Washington, 2001; Van Avery, 1992; Wojewodzki et al., 1998).

Timelines

The coordinators of 13 dyad and two co-mentoring programs established timelines for the duration of mentoring relationships. Timelines can be a means of encouraging participation among senior mentors who might be otherwise reluctant to enter into potentially long-lasting and resource-intensive relationships (Thorndyke, Gusic, & Milner, 2008). Program timelines varied from three months to three years, with the majority (66.67 percent) ranging between six and 24 months. In contrast, two programs stipulated that mentoring relationships were to continue until mentees had attained tenure or promotion (University of Southern California, 2010; LeMire & Rutledge, 2013).

Mentorship Agreements

Mentorship agreements clarify mentor and mentee responsibilities and act as blueprints for future interactions (Ghouse & Church-Duran, 2008). These agreements, or contracts, attempt to ensure that the expectations and responsibilities of both mentors and mentees are clearly understood. The authors of five studies reported on the inclusion of mentorship or "buddying" agreements in their program designs (Table 1). While formal agreements are rare in peer mentoring, the coordinators of the University of Idaho program required that participants

sign a Community of Practice Agreement, indicating their willingness to maintain a code of confidentiality (Henrich & Attebury, 2010). The authors of the University of Idaho study affirmed that, in the face of an academic environment that “seems to promote competition”, confidentiality agreements were necessary to protect intellectual property, and encourage participants to discuss ongoing research with colleagues (Henrich & Attebury, 2010, p.163).

Training and Support

Ten program coordinators developed structured mentorship education workshops, training days, or seminars for mentors and mentees (Table 1). Five coordinators hosted group meetings for mentors, mentees, or both, to clarify expectations, gauge progress, gather feedback, and, in the case of mentors, share best practices (Farmer et al., 2009; Kuyper-Rushing, 2001; Mentoring Task Force, 2006; Napier, 2007; Van Avery, 1992; Wittkopf, 1999a). Thirteen program coordinators provided participants with readings, suggested activities, and other supporting materials designed to socialize them into their mentoring roles (Table 1).

Incentives

Some academic institutions actively encouraged mentoring program participation through the provision of a variety of tangible incentives. Three programs incorporated work-release time for participants to attend group meetings and otherwise engage in mentoring activities (Boers, 1997; Haglund, 2004; Level & Mach, 2005). The coordinators of the peer-mentoring research and writing program at the University of Buffalo encouraged participation in their program by funding a two-day writing retreat for peer mentors, and provided each participant with a copy of Elizabeth Rankin’s *The Work of Writing* (Tysick & Babb, 2006). California State University administrators explicitly acknowledge mentorship program participation during faculty performance evaluations (Bosch, Ramachandran, Luevano, & Wakiji, 2010). Finally, the coordinators of the co-mentoring program at Texas A & M University provided mentors with a "small monetary award" for work-related research and mentoring expenses (Stephens, Sare, Kimball, Foster, & Kitchens, 2011).

Evaluation Methods

Among the 40 programs reported in this review, 11 authors described but did not evaluate their programs (Carter, Griffey, & Prince, 2006; Crump, Drum, & Seale, 2008; Exner & Houk, 2010; Fyn, 2013; German, 2010; Keener et al., 2012; Keyse, Kraemer, & Voelck, 2003; LeMire & Rutledge, 2013; Library Faculty Committees, 2005; Osif, 2008; University of Washington, 2001); five indicated the method by which programs would be evaluated, yet did not report results (University of Southern California, 2010; Florida Atlantic University Libraries, 2013; Mentoring Task Force, 2006; Slattery & Walker, 1999; Stephens et al., 2011); five reported evaluation results, but did not provide detailed descriptions of their methods of evaluation (Law, 2001; Lee, 2009; Level & Mach, 2005; Napier, 2007; University of Delaware Library Assembly of Professional Staff, 2009; Wojewodzki et al., 1998); 17 described evaluation methods and reported on the results of single-group post-implementation evaluations (Bosch et al., 2010; Cirasella & Smale, 2011; Colley, Thorson, & Capers Thorson, 1990; Farmer et al., 2009; Finlayson, 2009; Ghouse & Church-Duran, 2008; Haglund, 2004; Henrich & Attebury, 2010; Jesudason, 1997; Kuyper-Rushing, 2001; Martorana et al., 2004; Miller & Benefiel, 1998; Ortega et al., 2011; Sapon-White, King, & Christie, 2004; Underhill, 2006; Van Avery, 1992; Wittkopf, 1999a; Zhang, Deyoe, & Matveyeva, 2007); and one described and presented the results of a pre-post program evaluation (Sullivan, Leong, Yee, Giddens, & Phillips, 2013). Four authors included copies of evaluation tools in their published reports (Cirasella & Smale, 2011; Farmer et al., 2009; Haglund, 2004; Mentoring Task Force, 2006). There was no observable trend to indicate that programs initiated in recent years were more likely to have been evaluated.

