

Predoctoral Dental Students Intentions to Treat Children Post-Graduation

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Abstract

Purpose: This cross-sectional study aimed to assess the intentions of predoctoral dental students in Portland, ME, to treat pediatric patients post-graduation and identify influencing factors.

Methods: Students completed a self-administered online survey via REDCap that included 18 questions on demographics, educational experiences, and factors influencing their intentions to treat children. Data were analyzed using frequencies, percentages, and ANOVA to explore relationships.

Results: A total of 128 students completed the survey (67% female; 77% aged 30 or younger; 35% from rural hometowns; 24% had children). Approximately 17% did not intend to treat children after graduation. Positive predictors of intention included personal interest in pediatric dentistry ($P < .001$), comfort with behavior management techniques ($P < .001$), and favorable child cooperation ($P = .001$). Negative predictors included inadequate training ($P = .005$), discomfort with behavior management ($P < .001$), challenging child cooperation ($P = .032$), parental involvement ($P = .01$), and complexity of pediatric procedures ($P = .025$). Only 35% of fourth-year students felt adequately prepared to treat children, while 27% felt somewhat unprepared.

Conclusions: Most dental students intend to treat pediatric patients, but addressing challenges in training and behavior management techniques is critical to improving preparedness and willingness to care for children.

Introduction

- Access to pediatric dental care is essential for promoting lifelong oral health, yet many children face barriers due to a shortage of general dentists willing to treat them.
- While pediatric dentists specialize in this field, most children's dental care is provided by general practitioners.
- Therefore, the willingness and preparedness of newly graduated dental students to treat children plays a crucial role in addressing this gap.

Objectives

- Assess the intentions** of predoctoral dental students to treat pediatric patients after graduation.
- Identify key factors** influencing students' willingness or reluctance to provide pediatric dental care

Study Design and Methodology

- 18 questions covering demographics, educational experiences, and factors affecting students' willingness to treat children.
- Frequencies and percentages were used for data description.
- ANOVA tests were conducted to examine associations between student characteristics, training experiences, and their intentions to provide pediatric care



Results

- 128 students completed the survey
- 67% female; 77% aged 30 or younger; 35% from rural hometowns; 24% had children.
- About 17% did not intend to treat children after graduation
- Only 35% of D4 students felt adequately prepared to treat children, while 27% felt somewhat unprepared.

Fig. 1: Treating Intentions and Hometown

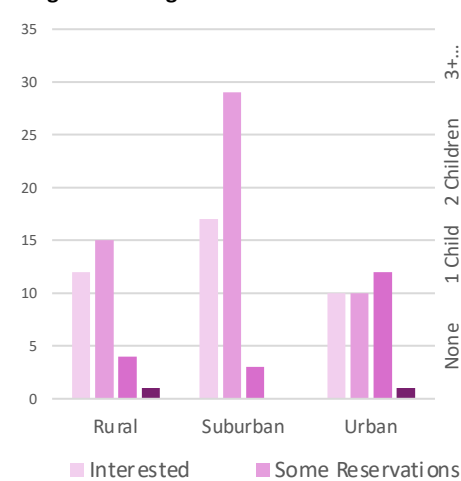
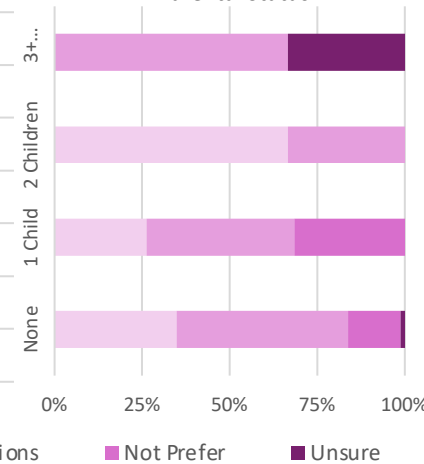


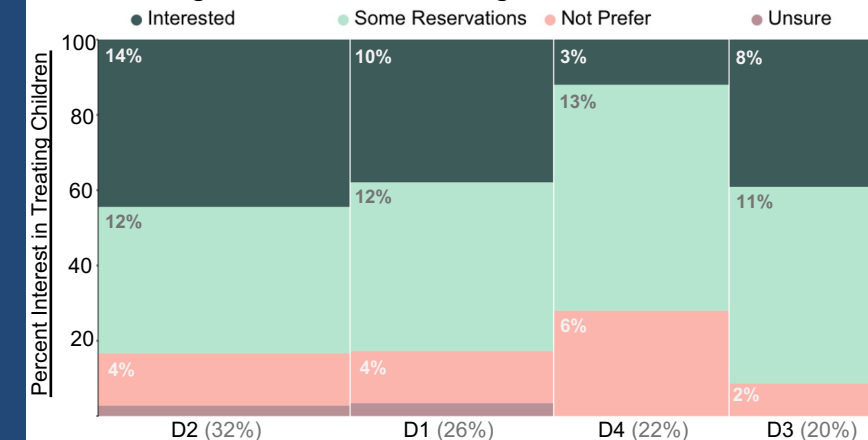
Fig. 2: Treating Intention by Parental Status



- There was a statistically significant association between hometown and treating intentions ($P = 0.011$) as well as the parental status of the participant and treating intentions ($P = 0.002$).

