Gender Preferences in the Choice of a Pediatric Dental Residency Program


Abstract: The goal of this study was to investigate whether men and women applying for graduate training in pediatric dentistry placed different emphasis on the same factors and program characteristics upon making their final ranking decision. A questionnaire was mailed to the first-year resident class in the United States in 2005 containing both multiple-choice and open-ended questions covering six sections: 1) candidate’s background, 2) the application process, 3) program characteristics, 4) nonclinical factors, 5) clinical factors, and 6) the interview process. In sections three through six, respondents ranked factors and characteristics from “not important” or “no influence” to “critical.” The response rate was 69.2 percent (180/260), with approximately 57.8 percent females (104/180) and 61.4 percent non-Hispanic white respondents (110/180). Statistically significant differences between genders were as follows: 1) men were older (29.4 years versus 28.1, p<0.05); 2) men applied to more programs (9.9 vs. 8.1, p<0.05); 3) women preferred programs affiliated with their own dental school (p=0.046); 4) women preferred university-based programs (p=0.049); 5) women preferred programs that offered a high amount of patient care under general anesthesia (p=0.040); and 6) women placed more importance on the salary/stipend amount offered by the programs (p=0.045).

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A large number of women have been entering the practice of general dentistry as well as pediatric dentistry for the past two decades. It is well known that men and women set different priorities when choosing a career in dentistry, a fact that leads to differences in practice characteristics and professional activities. Women tend to treat fewer patients, make more referrals to specialists, perform fewer surgical procedures, and are more likely to be employed in faculty or government positions than men.1 Female pediatric dentists are more likely to be partners or associates than sole proprietors, tend to use protective stabilization more frequently, and are more likely to hold academic or hospital positions than their male counterparts.2-4 Pediatric dental residents of both genders equally rated financial opportunity as the most important factor in choosing a career, with geographic location of the practice being also a strong consideration.5 However, more female residents considered career opportunities for their spouse as very important in personal career decisions than did men.

Recruitment of qualified dental students to attend a graduate program is a major concern for residency directors and faculty. The steady growth in females applying for a resident position in pediatric dentistry in the past few years6,7 makes it of paramount importance to understand the significant influence gender differences may have on program ranking. A companion study analyzed the factors that influenced candidates’ choice of a pediatric dental residency program without discriminating by gender.7 The goal of this study was to investigate whether men and women placed different emphasis on the same factors and program characteristics when ranking a pediatric dental residency program.

Materials and Methods

A questionnaire exploring factors that influenced candidates’ choice of a pediatric residency program was created and pre-tested using a group of pediatric dental residents in a U.S. dental school. Adjustments were made, and study approval was obtained from the university’s Institutional Review Board. The questionnaire consisted of six sections: 1) candidate’s background, 2) the application process,
3) program characteristics, 4) nonclinical factors, 5) clinical factors, and 6) the interview process. The first two sections had multiple-choice questions, while the latter four sections asked respondents to rank the presented factors from “not important” or “no influence” to “critical.”

Questionnaires were mailed to directors of pediatric dental residencies in the United States to distribute to their first-year residents in 2005. Contact information for a few programs could not be verified; thus, they were not included in the study. Out of 278 first-year positions available that year, 6260 residents received the survey together with a self-addressed, stamped envelope coded with a number used to track responses by program only, thus protecting the respondents’ confidentiality. Directors of programs failing to return all the surveys were sent a second set to distribute to the nonrespondent residents. Data were entered into Excel 2003 (Microsoft, Seattle, WA) and analyzed for gender differences using descriptive statistics, chi-square, and t-tests. The level of statistical significance was set at 0.05.

### Results

One hundred and eighty questionnaires were returned, comprising a rate of 69.2 percent. Almost 60 percent of the respondents were female (104/180). General findings, without discriminating by gender, were reported in the companion article, so only the statistically significant findings between genders are discussed here.

The mean age of the respondents (Table 1) was 28.7 years, but males were older than females (29.4 years versus 28.1, p<0.05). The respondents indicated that they applied to a mean number of almost nine programs (Table 2), with men applying to 9.9 training programs versus 8.1 for the female residents (p<0.05). Despite the fact that 42.7 percent of all respondents said that the affiliation of the program with their own dental school had no influence on their ranking, almost 25 percent of the women reported that factor had a heavy or critical influence on their decision compared to 17.4 percent of men (p=0.046, Table 3). More than one-third of the women (34.7 percent) said that a university-based institution was an important or critical factor compared to only 21.9 percent of men (p=0.049, Table 4). Almost 23 percent of female residents would have liked to attend a program that offered a high amount of patient care under general anesthesia (that is, more than 50 percent of the working week) versus 10.9 percent of men (p=0.040, Table 5). Twice as many females said that the salary/stipend amount offered by the programs was a critical issue (p=0.045, Table 6). Some respondents did not answer all questions.