Of the 18 programs that were evaluated, 10 were assessed with surveys (Cirasella & Smale, 2011; Haglund, 2004; Henrich & Attebury, 2010; Jesudason, 1997; Martorana et al., 2004; Miller & Benefiel, 1998; Ortega et al., 2011; Sapon-White et al., 2004; Tysick & Babb, 2006; Van Avery, 1992); one via participant interviews (Bosch et al., 2010); one through

organized focus groups (Kuyper-Rushing, 2001); and six via mixed methods designs including survey/focus group, survey/interview, website monitoring/participant feedback, and survey/performance targets (Colley et al., 1990; Farmer et al., 2009; Finlayson, 2009; Ghouse & Church-Duran, 2008; Sullivan et al., 2013; Zhang et al., 2007).

Evaluation Results

Evaluations of mentoring program effectiveness can focus on participant outcomes (eg: satisfaction or productivity), and/or process outcomes (eg: program design, implementation or methods of evaluation).

Outcomes Evaluations

Evaluations of library mentoring programs explored both career enhancing (eg: increased publications or skills acquisition) and psychosocial outcomes (eg: friendship or support). The outcomes reported in this literature included: overall program satisfaction , engagement in research and service activities (Farmer et al., 2009; Miller & Benefiel, 1998), skills development (Finlayson, 2009; Haglund, 2004; Tysick & Babb, 2006), success in grant applications (Miller & Benefiel, 1998), and achievements in tenure and promotion (Cirasella & Smale, 2011; Lee, 2009; Miller & Benefiel, 1998).

Mentors and mentees reported that mentoring programs provided them with opportunities to participate in professional discussions (Martorana et al., 2004; Sapon-White et al., 2004), develop competencies and skills (Bosch et al., 2010; Cirasella & Smale, 2011; Jesudason, 1997; Sapon-White et al., 2004; Wojewodzki et al., 1998), receive valuable research feedback (Cirasella & Smale, 2011; Miller & Benefiel, 1998), and engage with colleagues who share similar interests, experiences, and anxieties (Bosch et al., 2010; Keyse et al., 2003; Martorana et al., 2004; Miller & Benefiel, 1998). Mentors at California State University commented favorably on both their program's short time commitment (six months) and the recognition they received, during performance evaluations, for participating in their institution's co-mentoring program (Bosch et al., 2010).

In a pre-post evaluation of a peer-mentoring program at RMIT University, Sullivan and colleagues reported that the mentoring program enhanced participants' self-confidence with respect to engaging in research, publishing, and other professional activities (Sullivan et al., 2013). The authors applied a 27 item 10-point scale survey to measure confidence and skills in "publishing, presenting, and group processes". They found increased participant self-confidence across all twenty-seven measures. Of particular note was self-reported increased knowledge, ranging from 30.0 to 67.6 percent, of: peer review processes, author copyright, book reviewing, research methodologies, and in the use of various presentation technologies (Sullivan et al., 2013, p.699).

Finally, participants of a peer-mentoring program at the University of Buffalo reported that their program contributed to the development of a collegial support structure.....[that] figured strongly into the creation of a positive junior faculty experience" (Tysick & Babb, 2006, p.98).

Limitations in the research designs of included studies precluded the exploration of possible correlations between self-reported outcomes and specific program characteristics such as mentorship agreements, input into pairings, or mentor training.