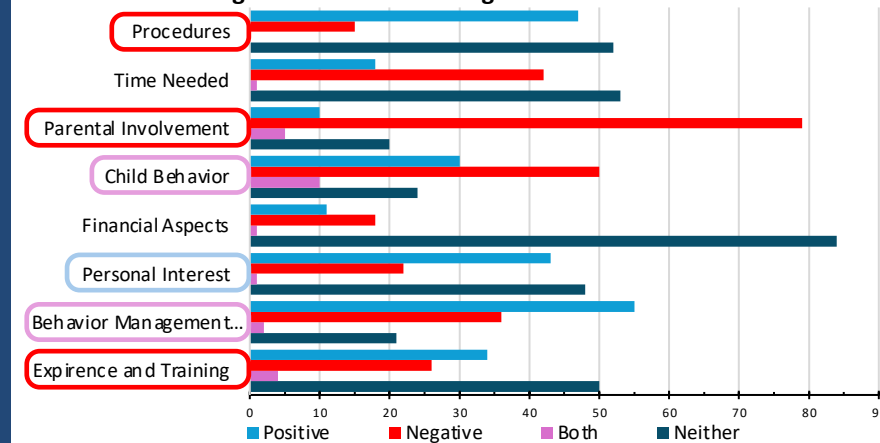
Results (cont.)

Fig. 3: Interest Levels Treating Children Post-Graduation



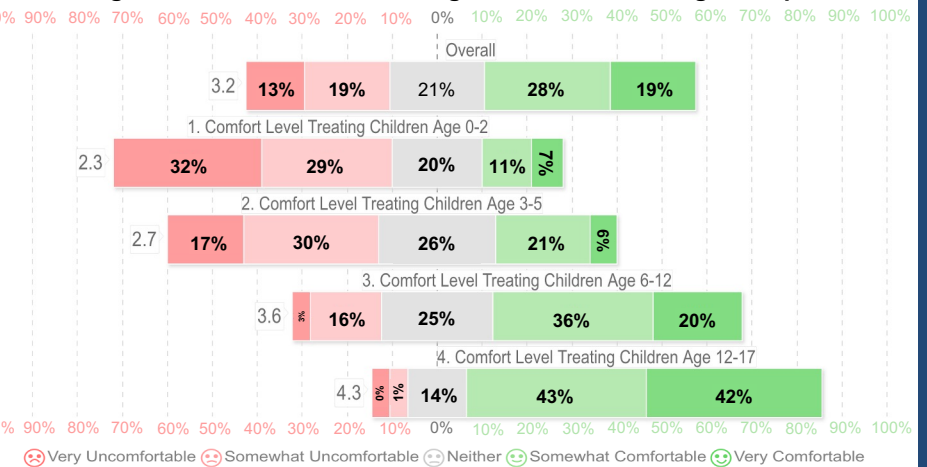
- There is a significant difference seen between 1st year dental students and 4th year dental students when it comes to interest in treating children.

Fig. 5: Factors Influencing Intention to Treat Children



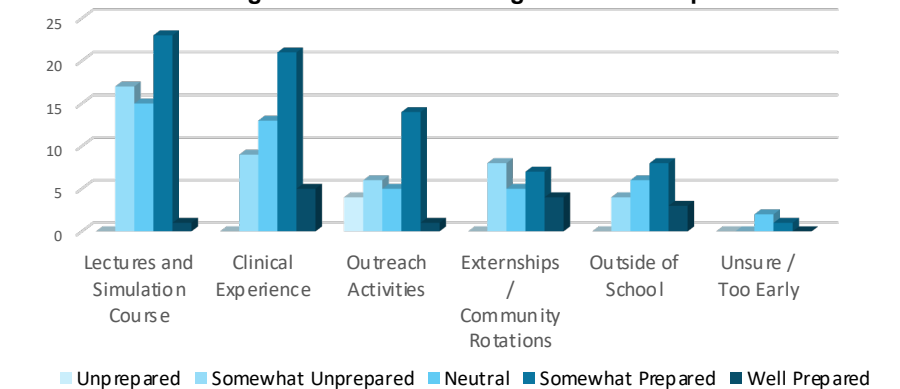
- Positive predictors of intention included **personal interest in pediatric dentistry** ($P < .001$), **comfort with behavior management techniques** ($P < .001$), and **favorable child cooperation** ($P = .001$).
- Negative predictors included **inadequate training** ($P = .005$), **discomfort with behavior management** ($P < .001$), **challenging child cooperation** ($P = .032$), **parental involvement** ($P = .01$), and **complexity of pediatric procedures** ($P = .025$).

Fig. 4: Comfort Levels in Treating Different Pediatric Age Groups



- Most students reported low comfort levels children aged 0-2, with 61% indicating discomfort in treating this age group
- An increasing comfortability trend is seen in the groups 6–12-year-olds and 13–17-year-olds, with increasing comfortability.

Fig. 6: Factors Influencing Perceived Preparedness



- Students who felt adequately prepared to treat children attributed their preparedness to **lectures and simulation courses** ($P < 0.001$), **clinical experiences** ($P < 0.001$), and **externships/community rotations** ($P = 0.012$), all of which showed significant correlations with perceived readiness.

Conclusions

- Most predoctoral students intend to treat children after graduation. There is an increased willingness to treat children by students from rural and suburban areas, as well as with more children.
- The majority of students reported lower comfort levels treating younger patients, with increasing trends as the age increases.
- Specific positive and negative predictors indicate personal preferences for a student's intention to treat children.
- Lectures, simulation courses, clinical experiences, and externships are influencing factors on a student's perceived preparedness to treat children after graduation.

Recommendations

- Increase hands-on clinical experiences with younger pediatric patients to improve comfort levels.
- Incorporate behavior management training early in the curriculum to build confidence over time.
- Optimize externship sites with pediatric specialists to reinforce skills and increase preparedness.