

Parental Acceptance of Advanced Behavioral Management Techniques on Children in Pediatric Dentistry

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Objective

The purpose of this study is to compare the current parental acceptance on advanced behavior management techniques in the U.S. pediatric dental school setting and assess which driving factors are most involved in their decision-making.

Introduction

- Contemporary pediatric dentistry transitioned into a patient-centered approach with shared decision-making and increased parental presence and involvement^{1,3}
- Not all children allow conventional or chairside dentistry due to age, maturity, special health care needs (SHCN), and/or medical diagnoses
- Advanced behavior guidance, or advanced behavior management techniques (ABMT),** are indicated for the delivery of their dental care ABMT includes the following:
 - Protective stabilization** utilizes a person or device to actively restrict movements
 - Moderate sedation** involves medications to achieve a level of somnolence (drowsiness)
 - General anesthesia** is when the child is “put under” or “goes to sleep” for procedures
- Utilizing ABMT require informed consent and therefore parental acceptability¹
- Variance in parental acceptability has trended over time with recent studies suggesting a shift towards *less restraint* and *more pharmacological management*¹⁻³ with greater acceptability in urgent or emergency care³
- Several factors may influence parental acceptability on ABMT

Methods

Inclusion: Parent/guardians whose child attends the VCU Pediatric Dental Clinic
Survey: Electronic/paper | Accessible QR code | Likert scale | Multiple choice | Open-ended | Yes or No

Included questions: Parental demographics, socioeconomic factors, children with medical health conditions or SHCN, previous experience, type of dental treatment: exams (routine/diagnostic), restoratives (fillings/crowns), emergency (extractions)

Presented ABMT: In short, brief descriptions

Two-way repeated measures ANOVA: Treatment type (exam, restorative, emergency) and ABMT (protective stabilization, sedation, general anesthesia)

Post hoc pairwise comparisons with Tukey's adjustment for multiple comparisons | Significance level was set at 0.05 | SAS EG v.8.3 (SAS Institute, Cary, NC) was used for all analyses

Results

Table 1: Respondent Demographics

Respondent	n	%
Mother	61	82%
Father	11	15%
Legal guardian	2	3%
Race/Ethnicity		
African American or Black	32	43%
Asian	2	3%
Caucasian or White	26	35%
Hispanic	14	19%
Other	3	4%
Education		
Less than high school degree	6	8%
High school degree	33	45%
Master's degree	12	16%
Bachelor's degree	16	22%
Post-bachelor's degree or higher	7	9%
Age		
18-25	1	1%
26-33	16	22%
34-41	35	48%
42-49	16	22%
50+	5	7%
Insurance		
Private insurance	25	34%
Government/Medicaid	49	66%
Number of Children		
1	10	14%
2	28	38%
3	23	31%
4	9	12%
5	4	5%
Child with Special Healthcare needs or accommodations		
No	60	82%
Yes	13	18%
Distance to the Dentist		
Within 30 Minutes	27	36%
30+ Minutes	47	64%
Is child in pain today		
Yes	2	3%
No	72	97%

Figure 1: Acceptability of Advanced Behavior Management Techniques by Appointment Type

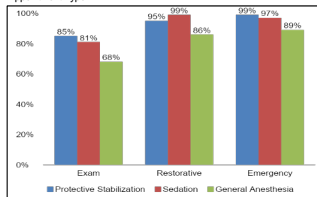


Figure 2: Average Acceptability Rating for Advanced Behavior Management Techniques by Visit Type and Technique

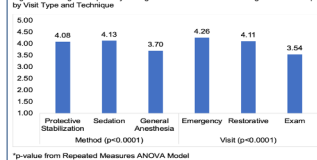


Figure 3: Average Influence on the Acceptability of Advanced Behavior Management Techniques

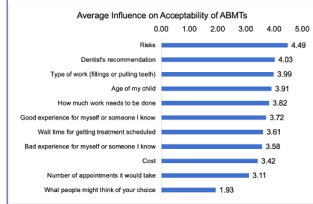


Table 1:

- Total of 74 participants
- Majority of participants were mothers (82%) and did *not* have children with SHCN (82%)
- Most children did *not* arrive with pain (97%)

Figures 1 and 2. ABMT showed overall high acceptability (68% to 99%) with observed significance between type of dental treatment and ABMT:

- Less* acceptance of ABMT for *exams*
- General anesthesia* was *less* acceptable than protective stabilization and sedation

Risks were most important in parental acceptability of ABMT, while *others' perception/judgement* was least important to parents (**Figure 3**).

Discussion

Unlike previous studies that compare basic and advanced behavior guidance, this study focused specifically on advanced behavior management techniques commonly used for necessary dental care²

- The findings did *not* support increased parental preference for pharmacological management over restraint, but did reflect a greater acceptability in necessary dental treatment³
- Parents reported perceived *risk* as the most important factor influencing their decision, which aligns with earlier studies of marked variability and parental fears among acceptance of pharmacological management¹

Given the small sample size and dental school setting, these results provide only a snapshot of parental attitudes and cannot be generalized to the broader U.S. population

Conclusion

The study suggests that there is an **overall high parental acceptance in ABMT**, but the type of dental treatment indicated and the treatment modality type matters:

- ABMTs were more acceptable in cases of a restorative or emergency appointment, suggesting an *increased acceptability with increased necessity or urgency of care*
- General anesthesia was less acceptable** compared to protective stabilization and sedation

Parents value the *risks* and the *dentist's recommendations* for ABMT, therefore understanding these factors can allow for a more tailored treatment plan that aligns with the family's values

Future studies could include larger, more diverse samples, private dental offices, and inclusivity of non-English-speaking families

References

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- Eaton JJ, McTigue DJ, Fields HW Jr, Beck M. Attitudes of contemporary parents towards behavior management techniques used in pediatric dentistry. *Pediatr Dent.* 2005;27(2):107-113.
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ABBREVIATIONS
 SHCN: special health care needs. ABMT: advanced behavior management techniques. SAS: Statistical Analysis System (software).