Process Evaluations

While many evaluations focused exclusively on measuring participant outcomes data, others also assessed program processes. Through surveys, focus groups, and interviews, participants commented on elements of program structure, implementation and evaluation including: the need to clarify roles and expectations; the importance of explicit program guidelines (Colley et al., 1990; Ghouse & Church-Duran, 2008; Jesudason, 1997; Zhang et al., 2007); the value of mentorship training (Bosch et al., 2010; Finlayson, 2009; Jesudason, 1997; Zhang et al., 2007); and, in instances where mentors and mentees were matched by program coordinators, the importance of psychosocial compatibility between mentors and mentees, and the need to incorporate participant input into mentorship pairings (Colley et al., 1990; Zhang et al., 2007). The authors of six studies reported that participant process evaluations informed

future improvements in program design and implementation (Bosch et al., 2010; Ghouse & Church-Duran, 2008; Henrich & Attebury, 2010; Law, 2001; Tysick & Babb, 2006; Van Avery, 1992).

DISCUSSION

Mentorship enables faculty to “become more socialized to academia” and “more collaborative in their performance and learning” (Bean, Lucas, & Hyers, 2014, p.58). Through modeling supportive academic behavior, mentors can prepare mentees to “offer themselves as mentors to others”, thus perpetuating the development of a “mentoring culture” (Bean et al., 2014, p.58). This scoping review found that many university libraries, particularly those in the United States, have introduced mentoring programs as a means of facilitating the professional development of academic librarians. The majority of these programs focused on the professional needs of junior, particularly untenured, librarians, did not incorporate structured training to socialize mentors and mentees into their new roles, and were characterized by either the absence of program evaluations or post-implementation evaluations that were generally insufficient to meaningfully assess the outcomes of these programs. While there is no clear evidence to suggest correlations between program characteristics and reported outcomes, elements such as mentor training, and participant input into pairings have been shown to correlate with positive mentoring outcomes in other professions (Chen & Lou, 2013; Kashiwagi & Varkey, 2013). This review updates the literature on mentoring programs in academic libraries, and is the first scoping study to systematically assess the trends and gaps in this literature (Golian & Galbraith, 1996; Nankivell & Shoolbred, 1997; Osif, 2008; Wittkopf, 1999b).

Researchers have speculated that formal mentoring programs are perceived as successful by participants to the extent that they mimic the “characteristics of spontaneously developed (informal) mentorships” (Allen et al., 2006, p.568), and that psychological compatibility is likely an essential component of any mentoring relationship, formal or informal (Zhang et al., 2007). Research with social workers, engineers, journalists, accountants, and

other professionals further indicates that meeting frequency, and "input into the matching process", both characteristic of informal mentoring relationships, are associated with overall mentee satisfaction and "greater organizational commitment" (Allen et al., 2006, p.567).

Although such associations were not observed within the context of this scoping review, a number of academic library mentoring programs did develop guidelines to encourage frequent meetings between mentors and mentees and ensure compatibility in mentorship pairings.

In order for mentoring programs to be sustainable, an adequate pool of available mentors is required. Faculty have a multitude of demands on their time, and may be disinclined to participate in mentoring programs if they perceive that such participation is not valued by their institutions to the same degree as teaching, research, and other professional activities (Ramani, Gruppen, & Kachur, 2006). Research has shown that mentors frequently cite "time constraints and scheduling conflicts" as barriers to engaging in mentoring relationships (Bean et al., 2014, p.64). However, few academic library mentoring programs specifically include work-release time for mentors or other explicit incentives to encourage and support program participation.

Although training that is perceived by participants as being of high quality has been shown to associate positively with "reports of mentorship quality, career mentoring, and role modeling", only 10 authors reported on the inclusion of workshop or seminar training/orientations for academic library mentors and mentees (Allen et al., 2006, p.576). Mentoring is a deliberate activity which requires individuals to develop the skills necessary to participate in these relationships. Insufficient attention towards mentorship skills training could negatively affect the impact of these programs. Further, the availability of training may be viewed by participants as an indication of the degree to which organizations value this activity.

The developmental needs of junior librarians are clearly a priority for academic library mentoring programs. Indeed, junior academics are typically the focus of most academic mentoring programs, while mid-career and senior faculty are considered to either require less formal mentoring support, or be better able to engage in informal mentoring relationships than

their less-experienced colleagues. Further exploration of the mentoring relationships of mid and advanced career librarians may inform the development of formal programs that can benefit both junior and senior library faculty.

