

Faculty Mentoring Programs at Schools/Colleges of Pharmacy in the U.S.

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ABSTRACT. A nationwide survey was conducted to determine the existence and extent of faculty mentoring programs at schools/colleges of pharmacy in the U.S. A 21-item questionnaire was developed and pilot tested at two academic institutions. The revised survey was then mailed to the deans at each of the 78 colleges listed at the time by the American Association of Colleges of Pharmacy. Approximately 77% (60/78) of the schools/colleges of pharmacy responded to the survey, 11 (18%) indicated the existence of a formal mentoring program, and

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another 32 (53%) indicated the existence of an informal mentoring program at their academic institution. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <<http://www.haworthpressinc.com>>]

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INTRODUCTION

Mentoring has been defined by Chalmers as a dynamic, reciprocal relationship in a work environment between a mentor and a less experienced professional (called a protégé) aimed at promoting the personal and professional development of both (1). For the protégé, the object of mentoring is the achievement of an identity transformation, a movement from the status of understudy to that of self-directing colleague. For the mentor, the relationship is a vehicle for achieving midlife “generativity,” meaning a transcendence of stagnating self-preoccupation via exercise of an instinctual drive to create and care for new life (2). Chalmers has defined mentoring as one approach to encouraging personal growth in an individual (1). Chalmers further describes several principles that affect the mentoring process including:

1. The degree of maturity that the protégé and mentor bring to the relationship influences its outcomes for each party.
2. Mentorships pass through qualitatively distinct periods: initiation, cultivation, separation, redefinition.
3. Mentorships change participants’ contexts, which in turn shape mentoring in a continual process.

While mentoring is often difficult to define, Campbell details specific examples of mentoring prescriptions including:

1. Mentoring without access is not mentoring.
2. Teach the mentee that the formal organization is a myth; the real organization is the informal one.
3. Mentor relationships benefit both individuals, and they thrive because they respond to current needs and concerns. (3)

Sands and colleagues describe a mentor as a more experienced professional who offers significant career assistance to a less experienced professional during a transitional period (4). They further state that mentoring is a process by which one is guided, taught, and influenced in one's work in important ways (4). The University of Oklahoma Faculty Development Institute Handbook describes mentoring as a developmental concept; to ensure its success, an institution has to be committed to the notion of mentoring (5).

The availability and quality of mentoring will directly affect the career decisions and outcomes of both the protégé and the mentor. Schoenfeld and Magnan describe the situation of most junior faculty when they observe that most newly appointed assistant professors have a general idea what being a professor is all about, or at least what they think it entails. However, since there is typically little formal training in academic leadership for new faculty, real preparation for the assignment is essentially on-the-job training. New faculty are left to learn from role models and from making their own mistakes (6). Descriptive research by Kram revealed that mentors provide multiple forms of career and psychosocial support (7). Career functions include providing the protégé with challenging assignments, exposure, upper-level visibility, and protection, whereas psychosocial functions include serving as a role model, friend, and counselor. Kram further states that mentorship has clearly been demonstrated to positively affect career advancement, salary attainment, and career satisfaction.

Various methods have been described to facilitate mentoring programs in the academic setting. Haynor, while stating that mentoring should not be forced, described a process where a chair can attempt to match a new faculty person with a mentor (8). He proposed a format in which a department chairperson would match a new faculty member with a mentor who has similar research areas and compatible problem-solving skills. Crandall and Cacy suggest developing a list of faculty who are interested in mentoring and a subsequent selection of a mentor by the new faculty person (9). The authors further state that this process could be facilitated in conjunction with the department chairperson. Other methods include group mentoring and a screening of potential mentors (8, 9). Sands and colleagues conducted an earlier study exploring the nature and extent of mentoring in the university setting (10). They concluded that mentoring was not prevalent and that when it did occur, it was negotiated mutually between a protégé and a

mentor. A detailed literature review did not reveal any previous national study of faculty mentoring at schools/colleges of pharmacy in the United States. Therefore, we have conducted a survey to evaluate the existence of faculty mentoring programs at these institutions.

