

Assessment of Predoctoral Students' Confidence in Pediatric Dentistry in U.S. Dental Schools

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Background

- Dental caries is the most common chronic condition among children in the United States¹.
- Prevalence of early childhood caries (ECC) and severe early childhood caries (SECC) continues to increase in recent years².
- The younger the child's age, the least likely a general dentist will provide care, with research showing that children under 3 being less likely to see a general dentist when compared to other ages³.
- The American Academy of Pediatric Dentistry (AAPD) recommends caries risk assessment, oral hygiene instruction for parents, and exposure to fluoride within the first 6-12 months of life⁴.
- Data suggests there may be a gap in care and comfortability among general dentists providing care to children under 3⁵.
- This presents a great opportunity in dental educations to augment pediatric curriculum for this young population of patients. However, little is known about existing trends in pediatric dental curriculum.
- Hypothesis:
 - Dental school characteristics are associated with pre-doctoral educational trends and student educational outcomes related to the oral health care of children.

Objective/Purpose

- The study is an exploration of national pre-doctoral curricula in pediatric dentistry to assess trends in dental education and dental student preparedness to care for children.

Survey Approach

- Obtained a list from the AAPD of predoctoral program directors
- Provided an IRB-approved introductory script and survey link to distribute to predoctoral pediatric directors
- Electronic survey administered through RedCap
- School demographic, clinical education, student preparedness, and COVID impact

School
Demographics

Clinical
Education

Student
Preparedness

COVID
Impact

Results

School Demographics	Total
Is your school public or private? n(%)	
Public	8 (86.7%)
Private	4 (33.3%)
Is your school located in a rural (< 50,000 people) community? n(%)	
No	9 (81.8%)
Yes	2 (18.2%)
Select which of the following best describes your dental school's matriculating class size. n(%)	
0-75	5 (45.5%)
76-150	5 (45.5%)
151-215	1 (9.1%)
How many total (full-time and part-time) pediatric faculty does your school employ? Please excuse unpaid adjunct faculty. n(%)	
0-5	5 (45.5%)
6-10	3 (27.3%)
11-20	1 (9.1%)
21+	2 (18.2%)