An interesting trend noted in this review is an apparent increase, in recent years, in the number of peer-mentoring programs designed to further the development of research, writing and publishing skills (Cirasella & Smale, 2011; Exner & Houk, 2010; Finlayson, 2009; Henrich & Attebury, 2010; Keener et al., 2012; Kuyper-Rushing, 2001; Sapon-White et al., 2004; Sullivan et al., 2013; Tysick & Babb, 2006). These programs support faculty status/tenure requirements, and encourage academic librarians to engage in scholarly pursuits. Although academic librarian positions are primarily service and teaching-focused, libraries have increasingly stressed the need for librarians to expand their participation in interdisciplinary and practice-based research. Such participation may be viewed as a means of aligning academic library positions more closely with those of other faculty, while addressing internal and external pressures to emphasize “service assessment and meaningful measures of library impact” (Canadian Association of Research Libraries, 2007, p.4). In a recent qualitative study of publishing trends among librarians in the United Kingdom, peer support was ranked as the second highest motivator, after protected time, of librarians’ research engagement (Clapton, 2010). The availability of peer-mentorship programs that can provide participants with support, feedback, and encouragement in their research endeavours may be an important means of motivating practice-based professionals to contribute to their profession's evidence-base

This scoping review has caveats and limitations. First, non-English studies were excluded from this review. The inclusion of reports of library mentoring programs published in other languages may have yielded different findings. Second, reports of national programs, and programs in public and special libraries were similarly excluded. The rationale for doing so was twofold. Many academic librarians have faculty status, and, as such, are required to engage in teaching, research, and service activities. This focus on research distinguishes academic

librarians from many other library professionals. As such, it seemed reasonable to exclude reports of mentoring programs in other settings. Further, the design, implementation, and conduct of national programs may differ from single-institution programs, where programs are influenced and/or governed to a greater degree by institutional cultures and priorities. Reports of informal mentoring relationships among academic librarians were also omitted from this review. Although a review of informal mentoring may have uncovered rich information on why, how, and for what purposes librarians enter into these relationships, this literature does not align with the purpose of this study, namely to explore design elements and effectiveness associated with formal programs. Finally, this review and synthesis of mentorship program data is limited to that which could be identified through systematic searching and analysis of the published and grey literature. As such, the current status of each of the programs included in this review is unknown. Future research efforts could focus on assessing the sustainability and ongoing development of these programs.

Organizations typically support initiatives that are capable of achieving organizational goals more efficiently and cost-effectively than available alternatives. While library mentoring programs were similar in many respects, multiple variations were noted in individual program design, including degree of administrative involvement, processes and restrictions with respect to mentor/mentee pairings, and the availability of training and support (Table 1). These variations may reflect important, irreconcilable, differences in organizational cultures. Thus, there may be no one recipe for success with respect to effective mentoring program design (Kashiwagi & Varkey, 2013; Osif, 2008). Although a number of both promising practices and gaps have been highlighted through this review, context is clearly fundamental to the development and implementation of any program. Program developers and other decision makers will wish to assess the applicability and transferability of these findings within the context of existing institutional priorities and settings.

Program developers need to know both if, and under what circumstances, a given program is capable of achieving its objectives (Bowen, 2012). Thoughtful, well-implemented, and ongoing evaluations can measure program effectiveness, explore the impact of internal and external factors on observed outcomes, inform future development, and assess the degree to which programs are transferable to other settings and contexts (Bowen, 2012). Mentoring is a complex relationship, the full effects of which may not be immediately or easily observable. Incorporating a qualitative approach to program evaluation may facilitate the exploration of individual experiences, enabling program organizers to gain a richer understanding of those factors which can impact on the success of mentorship programs.

CONCLUSIONS

Although academic institutions continue to promote mentorship as a means of furthering professional development, the conditions under which this can be achieved have, as yet, been insufficiently explored. This study contributes to the evidence-base on mentorship in academic libraries by identifying current trends in practice, and serving as a resource to support future research in this area.

AUTHORS' CONTRIBUTIONS

DLL and SEP conceived of the study, contributed to the study design, collected and analyzed the data, and prepared and approved the final version of this paper.

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None

COMPETING INTERESTS

None to declare

TABLES/FIGURES

Table 1 (Included Studies)

Figure 1 (Prisma Diagram)

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Figure 1: PRISMA Flow Diagram



