

Factors affecting the mobility of pediatric dentistry faculty

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Abstract

Purpose: A questionnaire was used to develop a profile of current pediatric dentistry faculty to determine whether current faculty would consider relocating to accept another position in academia, and to identify what factors are most important to current full-time faculty when considering another faculty position.

Results: Responding males had a significantly higher mean age (49.3 years) than the females (39.3 years). A significantly greater proportion of women (87%) than men (66%) reported that they were prepared to move if offered an improved career opportunity. Both women and men ranked an improved opportunity for professional growth followed by salary increase as the highest rated factors in considering relocation. There was no statistical difference between women and men at the assistant professor level relative to the importance of academic promotion opportunity. However, women at the associate professor level ranked an opportunity for academic promotion statistically higher than did men. (*Pediatr Dent* 20:288–91, 1998)

Attracting and retaining a qualified and competent faculty is basic to a teaching institution's success.¹ The purpose of this study was to develop a profile of current full-time pediatric dentistry faculty and, specifically, examine the questions:

1. Would current full-time faculty consider relocating to accept another academic position?
2. What factors are most important to current full-time faculty when considering another faculty position?

Full-time appointment was defined as four or more days/week. The faculty were asked to rate a variety of issues relative to remaining in academia. Questions from this survey addressing projected retention in academia were addressed in a previous publication.²

Methods

A two-stage distribution of surveys was used to solicit subjects for this study. First, the chairs, department/division of pediatric dentistry in the 54 American Dental Association- (ADA) accredited den-

tal schools in the US were asked the number of full-time pediatric dentists in their department. Second, the chairs were also asked to distribute a separate questionnaire to each of their identified full-time faculty. A second request was made to those chairs who did not respond to the initial mailing. This was followed-up by direct telephone contact.

The extent of enumeration and response was assessed in three ways. First, the characteristics of responding and nonresponding schools (private/public, regional distribution) were compared. Second, the total number of full-time faculty identified by department/division chairs was compared with the number of full-time pediatric dentistry faculty recorded by the American Association of Dental Schools (AADS, personal communication). Third, the gender distribution of faculty at responding schools was compared with the gender distribution at nonresponding schools (the latter data obtained by direct communication with the department/division chairs at those schools).

The survey instruments were designed to verify full-time status, to obtain basic demographic and academic appointment information about faculty, and to determine what factors were important to faculty relative to their considering a position at another institution. Importance was rated on a five-point Likert scale.³

Means and standard deviations were used to describe the demographic characteristics of the study population. Statistical differences were assessed with chi-square and Wilcoxon's tests. The data were compared by sex, age, willingness to move, and factors affecting the acceptance of a position in another institution. An alpha level of 0.05 was used to determine statistical significance.

Results

Completed questionnaires were received from pediatric dentists on the faculty of 40 schools of dentistry representing 74% of the 54 US dental schools. Responses were received from schools in all seven of the geographic regions defined by the National Institute of Dental Research for national surveys.⁴ A greater proportion of schools from the combined midwest and

southeast regions responded (24/28 schools) compared with schools from the two northeast regions (7/12 schools) and the three western regions (9/14 schools). A greater proportion of public schools responded (27/33 schools) compared with private schools (13/21 schools).

Department/division chairs identified a total of 221 full-time faculty in the 54 US schools approached for the survey. This is slightly less than the 234 people recorded as full-time faculty by the AADS after excluding Canadian schools and pediatric dentists with administrative appointments. A total of 135 full-time faculty returned completed questionnaires representing 61% of the 221 identified faculty at all 54 schools, or 77% of the identified 175 faculty at the 40 responding schools. Telephone inquiries to nonresponding schools indicated that 61% (28/46) of full-time faculty were male, which was lower than the 74% (110/135) of male respondents from participating schools.

Demographics

Demographic data are seen in the Table 1. Seventy-four percent of the respondents were males (mean age of 49.3 years) and 26% were females (mean age of 39.3 years). The difference in the age of men and women was statistically significant ($P < 0.01$).

Fifty-four percent of the faculty reported that their current academic appointment was their first in pediatric dentistry. A statistically higher ($P < 0.01$) proportion of females (51%) than males (18%) were at the rank of assistant professor. Forty-nine percent of the female and 45% of the male respondents stated that they had moved in the past to accept an academic appointment in another dental school. The mean number of moves per male faculty who had relocated in the past was 2.0, which was not significantly different from the mean of 1.2 for females.

Only five (4%) faculty members were actively seeking a position in another academic institution. However, 71% of responding faculty stated that they were prepared to accept a position at another dental school if it offered improved career opportunity. A statistically greater ($P = 0.02$) proportion of females (87%) were willing to relocate than were males (66%).

Faculty were asked to rate six factors as to their relative importance in considering a position at another dental school, but not all respondents ranked all factors (Table 2). Both women and men ranked an improved opportunity for professional growth followed by a salary increase as the highest rated factors in considering relocation. An

opportunity for academic promotion was ranked the next highest in order of importance by women followed by dissatisfaction with their current employer. Males ranked family concerns ahead of dissatisfaction with their current employment and opportunity for academic promotion. Failure to obtain tenure was rated as the least important by both women and men. The only statistically significant difference ($P < 0.05$) between females and males in the ratings was that women placed greater importance on academic promotion opportunity than did men.