METHODOLOGY

To gather information regarding the existence of faculty mentoring programs in pharmacy programs nationwide, a 21-item survey was developed by members of the Howard University Division of Pharmacy's Mentoring Committee. This questionnaire was validated by administrators at two neighboring academic institutions. The revised questionnaire was then forwarded to the deans of 78 schools/colleges of pharmacy throughout the U.S. The questionnaire asked various institutional details, including number of faculty and students, requirements for tenure and promotion, the existence of formal or informal mentoring programs, and the dean's assessment of the success of these programs. Two mailings of the questionnaire were conducted to maximize response. Along with the survey, a cover letter was attached advising the deans that this study was being performed to assist us in developing a program at our institution. The cover letter also defined a formal program as one with written procedures and possibly a plan of evaluation. An informal program was defined as one that facilitated the matching of a mentor with a protégé but lacked any written procedure or evaluation process. Approximately 77% (60/78) of the schools/colleges responded to the survey, and details regarding the existence of a mentoring program are presented.

RESULTS

Demographics

Of the pharmacy schools responding, 73% (44/60) were public institutions and the remaining 27% (16/60) were private institutions (Table 1). An average of 313 undergraduate and/or 377 professional students were enrolled in those schools. Academic units with graduate students ($n = 42$), had an average of 60 graduate students each. In

TABLE 1. Selected Responses to Institutional Faculty Mentoring Program Survey.

Question	Response	N (%)
1. School/college of pharmacy institutional designation	Public Private	44 (73.3%) 16 (26.7%)
2. Number one institutional priority for tenure & promotion	Teaching Research Clinical training Public service	26 (43.3%) 28 (46.7%) 1 (1.7%) 0 (0.0%)
3. Does your school have a formal faculty mentoring program?	Yes No No response, or not sure	11 (18.3%) 46 (76.7%) 3 (5.0%)
4. Does your school have an informal faculty mentoring program?	Yes No No response, or not sure	32 (53.3%) 14 (23.3%) 14 (23.4%)
5. Is the faculty mentoring program university-wide?	Yes No Not sure	10 (23.3%) 21 (48.8%) 12 (27.9%)
6. Is the faculty mentoring program department specific?	Department specific College-wide Not sure	15 (34.9%) 23 (53.5%) 5 (11.6%)
7. How long has the faculty mentoring program been active?	0-1 year 2-5 years 6-10 years Over 11 years Not sure	3 (7.0%) 19 (44.2%) 7 (16.3%) 9 (21.9%) 5 (11.6%)
8. Is the participation mandated or voluntary for senior faculty?	Mandatory Voluntary No response	1 (2.3%) 39 (90.7%) 3 (7.0%)
9. Is the participation mandated or voluntary for junior faculty?	Mandatory Voluntary No response	8 (18.6%) 32 (74.4%) 3 (7.0%)
10. How are mentors assigned to new junior faculty members?	Chosen by junior faculty Senior faculty volunteer Assignment by chair Other	9 (21.9%) 17 (39.5%) 11 (25.6%) 6 (54.5%)
11. What percentage of senior faculty members are participants in this program?	< 25% 26-50% 51-75% > 76% Not sure	18 (41.8%) 6 (14.0%) 11 (25.6%) 5 (11.6%) 3 (7.0%)
12. What percentage of junior faculty members are participants in this program?	< 25% 26-50% 51-75% > 76% Not sure	11 (25.6%) 3 (7.0%) 12 (27.9%) 15 (34.9%) 2 (4.7%)

TABLE 1 (continued)

Question	Response	N (%)
13. Is your faculty mentoring program used as a recruiting tool?	Yes No Not sure	10 (23.4%) 28 (65.0%) 5 (11.6%)
14. Are senior faculty members given credit for mentoring junior faculty?	Yes No Not sure	14 (32.6%) 19 (44.2%) 10 (23.3%)
15. Evaluation of program:		
Mentors evaluated by junior faculty		3 (7.0%)
Procedures are written into guidelines for promotion & tenure		1 (2.3%)
Junior faculty meet regularly with department chair		13 (0.2%)
All senior faculty members are expected to serve as mentors		4 (9.3%)
Success of program is discussed during faculty meetings		3 (7.0%)
No easily measurable evaluation of success is available		25 (58.1%)
Other		2 (4.7%)

terms of faculty, schools responding to the questionnaire had an average of 42 full-time faculty, 22 tenured faculty, and 17 junior faculty.