Table 1. Dental School Demographics

Pediatric Dental Experiences Offered by School

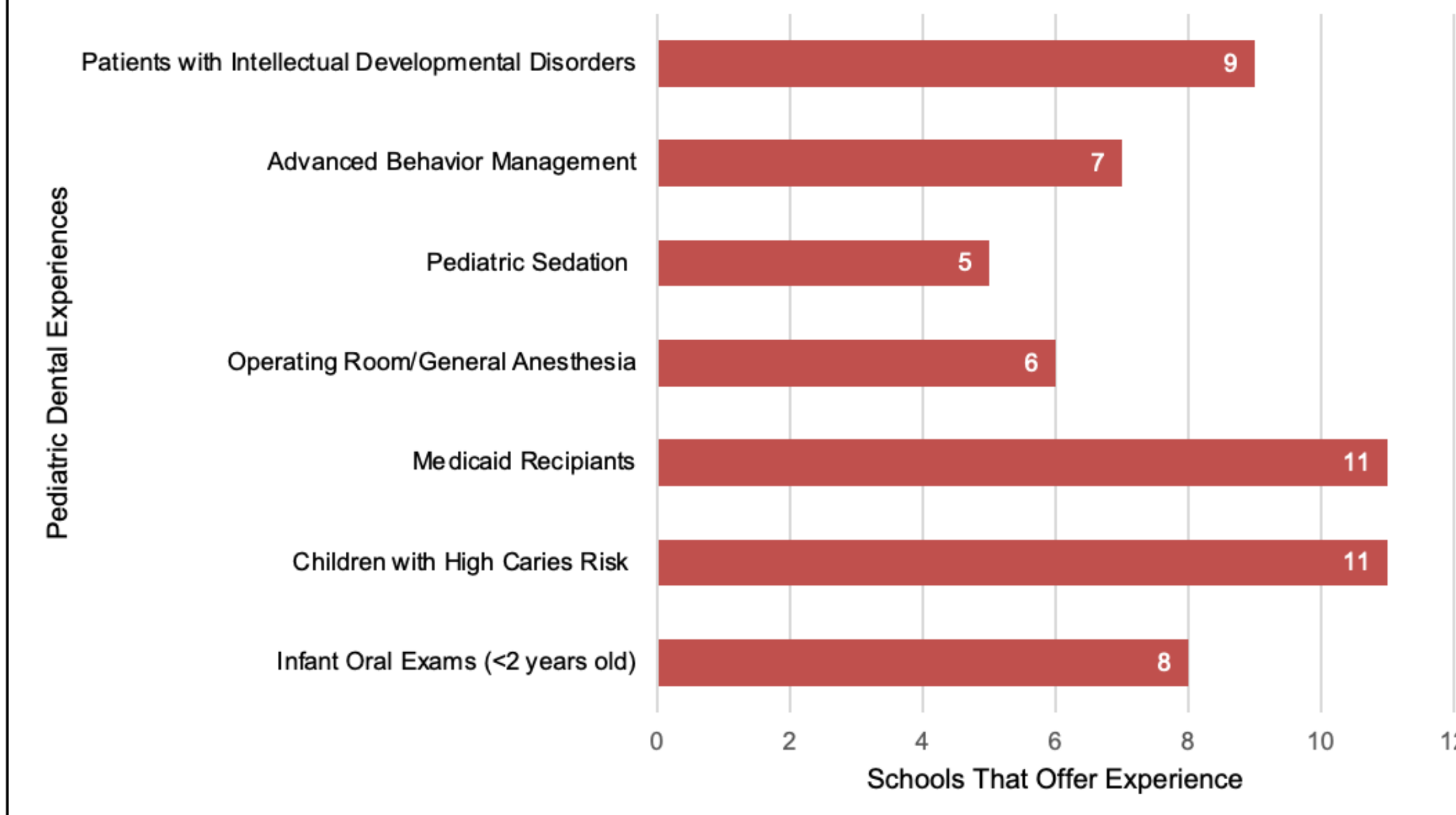


Table 2. Pediatric Clinical Education. Schools responded which pediatric dental experiences they offered pre-doctoral students.

