

Factors Influencing Pediatric Dental Residency Program Selection

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PURPOSE

The aim of this study was to identify factors and characteristics of a pediatric dental residency that influence applicants on their decision in program ranking.

BACKGROUND

- The number of applicants to pediatric dental programs has increased almost six-fold since 1990, rising from 21.3 applicants per program to 117.3 applicants per program.(1)
- In 2023 residency program admission cycle, nearly 85% of available positions were filled through the MATCH process.(2)
- In 2007, a study found that the main factors associated with program ranking included modern clinical facilities, high ratio of dental assistants and faculty to residents, availability of assistants for sedation and general anesthesia cases, salary or stipend, and amount of clinical experience.(3)
- There has not been a recent study looking at pediatric dental residency programs and the main factors that influence it in almost two decades.

METHODS

A cross-sectional survey was distributed via ADEA PASS emails to current pediatric dental residents and dentists within five years of residency completion. Participants rated 19 program characteristics on a five-point Likert scale ("not important" to "extremely important") (Table 1a and 1b). Respondents also ranked 11 program characteristics from most to least important (Table 2). A mean rank was calculated with 1 the "most important" factor and 11 the "least important." The survey ended with an open-ended question asking other factors respondents considered as very important.

Characteristic	Mean (SD)	n (%)				
		Extremely	Very	Moderately	Slightly	Not
Program reputation	3.5 (1.1)	18 (15.9)	47 (41.6)	30 (26.6)	12 (10.6)	6 (5.3)
Reputation of faculty	3.4 (1.1)	20 (17.7)	35 (31.0)	40 (35.4)	10 (8.9)	8 (7.1)
Research opportunities	2.1 (1.2)	5 (4.4)	9 (8.0)	24 (21.2)	26 (23.0)	49 (43.4)
Financial support (high stipend or tuition)	4.2 (1.0)	55 (48.7)	34 (30.1)	18 (15.9)	1 (0.9)	5 (4.4)
Program Length (<30 months)	4.0 (1.1)	51 (45.1)	32 (28.3)	19 (16.8)	6 (5.3)	5 (4.4)
Hospital-based	3.4 (1.2)	24 (21.2)	33 (29.2)	35 (31.0)	8 (7.1)	13 (11.5)
University-based	2.4 (1.2)	6 (5.3)	12 (10.6)	36 (31.9)	23 (20.4)	36 (31.9)
Mixed (hospital and university-based)	3.3 (1.3)	24 (21.2)	30 (26.6)	32 (28.3)	15 (13.3)	12 (10.6)
Master's or PhD offered	1.9 (1.3)	9 (8.0)	7 (6.3)	11 (9.8)	20 (17.9)	65 (58.0)
Location	3.8 (1.2)	37 (32.7)	32 (28.3)	31 (27.4)	6 (5.3)	7 (6.2)
Satisfied current resident	4.2 (0.9)	44 (39.3)	50 (44.6)	12 (10.7)	5 (4.5)	1 (0.9)
Multiple techniques taught	4.1 (0.9)	42 (37.2)	51 (45.1)	16 (14.2)	0 (0)	4 (3.5)

Table 1a. Importance of Program Characteristics Influencing the Respondent's Choice of Pediatric Dental Residency

Characteristic	Mean (SD)	n (%)				
		Extremely	Very	Moderately	Slightly	Not
Impression of faculty at interview	4.0 (0.9)	38 (33.6)	51 (45.1)	19 (16.8)	1 (0.9)	4 (3.5)
Impression of current residents at interview	4.1 (0.9)	44 (38.9)	43 (38.1)	22 (19.5)	1 (0.9)	3 (2.7)
Updated technology and techniques taught	3.8 (0.9)	26 (23.0)	51 (45.1)	28 (24.8)	5 (4.4)	3 (2.7)
Extensive interdisciplinary care training	3.6 (1.2)	28 (24.8)	33 (29.2)	33 (29.2)	12 (10.6)	7 (6.2)
High number of faculty	3.1 (1.1)	11 (9.7)	28 (24.8)	40 (35.4)	26 (23.0)	8 (7.1)
High number of patients treated	4.0 (1.0)	42 (37.2)	39 (34.5)	24 (21.2)	3 (2.7)	5 (4.4)
Curriculum has large medical / medicine focus	3.3 (1.1)	13 (11.6)	40 (35.7)	29 (25.9)	24 (21.4)	6 (5.4)

Table 1b. Importance of Program Characteristics Influencing the Respondent's Choice of Pediatric Dental Residency

Characteristic	Mean Rank	No. of Respondents who Ranked this Factor #1	No. of Respondents who Ranked this Factor #1 or #2	No. of Respondents who Ranked this Factor #1, #2 or #3
Good clinical experience	3.2	32	46	68
Financial support	4.0	23	43	55
Location	4.4	29	45	55
Program reputation	4.6	10	31	44
Quality of faculty	4.8	5	19	35
Impression of faculty and residents during interview	4.9	5	19	36
Updated technology and techniques taught	6.6	1	3	11
Hospital-based	7.1	2	7	11
Mixed (hospital and university-based)	7.4	3	8	14
Research opportunities	9.2	1	1	4
University-based	9.6	0	0	0

Table 2. Factors Influencing Choice of Residency Program Ranked "least important" to "most important"

DATA ANALYSIS

Descriptive statistics were generated. Survey results were shown with frequency counts and percentages for 19 program characteristics. The mean response score for program characteristics were calculated using a 5-point scale where 5 = "extremely important" to 1 = "not important." Higher mean scores indicated greater importance. Respondents ranked 11 program characteristics from most to least important. A mean rank was calculated using an 11 point scale where 1 was "most important" and 11 was "least important." Data were analyzed using SAS v9.4.

RESULTS

- A total of 113 respondents completed the survey. Most were female (66.1%) and non-Hispanic White (55.7%)
- Over 60% respondents reported educational debt exceeding \$200,000.
- Seven factors were highly rated (mean ≥ 4.0): financial support, resident satisfaction, variety of techniques, interview impressions (residents and faculty), shorter program length (<30 months), and high patient volume (Table 2).
- Financial support was most frequently rated "extremely important," while research opportunities, advanced degrees, and university-based structure were less important (Table 2).
- In rank-ordering, clinical experience was most influential, followed by financial support and geographic location; research and university affiliation ranked lowest (Table 1a and 1b).
- Additional important themes included operating room/sedation exposure, special needs experience, program culture, mentorship, call schedule, cost of living, and post-graduation job opportunities

CONCLUSIONS

Financial support/stipend, satisfied residents, multiple techniques taught, impression of current residents at interview, program length, impression of faculty at interview and high number of patients treated are important to applicants when applying to pediatric dental residency programs. The most important factors in ranking a residency program included clinical experience, financial support and location while research and university-based were the least important. Understanding these priorities may help programs better align recruitment and structure with applicant expectations.

LIMITATIONS

- Survey response was low
- Possible recall bias of respondents
- Inability to verify accuracy of answers

REFERENCES

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