



BACKGROUND & OBJECTIVES

- Pacifier and digit sucking, collectively referred to as non-nutritive sucking (NNS) habits, are among the most prevalent oral habits in early childhood.
- The AAPD recommends cessation by 36 months to prevent malocclusion, speech delay, and impaired orofacial development.
- NNS use beyond 12 months increases risk of acute otitis media.
- Parental knowledge of long-term orofacial consequences remains under characterized across diverse populations.
- Parents commonly underestimate developmental risks — targeted provider counseling is needed.

OBJECTIVE: Characterize parental NNS knowledge and its correlates in a diverse, urban pediatric dental population.

METHODS

Design	Cross-sectional, anonymous survey distributed during routine dental appointments
Setting	Urban pediatric dental practice (Children's Dental Specialists of Hazel Park, MI)
Sample	N=96 parents/guardians with children aged 36 months–6 years (Jan 15–Mar 30, 2026)
Inclusion	Prior or current pacifier/NNS use; first-time and multiparous caregivers included
Exclusion	Parents of children with special health care needs, oral clefts, or sensory processing disorders
Instrument	Anonymous paper survey assessed NNS awareness, habit history, guideline knowledge, demographic characteristics
Analysis	Descriptive statistics; independent t-tests; ANOVA; Pearson/Spearman correlations ($\alpha=0.05$)

RESULTS

Table 1. Participant Demographics (N=96)

Variable	N	%
Child Age (yrs; mean±SD)	4.4 ± 1.2	—
Child Gender: Male	48	50.0
Race: Black	39	40.6
White	26	27.1
Mixed / Other	14	14.6
Education: High School / GED	31	32.3
Some College	36	37.5
College Grad. +	20	20.8
Employment: Full-time	54	56.3
Primary Caretaker	91	94.8

Table 2. NNS Behavior Summary

Variable	Pacifier	Digit
Ever Used (%)	60.4	15.6
Age Stopped (months; mean±SD)	11.4 ± 8.8	10.8 ± 7.9
Stopped ≤36 Months (%)	98.2	100
Primary Reason: Soothing	85.6	96.5
Cessation: Self-stopped (%)	45.9	33.3

Table 3. Knowledge Scores by Demographic Characteristics

Variable	Pac. Score	Digit Score	Total Score
Education: ≤HS vs. >College	2.5 vs. 2.5	2.1 vs. 2.3	4.4 vs. 4.5
Employment: Full vs. Part	2.4 vs. 2.5	2.5 vs. 2.2	4.2 vs. 4.9
Child Age: <4 vs. ≥4 yrs	2.5 vs. 2.4	2.3 vs. 2.1	4.5 vs. 4.5
Child Gender: M vs. F	2.4 vs. 2.5	2.3 vs. 2.1	4.6 vs. 4.4
Pacifier Use: Yes vs. No*	2.6 vs. 2.3	2.4 vs. 1.9	4.8 vs. 4.0*

*Total knowledge = Pacifier + Digit knowledge score; Parents of a child with a pacifier history had significantly higher total knowledge scores ($p=.04$). All other comparisons non-significant ($p>.05$).

RESULTS (CONTINUED)

89.4%

Aware Pacifier Is Harmful

89.8%

Aware Digit Habit Is Harmful

94–98%

Knew AAPD 36-Mo Guideline

- Average age of participants' children was 4 years, half were male, and most were Black. Most caregivers had some college education, worked full-time, and were the primary caretaker.
- 60% of patients had used a pacifier and 16% had history of finger sucking habit, mostly for soothing and almost all had stopped by 36 months.
- Parent awareness of general NNS harms was high (~89%), and 94-98% knew the AAPD-recommended cessation age of 36 months.
- Knowledge scores did not significantly differ by caregiver education, employment, child age/gender, race, or breastfeeding duration - gaps are broadly distributed across all socio demographic groups.

LIMITATIONS & STRENGTHS

- Limitations: small sample size → limited statistical power; study performed in one clinic may limit generalizability.
- Strengths: Study characterizes parental knowledge about NNS in a diverse, urban population.

CONCLUSIONS & CLINICAL IMPLICATIONS

Pediatric dental providers and pediatricians should deliver structured NNS anticipatory guidance that goes beyond general harm awareness to address specific orofacial sequelae — particularly airway/palatal effects. Integration of targeted counseling at routine well-child visits can potentially close knowledge gaps.

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