



## INTRODUCTION

The Hall Technique (HT) is a minimally invasive approach involving placement of a preformed metal crown over carious primary molars without caries removal or tooth preparation. Since its introduction by [Norah Hall](#) in 2006, evidence has demonstrated clinical outcomes comparable to or exceeding traditional restorative methods.

Despite this, HT remains underutilized. Barriers include limited training exposure, reliance on conventional treatment approaches, and concerns related to occlusal management. Adoption also varies by geographic region, likely reflecting differences in training and clinical practice patterns.

Understanding how training and regional factors influence HT adoption is essential to support standardized education and broader implementation in pediatric dental practice.

## OBJECTIVE

This study aimed to evaluate the influence of formal training on Hall Technique utilization among pediatric dentists. It also assessed the relationship between training and provider confidence, examined regional differences in adoption, and identified perceived barriers and facilitators to clinical use.

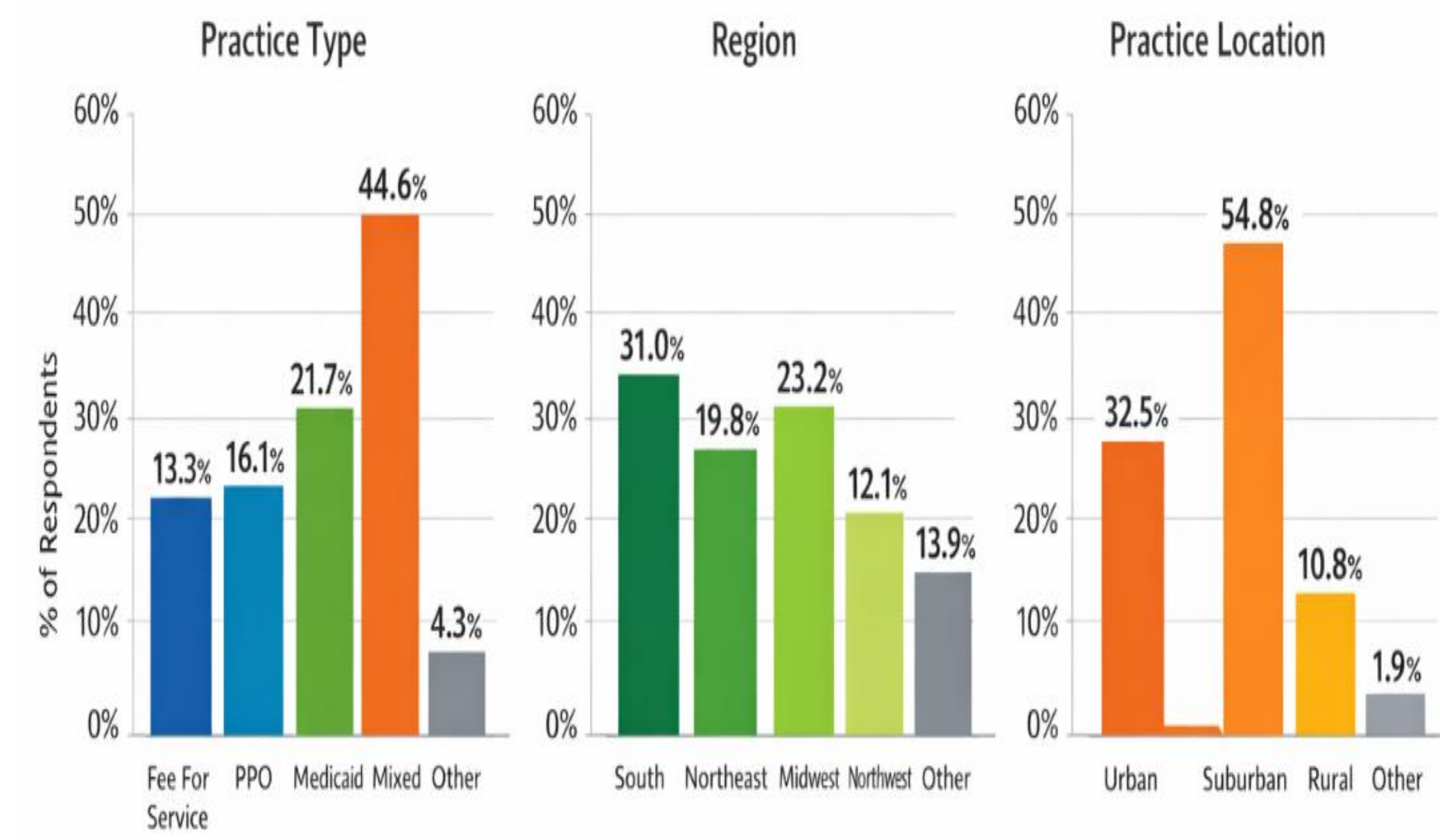
## METHODS

This study received IRB exemption (Protocol ID: #9842) from Louisiana State University Health Sciences Center in New Orleans, Louisiana. A 20-question survey was developed to assess pediatric dentists' use of the Hall Technique, including perceived effectiveness, patient and parent acceptance, training background, and clinical barriers. The survey consisted of multiple-choice, Likert-scale, and open-ended questions and was reviewed and approved by the American Academy of Pediatric Dentistry Council on Scientific Affairs prior to distribution.

