

## Background

Many pediatric patients present with developing occlusions and oral functions that if left untreated could result in debilitating functional deficiencies. The ability to provide interceptive treatment allows patients facing these variations an opportunity to guide development to restore the occlusion or function to normalcy for one's age. Interceptive orthodontics treats issues early before they become challenging to correct and utilizes jaw growth advantageously. There are few studies available that have quantified and qualified orthodontic education and hands on experience pediatric dental residents receive during their residency programs. Rawlings et al surveyed United States pediatric dentistry residency programs concerning the amount of orthodontic training received in 1977.<sup>1</sup> In 2003, Hilgers et al surveyed pediatric dental residencies regarding the amounts and type of orthodontic training residents receive.<sup>2</sup> In 2020, Thayer et al conducted a similar study to update the status of orthodontic education in U. S. pediatric dental residency programs.<sup>3</sup> These two surveys were directed to program directors and assistant program directors. This study aims to measure the clinical training experiences of pediatric dental residents in their preparation to provide eruption guidance within the standard of care upon graduation. It is directed to pediatric dental residents to reflect their individual experiences.

## Objective

To survey current American Academy Pediatric Dentistry residents on their experience in treating patients with interceptive orthodontics.

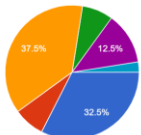
## Methods

Pediatric dentistry residents enrolled in United States residency programs accredited by the Commission on Dental Accreditation received an email from the AAPD listserv announcing the study. Residents that chose to participate navigated to the online survey and answered 40 questions regarding their experience in treating patients with interceptive orthodontics. Participants were thanked for their participation in advance and given contact information for the PI.

## Data Results

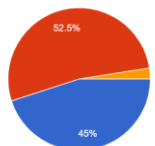
1. Where is your residency program located? \*

40 responses



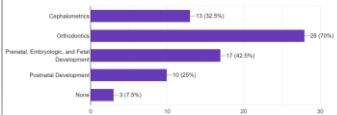
5. In what year of residency are you? \*

40 responses



4. Which didactic courses have you taken? \*

40 responses



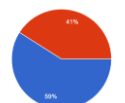
7. Passive space holding

40 responses



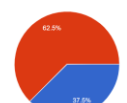
22. Lingual arch fixed passive: soldered

23 responses



25. Maxillary palatal bar fixed passive: Soldered

40 responses



## Results

- 40 responses collected/ 880 emails sent accounts for 4.5% response rate .
- Respondents were mainly from Northcentral (37.5%), Northeastern (32.5), and Western (12.5) regions.
- Respondents were primarily from hospital- based certificate programs (52.5%) > a combined program (32.5%).
- Most respondents were from 2- year programs (90%).
- Majority of respondents reported having courses in orthodontics(70%), while 42.5% reported having courses in prenatal, embryologic, and fetal development, 32.5% had cephalometrics and 25% had postnatal development.
- 90% of respondents have experience in passive space holding and 47.5% reported experience in active space regaining and incisor relocation (23%).
- Overall, respondents have more experience with LLHAs than TPAs and more experience with passive appliances than active ones or habit appliances.

## Conclusions

- Educational experience for pediatric dental residents is limited and does not provide sufficient hands-on clinical training to effectively use devices to affect commonly encountered conditions to dental arch and facial development.
- Therefore, pediatric dental residents leave residency with a “dry lab” experience and readings regarding common clinical encounters yet are not prepared to clinically activate change effectively .

- Limitations:
- Low response rate

## References

1. Rawlings W, Taylor P, Sherling M. Survey of orthodontic training offered by graduate pedodontics programs. J Dent Child 1977;44(6)463-7.
2. Hilgers KK, Redford-Badwal D, Reisine S, Mathieu GP. Orthodontic Training in Pediatric Dental Residencies. J Dent Educ. 2003;67(6)614-21.
3. Thayer JJ, Park JJ, Duong M-LT, Park JH. The current status of orthodontic education in U. S. pediatric dental residencies. J Dent Educ. 2020; 84:1334-1340.

## Acknowledgements

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