Pediatric clinical faculty change due to COVID-19

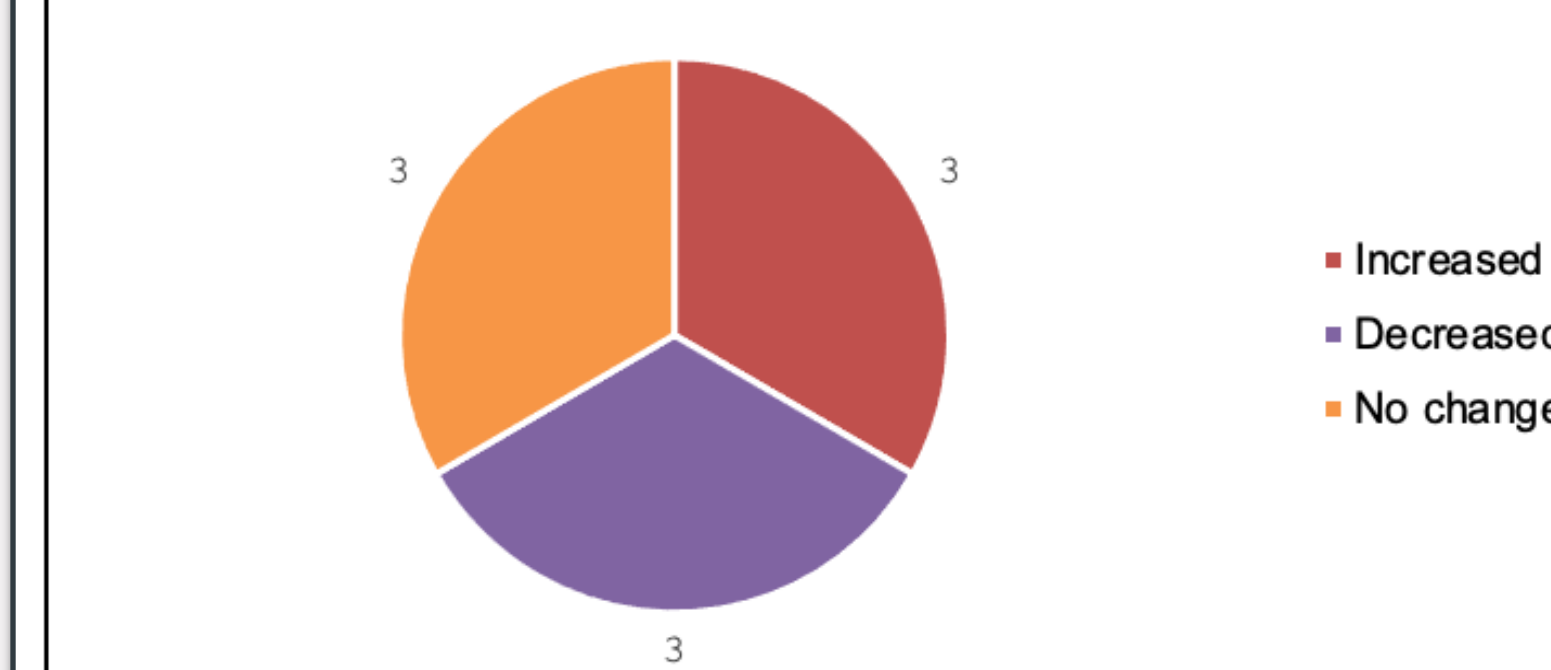
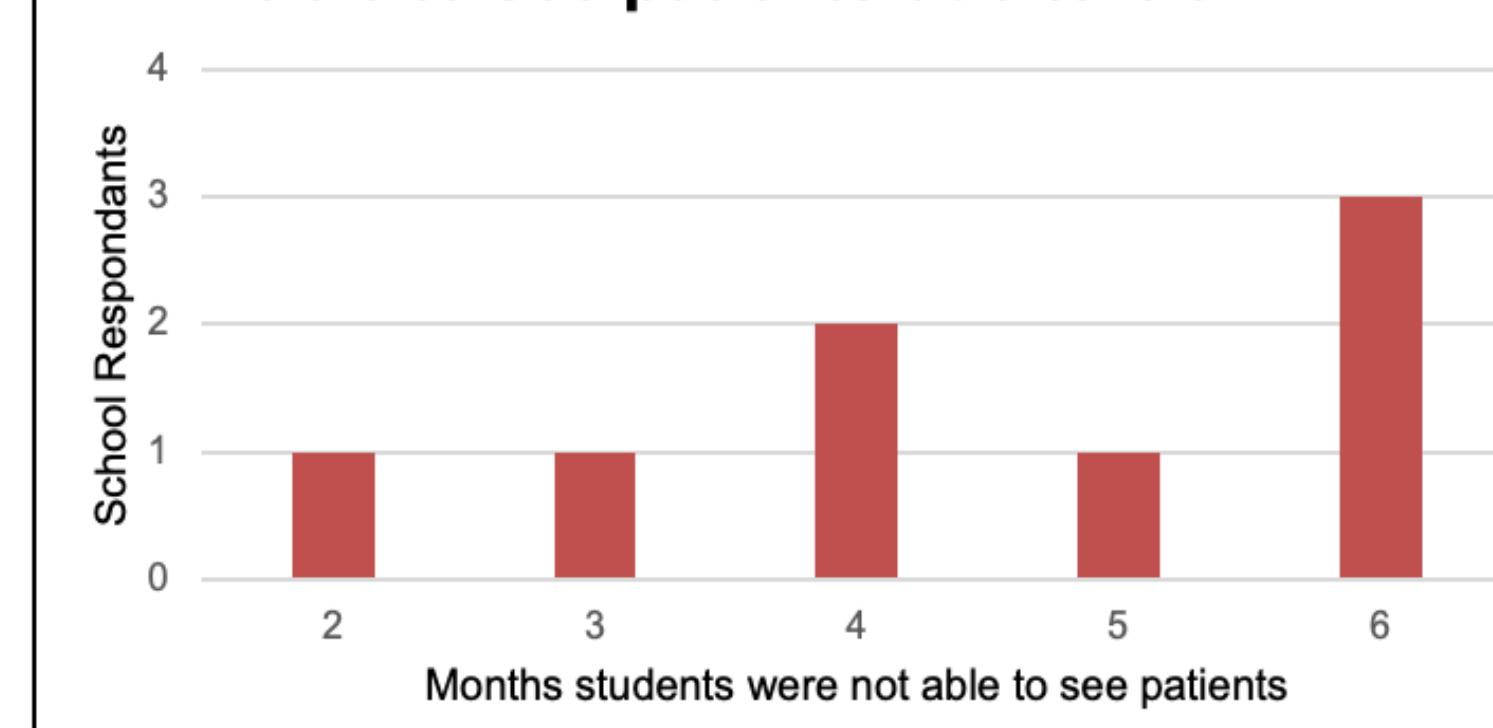


Table 3. COVID-19 Impact. (a) shows the change seen in faculty due to the COVID-19 pandemic. (b) depicts the number of months students were unable to see patients during the COVID-19 pandemic.