The survey was distributed via email to active AAPD members (n = 8,755), with 323 emails identified as undeliverable. Eligible participants included licensed pediatric dentists practicing in the United States who were able to respond in English and willing to participate. Non-U.S. dentists, non-pediatric dentists, and incomplete or duplicate responses were excluded. Participation was voluntary and anonymous, and a reminder email was sent three weeks after the initial distribution.

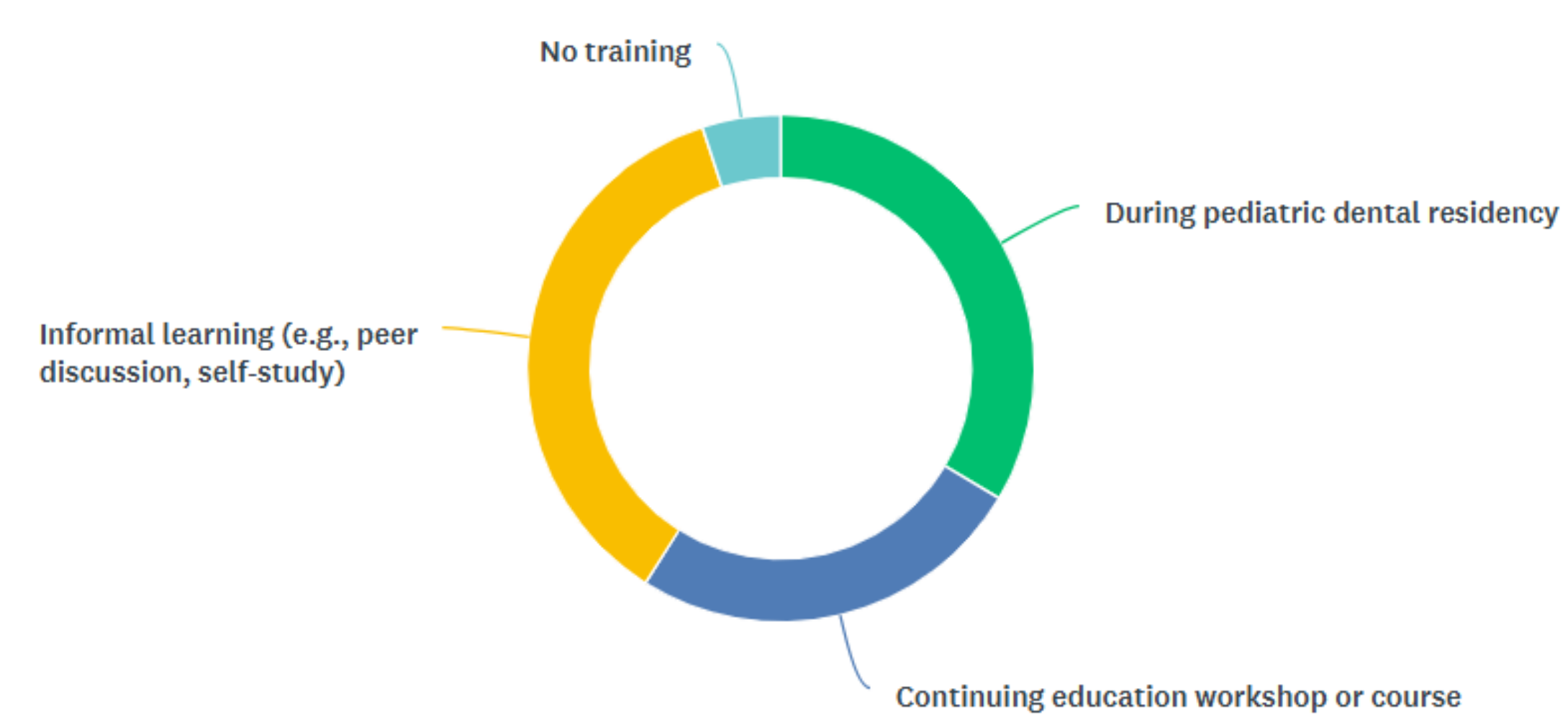
Survey responses were summarized using descriptive statistics, including counts and percentages for categorical variables and means with standard deviations for continuous variables. Likert-scale responses were recategorized into broader groups. Associations between training type, Hall Technique use frequency, geographic region, and other variables were analyzed using chi-square tests, t-tests, and analysis of variance. Multivariable regression modeling was used to identify predictors of Hall Technique usage, while qualitative responses were analyzed thematically. Statistical significance was set at  $p < 0.05$ .