### Discussion

It was interesting to note that women placed more importance on the program’s salary and/or stipend than did men (Table 6), given that males usually tend to assume greater financial responsibility for the family. In contrast, a study of obstetrics/gynecology residents...
Table 3. Importance given to residency program being affiliated with own dental school, by number and percentage of total male and female respondents (p=0.046)

<table>
<thead>
<tr>
<th></th>
<th>No Influence</th>
<th>Some Influence</th>
<th>Neutral</th>
<th>Heavy Influence</th>
<th>Critical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>33 (44.0%)</td>
<td>13 (17.3%)</td>
<td>16 (21.3%)</td>
<td>5 (6.7%)</td>
<td>8 (10.7%)</td>
<td>75</td>
</tr>
<tr>
<td>Females</td>
<td>43 (41.7%)</td>
<td>5 (4.9%)</td>
<td>30 (29.1%)</td>
<td>14 (13.6%)</td>
<td>11 (10.7%)</td>
<td>103</td>
</tr>
</tbody>
</table>

Table 4. Importance given to university-based programs, by number and percentage of total male and female respondents (p=0.049)

<table>
<thead>
<tr>
<th></th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Neutral</th>
<th>Important</th>
<th>Critical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>19 (26.0%)</td>
<td>10 (13.7%)</td>
<td>28 (38.4%)</td>
<td>15 (20.5%)</td>
<td>1 (1.4%)</td>
<td>73</td>
</tr>
<tr>
<td>Females</td>
<td>13 (12.9%)</td>
<td>17 (16.8%)</td>
<td>36 (35.6%)</td>
<td>25 (24.8%)</td>
<td>10 (9.9%)</td>
<td>101</td>
</tr>
</tbody>
</table>

Table 5. Amount of dental care under general anesthesia experience preferred (as percentage of work week), by number and percentage of total male and female respondents (p=0.040)

<table>
<thead>
<tr>
<th></th>
<th>&lt;20%</th>
<th>20%–50%</th>
<th>50%–75%</th>
<th>&gt;75%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>34 (45.9%)</td>
<td>32 (43.2%)</td>
<td>6 (8.1%)</td>
<td>2 (2.8%)</td>
<td>74 (100%)</td>
</tr>
<tr>
<td>Females</td>
<td>28 (27.7%)</td>
<td>50 (49.5%)</td>
<td>20 (19.8%)</td>
<td>3 (3.0%)</td>
<td>101 (100%)</td>
</tr>
</tbody>
</table>

Table 6. Importance given to stipend/salary amount, by number and percentage of total male and female respondents (p=0.045)

<table>
<thead>
<tr>
<th></th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Neutral</th>
<th>Important</th>
<th>Critical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>0 (6.6%)</td>
<td>5 (18.7%)</td>
<td>14 (50.7%)</td>
<td>38 (24.0%)</td>
<td>18 (100%)</td>
<td>75</td>
</tr>
<tr>
<td>Females</td>
<td>6 (5.9%)</td>
<td>4 (3.9%)</td>
<td>21 (20.6%)</td>
<td>35 (34.3%)</td>
<td>36 (35.3%)</td>
<td>102</td>
</tr>
</tbody>
</table>

Necology applicants found that males placed much greater emphasis on financial issues, such as salary and opportunities to moonlight, whereas women were less concerned about financial incentives. Oral surgery residents, generally mostly males, considered quality of the program more highly than salary and moonlighting opportunities in their final choice of a residency program. This clear interest of women on the salary/stipend issue may also indicate a desire to not increase the already high debt burden acquired during dental school and/or may mirror changes in family structure such as the woman being a single parent or the primary provider for the family. Women indicated their preference for programs that offered a high amount of general anesthesia time for patient care (Table 5), a finding that is difficult to interpret. A study of factors influencing medical students’ selection of an internal medicine residency program found that women gave more consideration to familial issues such as the program being located close.
to their spouse or significant other’s job. A similar outcome was seen in a recent study of senior dental students who desired to further their education and recent graduates of dental school already enrolled in a residency program. In our study, family needs had a heavy or critical influence on the ranking decision for 57.3 percent of the women and 53.4 percent of the men. However, women showed a statistically significant preference for programs affiliated with their own dental school (Table 3), which may imply a difficulty to relocate, especially if they have a family and/or a spouse/significant other already established in the community. Program location was also an important factor for females in medical studies.

The fact that women placed more importance on university-based programs (Table 4) may be indicative of their desire to pursue an advanced degree, given that they tend to choose academic positions more frequently than men. Hospital-based pediatric dental programs usually do not offer the opportunity for a master’s or doctorate degree. Furthermore, although not statistically significant, more men (21.3 percent) than women (2.9 percent) thought that the faculty board certification status was not an important factor to consider in the final ranking of programs, possibly indicating women’s appreciation of academic achievements. The preference for university-based programs may also show a desire for a more controllable lifestyle, given that such programs traditionally offer a lighter on-call schedule than hospital-based residencies, allowing residents more time to accommodate family responsibilities and/or personal interests. A similar trend was seen with graduating female medical students who wished to have a manageable case load and call schedules during their residency. It appears that a more controllable lifestyle is a pursuit of this newest generation of health care professionals of both genders as demonstrated in this study’s companion article and other publications.

Weaknesses of this study include the questionnaire’s limitations in interpretation, the inability to verify accuracy of the answers, and the possible recall bias of the respondents, especially because they were already enrolled in their residency program when they completed the survey. Results of this study show that women place different emphasis on certain program aspects, which are important for pediatric dentistry faculty to understand in order to tailor their selection process.

To our knowledge, this is the only study in the dental literature that has analyzed candidates’ preferences in ranking programs according to their gender. Therefore, comparison with gender predilections in other dental specialties is not possible.

REFERENCES