Promotion and Tenure Requirements

When the deans were asked to prioritize their criteria for promotion and tenure (teaching, research, public service, and clinical training), teaching and research were ranked nearly equally as the most important criteria. Twenty-eight (47%) schools listed research as the number one criteria, and 26 (43%) listed teaching as the number one criteria for promotion and tenure. The descending order of priorities was research, teaching, public service, and clinical training. However, several schools noted a separate and distinct process for the tenure and promotion of clinical faculty versus nonclinical faculty.

Existence of Mentoring Programs

Only 18% (11/60) of the schools responding indicated the existence of a formal mentoring program, which would include written procedures and a possible evaluation plan (Table 2). However, another 53%

(32/60) indicated the existence of an informal program (Table 3). Of the 43 schools that indicated the existence of some form of mentoring program, 44% (19/43) stated that the program had been in place for 2-5 years, 16% (7/43) indicated that the mentoring program had been in existence for 6-10 years, and 21% (9/43) indicated that their mentoring program had been in place for over 11 years. Only one school stated that participation in the faculty mentoring program was mandatory for senior faculty, while 19% (8/43) responded that participation was mandatory for new junior faculty.

In terms of university involvement, 10 schools (23%) indicated that their mentoring program was university-wide. Of the schools with some form of mentoring program, 35% (15/43) were department specific and 53% (23/43) were school/college-wide. Regarding the assignment of mentors, 40% (17/43) indicated that senior faculty volunteered to mentor specific junior faculty members, 20% (9/43) of the schools stated that junior faculty selected their mentors, and another 26% (11/43) indicated that the department chairperson assigned mentoring partners. Several deans indicated that there was a combination of techniques used in the assignment process, such as a call for volunteers and subsequent assignment by the chair if no volunteers were forthcoming.

TABLE 2. Statistical Comparisons of Formal Mentoring Programs by Type of School.

	Formal Mentoring Program	
	Yes	No
Public college/school	8	36
Private college/school*	3	12

*One school did not respond completely.
Chi-square value = 0.24, $p = 0.876$

TABLE 3. Statistical Comparisons of Informal Mentoring Programs by Type of School.

	Informal Mentoring Program	
	Yes	No
Public college/school	25	19
Private college/school*	7	8

Chi-square value = 0.464, $p = 0.496$

Assessment of Existing Programs

Twenty-six percent (11/43) of the deans indicated that less than 25% of their senior faculty participated in mentoring. Fourteen percent (6/11) indicated senior faculty participation between 26% and 50%, and 37% (16/43) reported greater than 51% participation by senior faculty. However, it must be noted that participation would depend upon the number of junior faculty that are in need of or request mentoring. A school with very few junior faculty would have less need for mentoring and therefore less participation by senior faculty members. Regarding junior faculty participation, 26% reported participation by less than 25% of junior faculty, while 63% (27/43) reported participation by over 51% of their junior faculty.

Only 24% (10/43) of deans indicated that their faculty mentoring program was used as a recruiting tool to attract prospective new junior faculty members. Evaluation of a mentoring program may prove problematic, as the majority of schools (25/43) indicated that they had no easily measurable evaluation of the success of their mentoring program, although 30% (13/43) indicated that junior faculty met regularly with the department chairperson to evaluate the impact of their mentoring relationship on their progress. Thirty-two percent (14/43) of the deans reported that senior faculty mentors were given some form of credit for mentoring of junior faculty, although the specific method of credit was not detailed.

Statistical Analysis

Comparisons were made between private and public schools of pharmacy regarding the existence of both formal and informal mentoring programs. There was no significant difference in the existence of either formal (chi-square, $p = 0.876$) or informal (chi-square, $p = 0.496$) programs when compared by type of school. Comparisons were also made between schools of pharmacy based upon the dean's assessment of institutional priorities for tenure. Regardless of whether teaching or research was considered the top institutional priority for granting faculty tenure, there was no significant difference in the existence of formal (Fisher's Exact Test, $p = 0.169$) or informal (chi-square, $p = 0.284$) mentoring programs (Tables 4 and 5).

When asked to comment on the impact of formal or informal programs, deans mentioned the increased success of applications for

TABLE 4. Statistical Comparisons of Formal Mentoring Programs by Institutional Priority for Promotion and Tenure.