Length of time students were not able to see patients due to COVID



Student Preparedness

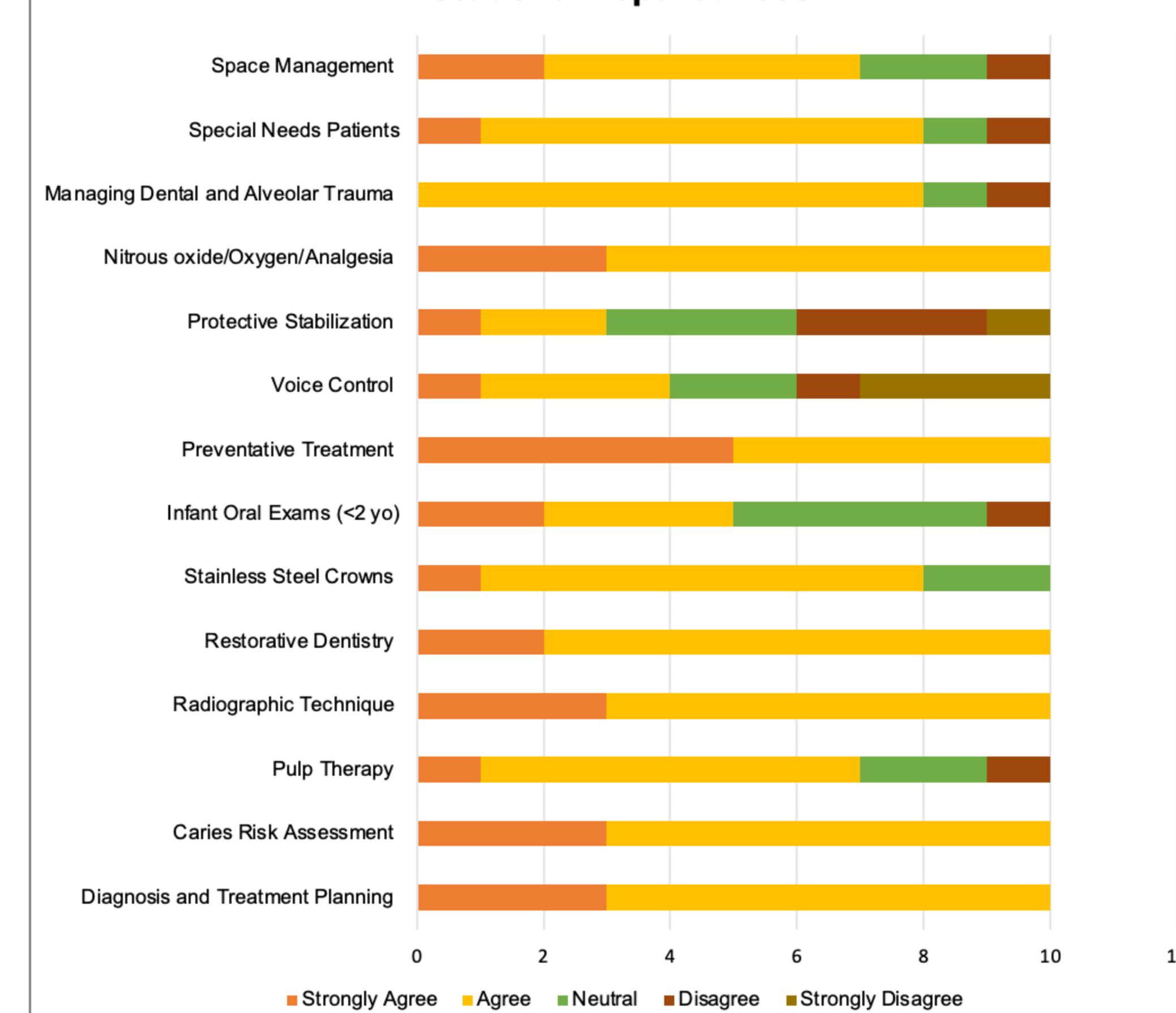


Table 4. Student Preparedness Assessment. Pediatric program directors were asked via Likert scale to assess the preparedness of their predoctoral students.

Conclusion

- With our sample size, there were no significant associations between dental school trends and outcomes.
- 8/11 programs offered infant oral exams
- 5/10 schools ranked their student's preparedness as neutral or below.
- Other areas of lower student preparedness include pulp therapy, voice control, protective stabilization, space management, patients with IDD's, and alveolar trauma.
- Experiences least offered by dental schools included pediatric sedation, operating room experience, and advanced behavior management.
- Students on average did not see patients for 4.5 months during COVID and overall did not impact faculty at the responding schools.
- Limitations of the Research
 - Lower statistical power due to low response rate.
 - Response bias is possible due to program directors avoiding discussing their program negatively.
 - Survey feedback noted that some questions were not programmed properly.
- Future Research
 - Surveying new graduate dentists to assess their confidence providing pediatric dental care.

Acknowledgements

We appreciate the support of:

- UNMC College of Dentistry Student Research Fellowship Award
- Kaeli Samson, MPH, MA, UNMC College of Public health, for descriptive statistical analysis
- Vinod Kumar, MS, REDCap, for survey programming

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