

# Parental Temperament/Character and Approval of Aversive Behavior Guidance Techniques

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### Introduction

Behavior guidance techniques (BGTs) are integral to pediatric dentistry as they shape the outcome of a patient's dental experience. Over the course of generations, shifts in the modern parent's attitudes, opinions, and parenting styles have been observed. As such, parental preferences of behavior guidance techniques have also changed over time, with protective stabilization being the least acceptable technique.<sup>3</sup> Various factors have been found to increase parental acceptance of BGTs such as urgency, convenience, and previous experience.<sup>4</sup>

Child behavior in a dental chair is product of individual characteristics as well as environmental factors, namely parenting styles and temperament. Parental temperament has been linked to child externalizing, internalizing, and attention problems. Temperament makes up one component of an individual's personality, with character being the second. While temperament has been widely studied in pediatric dental literature to predict child behaviors as well as parental influence on child behavior, character is a construct of personality that has not been so widely investigated. Temperament is defined by the strength of the drive underlying an individual's basic emotions and is established early on in life, while character is defined by an individual's goals and values and develops as individuals grow in their higher cognitive processes. It has been found that character traits are better predictors of the quality of parenting than temperament and that child internalizing and externalizing problems are also linked to parental character. The Temperament and Character Inventory, or TCI has proven to be a reliable measure of assessing such personality traits.

**Hypothesis:** Parents who score high in harm avoidance and self-transcendence or low in self-directedness are more likely to be disapproving of aversive behavior guidance techniques such as protective stabilization and voice control.

The purpose of this study was to identify associations between parental temperament/character and preferences for BGTs.

## Materials & Methods

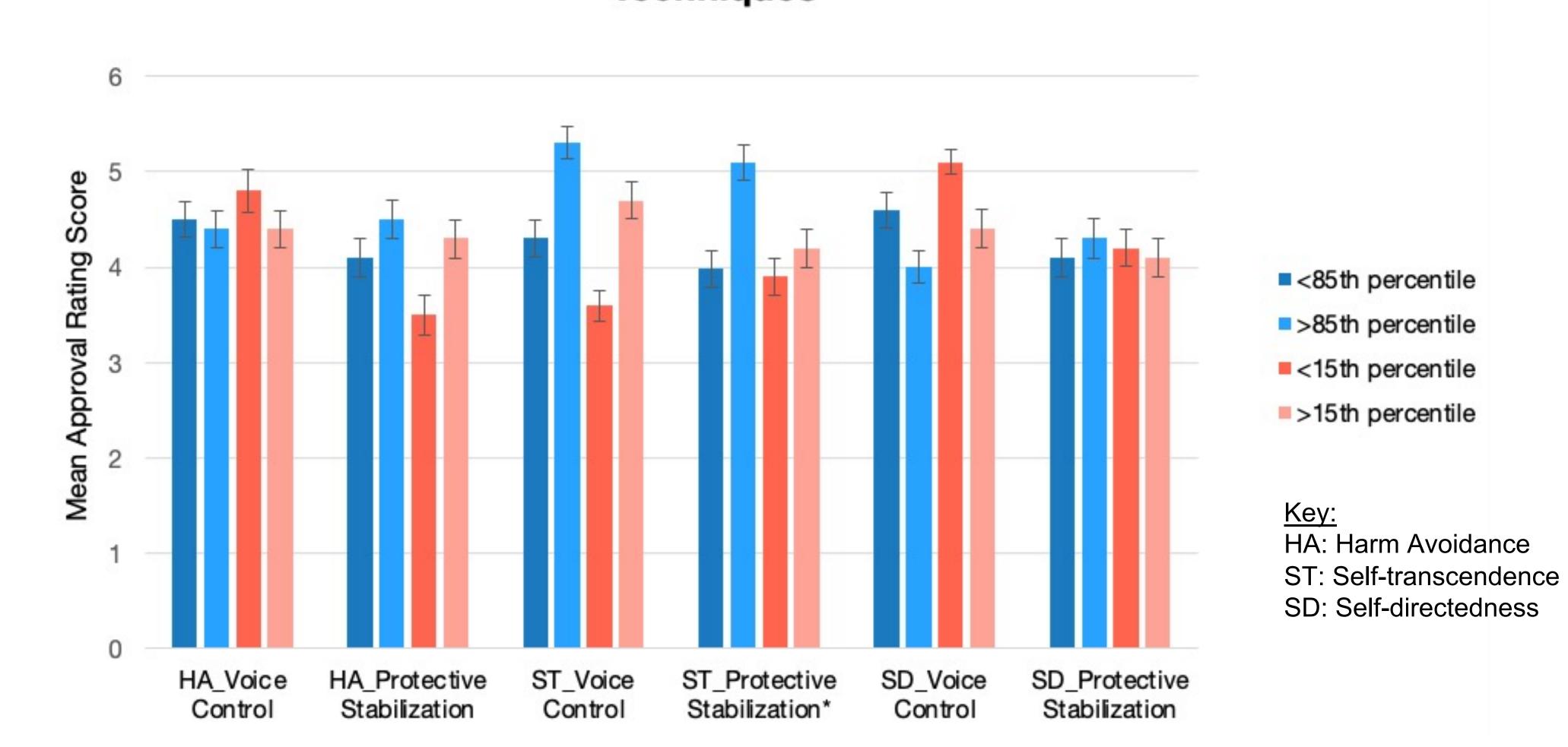
- Recruited participants were English- or Spanish- speaking parents of patients of record from UCLA School of Dentistry affiliated clinics
- Inclusion criteria: child's age (3-8 years of age) and medical history (ASA I)
- Participants completed a questionnaire recording demographics, approval ratings of different behavior guidance techniques, and a validated temperament and character inventory (TCI-R)
- Participants were divided into 2 groups for each of the 3 studied temperament and character profiles from TCI-R (Harm Avoidance, Self-transcendence, and Self- Directedness): 1) high (>85<sup>th</sup> percentile) and 2) low (<15<sup>th</sup> percentile).
- Participant approval ratings for aversive behavior guidance techniques (protective stabilization and voice control) were compared using a 2-sided 2-sample unequal variance t-test.
- Subjects were recruited during the following appointments: new patient exam, recall, restorative with and without nitrous, moderate sedation, and general anesthesia. A \$10 gift card upon completion of the questionnaire.
- The UCLA REDCap database was used for data entry. This study was approved for research using human subjects by the Institutional Review Board of UCLA (IRB#19-001402-AM-00002).