Highest Institutional Priority for Promotion/Tenure*	Formal Mentoring Program	
	Yes	No
Teaching	7	19
Research	3	25

*A few institutions listed other primary priorities for promotion and tenure.
Fisher's Exact Test, $p = 0.169$

TABLE 5. Statistical Comparisons of Informal Mentoring Programs by Institutional Priority for Promotion and Tenure.

Highest Institutional Priority for Promotion/Tenure	Informal Mentoring Program	
	Yes	No
Teaching	12	14
Research	17	11

Chi-square test value = 1.150, $p = 0.284$

promotion and tenure, increased faculty productivity, better relationships among junior and senior faculty, and a shorter adjustment period into academe. One dean noted that a mentoring program was unsuccessful at his institution due to the unstructured manner in which it was implemented. The deans also commented regarding recommendations for initiation of a formal program. These comments included immediately assigning new faculty mentors, evaluating the program yearly, adjusting the reward system to reflect importance to mentors, establishing a clear allocation of resources and rewards commensurate with responsibilities, and giving senior faculty credit and ample time to mentor. A few deans at schools that did not currently have a mentoring program in place noted that their institutions were in the process of developing a formal mentoring program.

DISCUSSION

The success of a faculty mentoring program will ultimately be measured by the productivity and quality of life reported by both junior faculty mentees and senior faculty mentors. Magnussen writes of the importance of the establishment of a formal mentoring program and details the great mutual benefit of the mentoring relationship (11).

Dreher and Cox, in a study of compensation attainment and the establishment of mentoring relationships, place an economic value on the development of mentored relationships (12). Other researchers have highlighted the value of formalized mentoring programs, both to the individuals involved and to the academic institution as a whole (2, 5, 12).

In terms of existing mentoring activities, only 18% of the schools/colleges of pharmacy responding to our survey reported the existence of a formal mentoring program. Another 53% reported the existence of an informal mentoring strategy; however, the survey did not allow for elaboration on the details regarding the informal processes. There was no statistical difference in the existence of mentoring programs when comparing private schools to public schools of pharmacy. Institutional differences in emphasis in research versus teaching did not result in statistical differences in the existence of mentoring programs. The existence of a formal mentoring program at the reporting institutions may represent not only a commitment to academic mentoring but also a more extensive faculty development plan. Magnussen reported that this also includes a commitment to assign reasonable teaching loads, a balance maintained between research and teaching, and an individual assessment of new faculty development needs (11). Magnussen further postulates that the development of scholars is most likely to be achieved in a mentoring relationship.

The development of a faculty mentoring program is not only beneficial to the junior faculty mentee but also provides significant reward to the mentor in terms of career revitalization, generating a sense of continuing contribution to the development of a protégé, and possibly institutional rewards based on tenure and promotion criteria for mentoring. As noted previously, Dreher and Cox report that there was a significant economic benefit to faculty involved in a mentoring relationship (12). Although these differences were also correlated to the ethnicity of the mentor, in that faculty with white mentors had an economic advantage over faculty with minority mentors, it speaks to a general additional benefit of mentoring relationships. Institutionally, the university will also benefit from greater productivity from the mentored partners, in an improved satisfaction and quality of life reported in mentored faculty, and in the recruitment of new faculty based on the existence and success of a mentoring program.

In conclusion, the existence of formal mentoring programs at fewer than 20% of schools/colleges of pharmacy surveyed highlights the

need for programs of this type at academic institutions. The need for these programs is further emphasized by the comments and responses of the deans acknowledging that programs of this type would likely increase faculty retention and assist junior faculty in the promotion and tenure process. The success of these types of programs will depend upon vigorous participation of junior and senior faculty and also upon the cooperation of college administration in supporting faculty development. Incentives including consideration for promotion and tenure, criteria for salary adjustment, and use of the program as a recruiting tool can increase the likelihood of success of these efforts.

While this project has provided a status report of mentoring programs at schools/colleges of pharmacy, it also suggests several questions for future study. Is there a correlation between rewards to faculty and the success of mentoring programs? How does the turnover of faculty relate to the need/desire for mentoring programs? What is the perception of faculty regarding the usefulness of these programs in pharmacy? What is the cost benefit of faculty mentoring programs? Is there greater faculty satisfaction and retention at institutions that have mentoring programs?

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