Figure 1. Practice Demographics



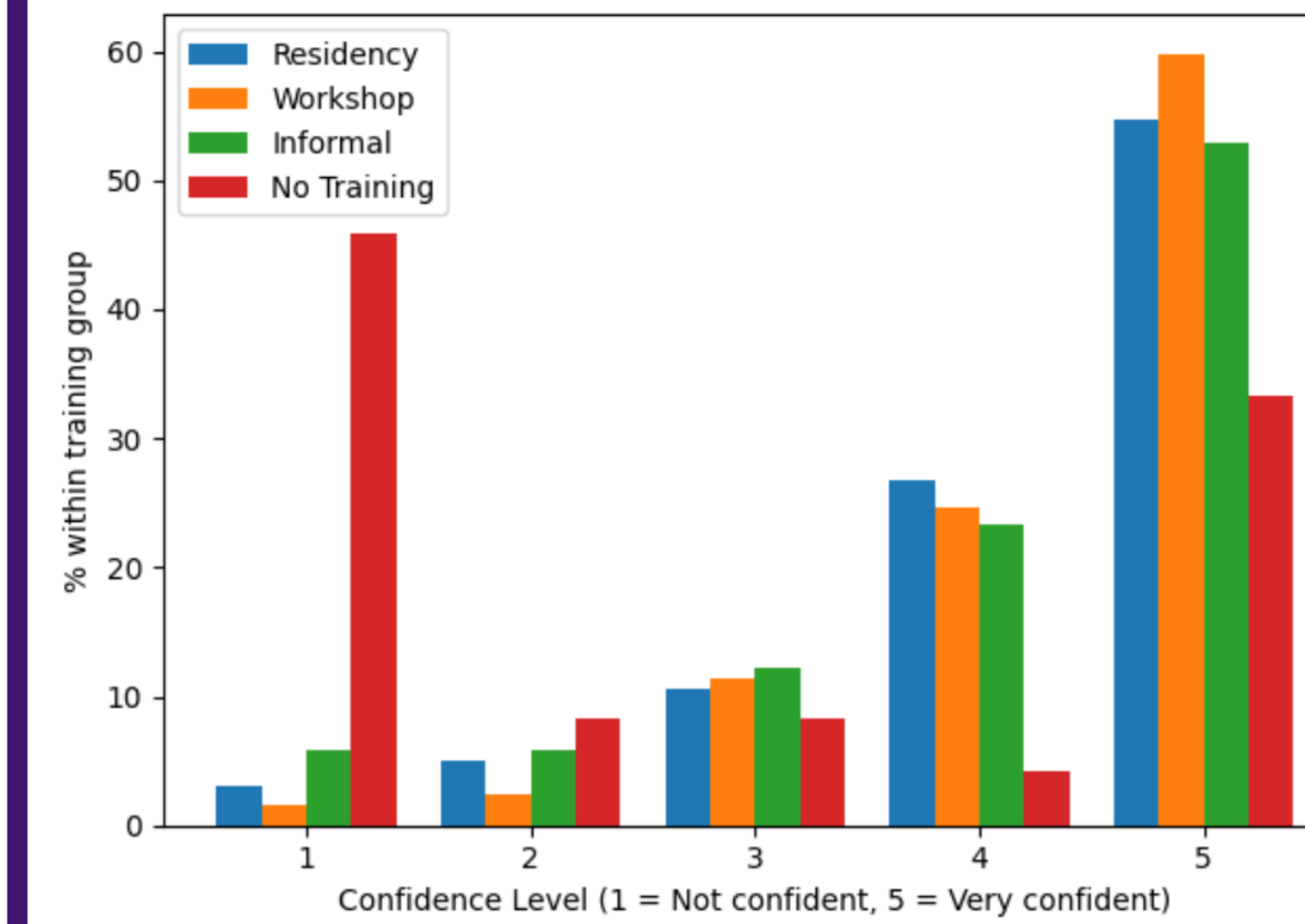
Distribution of respondents by practice type, location, and geographic region.