#### Results

Demographic Information					
Gender	18% Males	82% Females			
Ethnicity	33% Non-Hispanic	67% Hispanic			
<b>Education Level</b>	36% College degree or more	64% High school degree or less			

Figure 1. Demographic information regarding gender, ethnicity, and education level of parent subjects (n=105).

# Mean Approval Ratings of Aversive Behavior Guidance Techniques



**Figure 2.** Comparison of mean approval rating score of aversive behavior guidance techniques between subjects in the >85<sup>th</sup> percentile and <85th percentile as well as >15<sup>th</sup> percentile and <15<sup>th</sup> percentile for harm avoidance, self-transcendence, and self-directedness.

**Table 1.** P-values formulated for all groups using two-sided two-sample unequal variance t-tests.

	Protective Stabilization		Voice Control	
	> 85 <sup>th</sup> percentile vs. < 85 <sup>th</sup> percentile	> 15 <sup>th</sup> percentile vs. < 15th percentile	> 85 <sup>th</sup> percentile vs. < 85 <sup>th</sup> percentile	> 15 <sup>th</sup> percentile vs. < 15th percentile
Harm Avoidance	0.41	0.17	0.75	0.57
Self-Directedness	0.76	0.94	0.26	0.16
Self-Transcendence	0.047	0.56	0.066	0.038

Correlation Coefficient (r)						
	Protective Stabilization	Voice Control				
<b>Novelty Seeking</b>	0.048	0.127				
<b>Reward Dependence</b>	0.049	0.180				
Persistence	-0.143	0.189				
Harm Avoidance	0.125	-0.069				
Self-Directedness	-0.123	-0.052				
Self-Transcendence	0.168	0.156				
Cooperativeness	-0.077	0.063				

**Table 2.** Correlation between temperament and character profiles with aversive behavior guidance techniques was determined using Pearson's correlation coefficient test. No significant correlation was observed between any of the groups.

### Conclusion

- Parental temperament and character profiles showed weak correlation with parental approval ratings of protective stabilization and voice control.
- Parents who scored low in the self-transcendence profile were significantly more disapproving of voice control.
- Parents who scored high in the self- transcendence profile were significantly more approving of protective stabilization.
- Parental temperament and character may have a role in predicting parental acceptance of BGTs, but further studies are needed to support.

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#### References

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