



# Assessing Child Temperament as a Predictor of Sedation Outcomes

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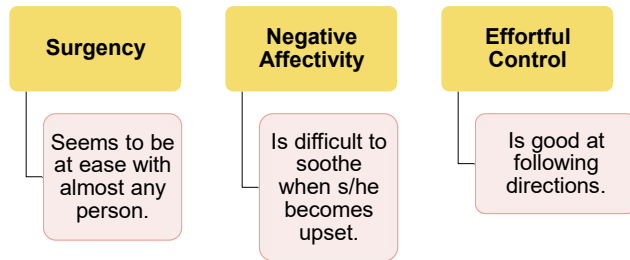
## Purpose

- To investigate if there is an association between a child's temperament and oral sedation outcomes.
- The null hypothesis is there is no relationship between a parent/guardian's perception of their child's temperament on the Child Behavior Questionnaire Very Short Form (CBQ-VSF) and the sedation outcome.

## Materials and Methods

- Cross-sectional/descriptive study conducted over 3 months in the Pediatric Dentistry Postgraduate clinic.
- Institutional Review Board approval obtained
- Parents/guardians of patients ages 36 to 95 months completed a validated questionnaire to evaluate their child's temperament based on the "big 3 determinants."

Figure 1. Item-by-Scale Examples from CBQ-VSF



- Sedation outcomes were determined using the AAPD sedation record form for sedation level, behavior/responsiveness to treatment, and overall effectiveness.
- Sedations were deemed successful if behavior was graded as fair, good, or excellent, and if overall effectiveness was effective or very effective.

Table 1. Description of Their Child's Reactions to Given Situations

Circle #	If the statement is:
1	Extremely untrue of your child
2	Quite untrue of your child
3	Slightly untrue of your child
4	Neither true nor false of your child
5	Slightly true of your child
6	Quite true of your child
7	Extremely true of your child
NA	Never seen child in given situation

- A t-test was used to analyze the continuous data and Fisher exact test to analyze categorical data;  $p$ -value – 0.05.

## Results

- 25 pediatric patients
- Age – 36-95 months, Average: 75.4 months
- Sex – Boys: 15, Girls: 10
- Language – English: 7, Spanish: 18
- Insurance – Medicaid/CHIP: 8, Private: 1, Uninsured: 16

- ❖ No statistical significance was found for any of the demographic variables and sedation outcome.

Table 2. Temperament Scores of Study Participants by Oral Sedation Success Rate

Temperament scales	Overall mean $\pm$ (SD)	Overall sedation outcome		
		Success mean $\pm$ (SD)	Failure mean $\pm$ (SD)	P-value
Surgency	4.59 $\pm$ 0.80	4.62 $\pm$ 0.91	4.53 $\pm$ 0.62	0.80
Negative Affectivity	4.60 $\pm$ 0.87	4.56 $\pm$ 0.94	4.67 $\pm$ 0.79	0.75
Effortful Control	5.59 $\pm$ 0.66	5.52 $\pm$ 0.70	5.71 $\pm$ 0.60	0.51

## Conclusion

- The overall sedation success rate in this study was 64 percent (N = 16).
- Sedation success rate was not significantly associated with differences in age, sex, language, or type of insurance which is consistent with Lane et al. (2015) except language which was not assessed.
- The temperament scales for surgency, negative affectivity, and effortful control on the Children's Behavior Questionnaire Very Short Form (CBQ-VSF) were not significantly associated with the sedation outcome.
- The small sample size affected the significance of the results; a larger sample may more accurately represent the population value.
- Based on this study's findings, having parent/guardians complete the CBQ-VSF would neither help dentists predict sedation outcomes nor aid in screening for oral sedation candidates.

## References

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