Figure 2. Hall Technique Training Received



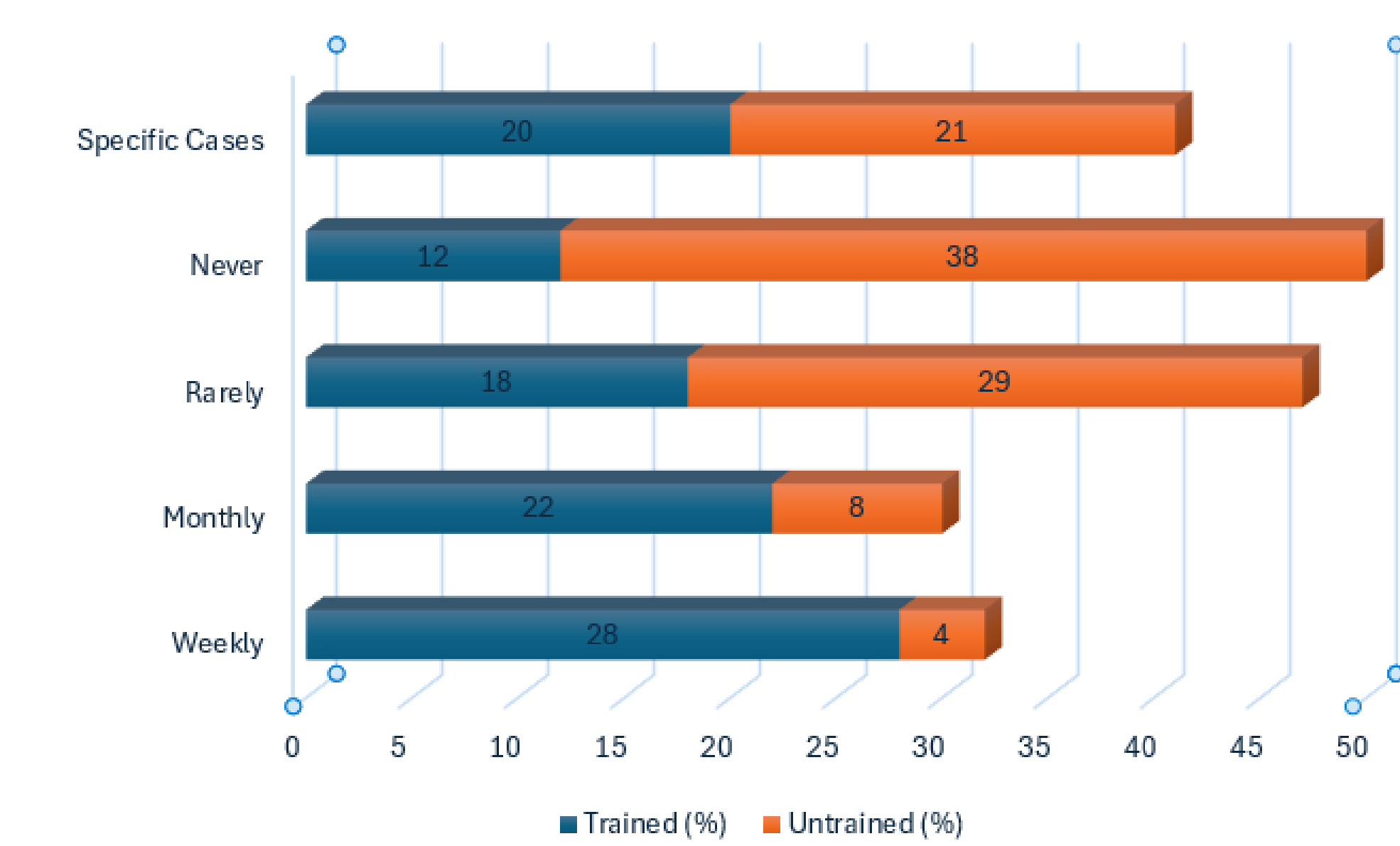
Distribution of formal, informal, and no training in the Hall Technique among respondents.

Figure 3. Confidence by Training Type



Provider confidence in using the Hall Technique stratified by training exposure.