The rating of opportunity for academic promotion by men and women was explored in more detail because it seemed possible that the difference could be related to unequal distribution of academic ranks between the sexes. If junior faculty rate the potential for promotion more highly than senior faculty when considering a position at another dental school, it may account for the observed differences between men and women, rather than any effects of sex per se. Hence, further analysis of responses to the question relative to academic promotion opportunity was undertaken, first by excluding full professors (as it was reasoned that many of those individuals would regard themselves as having reached the limits of academic promotion), and second by comparing male and female responses within the remaining academic ranks of assistant/associate professor. The results for assistant professors revealed

TABLE 1. DEMOGRAPHICS OF FULL-TIME FACULTY BY GENDER

	Female (N = 35)	Male (N = 100)
Age in years (mean \pm sd)	39.3 \pm 6.3	49.3 \pm 9.7*
Rank		
assistant professor (%)	51	18†
associate/full professor (%)	49	82
First faculty appointment in pediatric dentistry (%)	54	54
Faculty who have moved in the past to accept another academic appointment (%)	49	45
Number of moves after initial faculty appointment (mean \pm sd)	1.2 \pm 0.4	2.0 \pm 3.2
Prepared to move if offered improved career opportunity (%)	87	66**
Actively seeking a faculty position at another dental school (%)	6	3

*Statistically significant, $P < 0.01$, Wilcoxon's test; † Statistically significant, $P < 0.01$, chi-square test; ** Statistically significant, $P = 0.02$, chi-square test.

TABLE 2. FACTORS IN CONSIDERING A POSITION IN ANOTHER DENTAL SCHOOL BY FULL-TIME FACULTY

Female	Not Important						Very Important	
Professional growth	36	0	0	2	4	30	4.78 ± 0.54	
Salary increase	36	0	1	7	10	18	4.25 ± 0.87	
Academic promotion	33	4	0	8	9	12	3.76 ± 1.30*	
Not pleased with present employer	35	6	1	10	6	12	3.49 ± 1.44	
Family concerns	35	7	2	7	5	14	3.49 ± 1.56	
Failure to obtain tenure	33	15	2	7	4	5	2.45 ± 1.54	
Male	Not Important						Very Important	
Professional growth	93	4	0	1	13	75	4.67 ± 0.88	
Salary increase	92	4	2	16	37	33	4.01 ± 1.01	
Family concerns	91	17	8	18	23	25	3.34 ± 1.45	
Not pleased with present employer	89	19	10	22	25	13	3.03 ± 1.36	
Academic promotion	91	26	6	18	25	16	2.99 ± 1.49	
Failure to obtain tenure	84	49	5	12	12	6	2.06 ± 1.40	

*Significantly different from males, $P < 0.05$, Wilcoxon's test.

virtually no difference in mean Likert-scale responses for men (mean = 3.94, SD = 1.30) and women (mean = 3.63, SD = 1.21), $P = 0.30$. However, for associate professors, men rated an opportunity for promotion significantly lower (mean = 2.80, SD = 1.43) than females (mean = 3.93, SD = 1.44), $P = 0.01$. Hence, the difference between men and women was not due entirely to present academic rank, at least among people at the rank of associate professor.

Discussion

It is possible that department/division chairs failed to identify or distribute questionnaires to all full-time faculty, although the results of our enumeration were close to the number of full-time faculty recorded by the AADS. While gender composition of respondents and nonrespondents appeared similar, there was regional variation in the response from schools. In addition, respondents may differ from nonrespondents in other important ways that we could not assess. Nonetheless, we believe that the associations observed within this sample of responding faculty members provide useful insights.

It is reasonable to assume that teaching is the principal career of most full-time faculty. Seventy-one percent of full-time faculty reported that they were willing to consider relocating to another school if the position offered improved career opportunities, yet only 4% indicated that they were actively seeking a faculty position at another school. This would suggest that many faculty are open to consideration of other academic opportunities but have no strong urge or need to seek out a change.

The rating of opportunities for professional growth and salary increase as being the most important to both men and women was not

unexpected. It was interesting that family concerns were ranked higher by male faculty than by female faculty; women health professionals—more often than males—have spouses who are also health professionals which could affect mobility.⁵ Women rated the opportunity for academic promotion as significantly more important ($P < 0.05$) than did men. Academic promotion is often a statement of prestige but is not necessarily linked to an increase in salary. However, the recognition associated with an elevation in academic rank, and possible increase in salary, is apparently more important to women than men within the rank of associate professor.

Most men and women rated failure to obtain tenure in their current position as of minor relevance in their consideration to seek a faculty position at another dental school. This may reflect a growing trend away from tenure-track faculty in teaching institutions and more time-limited contractual appointments.^{6,7} However, 23% of the full-time faculty did rate failure to obtain tenure in their present position as important (Likert rating of 4 or 5) to their considering a position in another dental school.

Conclusions

The following conclusions were drawn:

1. Full-time male pediatric dentistry faculty are significantly older than female faculty.
2. A high percentage of pediatric dentists holding full-time positions in education are interested in other academic opportunities but are not actively seeking a change.
3. Among both women and men full-time faculty the opportunity for professional growth and increase in salary are the two most important factors relative to considering a position at another institution.
4. At the rank of associate professor, the opportunity for academic promotion was significantly more important to women than it was for men. There was no difference between women and men at the assistant professor rank relative to the importance of academic promotion opportunity.

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