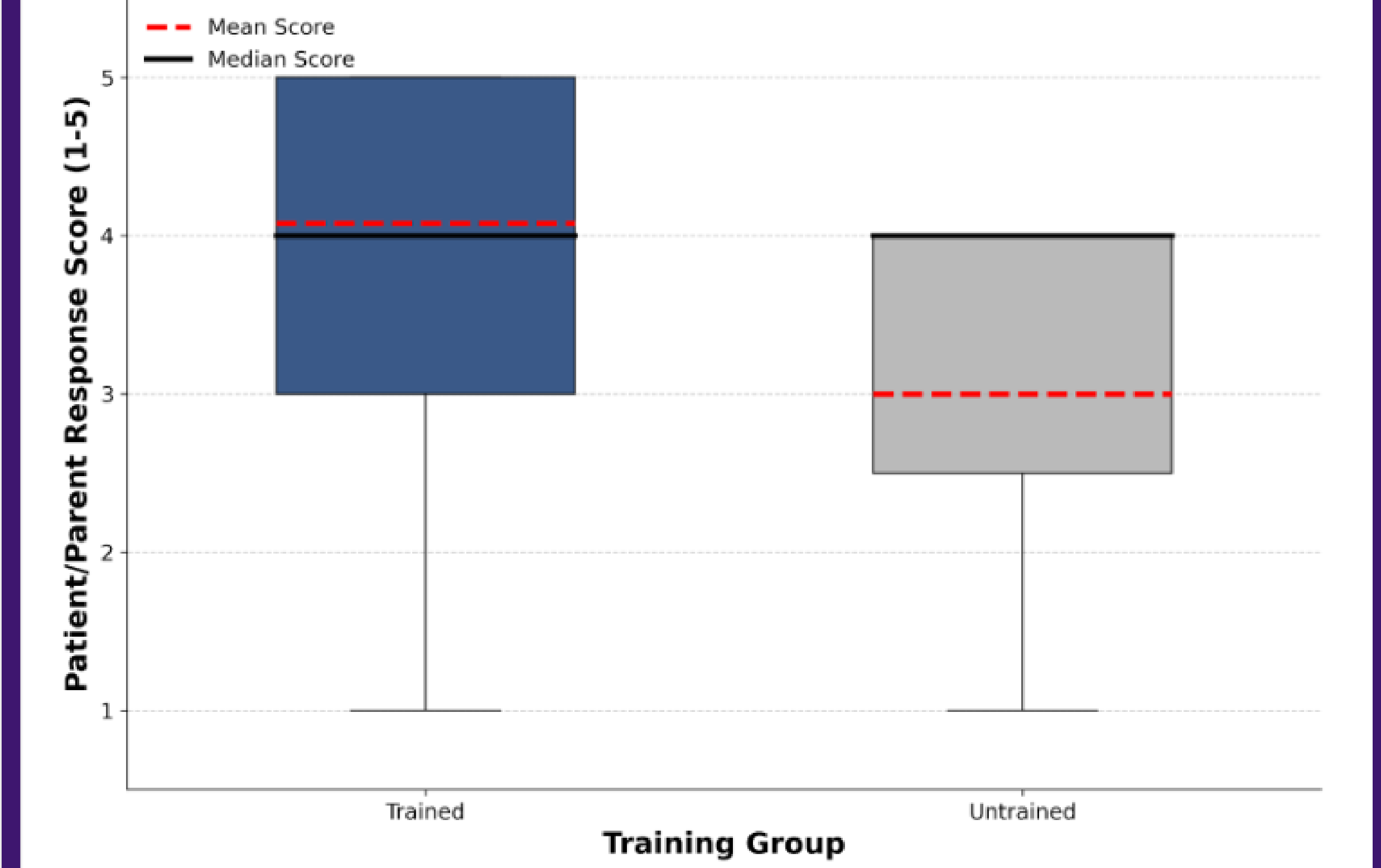
Figure 4. Use of Hall Technique by Confidence Level



Frequency of Hall Technique use by provider confidence level.

## RESULTS

Figure 5. Patient and Parent Response to Hall Crowns



Patient and parent responses to Hall crown treatment by provider training exposure.

## KEY FINDINGS

Training was associated with increased Hall Technique use ( $p = 0.025$ ) and more positive patient responses ( $p = 0.009$ ). Higher provider confidence was linked to greater utilization, while dentists in the Northeast were less likely to use the technique ( $p \approx 0.049$ ).

## CONCLUSIONS

Training is significantly associated with increased use of the Hall Technique and more positive patient and parent responses. Providers who received formal or informal training were more likely to incorporate the technique into practice and demonstrated greater clinical confidence in its use.

Geographic variation in adoption was also observed, with dentists practicing in the Northeast less likely to utilize the Hall Technique compared to the reference region, while other regions showed no significant differences. These findings suggest that regional differences may reflect variability in training availability, clinical exposure, or local practice patterns.

Overall, training appears to be a primary driver of Hall Technique adoption and patient acceptance. Expanding standardized training opportunities and increasing exposure during residency and continuing education may improve provider confidence and support more consistent implementation across clinical settings.