

# A Consumer, Scientific, and Behavioral Evaluation of Children's Picture Book Literature About Going to the Dentist

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#### INTRODUCTION

- Dental visits beginning in infancy allow early detection and prevention of oral disease and improve oral and general health<sup>1</sup>
- Children's books about going to the doctor are used for entertainment and to help prepare children for appointment<sup>2</sup>
- Unknown is how children's books about going to the dentist can serve as a medium for teaching and behavioral modification

### **PURPOSE**

- To describe and assess characteristics and content of the most-rated *going to the dentist* children's books
- To assess differences in characteristics and content between books written by healthcare professionals and non-healthcare professionals

#### **METHODS**

#### **Book Identification**

Obtained a convenience sample from *Amazon.com* using search terms:

- "first dental visit book"
- "kids dentist visit book"
- "going to the dentist book for kids"
- "kids dentist visit book"

Spanish Availability

#### **Book Selection**

Removed duplicates & books that did not meet inclusion criteria of:

(a) a children's picture book(b) portraying a dental visit(c) written in English

Final list consisted of 94 books (n=94)

#### **Content Analysis**

3 analytic domains: book characteristics, scientific information, and behavioral content

Coding manual used a dichotomous scale (Yes/No)

Descriptive & correlational analysis

Table 1: Subdomain Descriptors	
Subdomain Title	Brief Explanation
Consumer	
Accessibility	language (English vs. Spanish)
Publishing Type	independent vs. publishing company
Purpose of Book	routine check-up vs. therapeutic (filling, extraction)
Scientific*	
Diagnostic	exam, x-rays, risk assessment
Preventative	cleaning, fluoride application
Therapeutic	restoration, extraction
Educational	nutrition, OHI, anticipatory guidance
Behavioral*	
Positive Modeling	child excitement, cooperation, compliance
Negative Modeling	uncooperative, disobedient, poor oral hygiene
Positive Portrayal	friendly dentist and staff, fun waiting room
Negative Portrayal	shaming, inflicting pain, unfriendly characters
Positive Reinforcement	high fives, verbal praise, prizes
Euphemisms	ex "sugarbugs" instead of "cavities"
Anxiety-Producing Words	ex "shot," "hurt," or "pain"
*Per AAPD Guidelines	

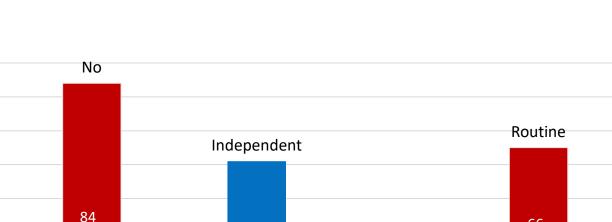
**Table 2: Domains Assessed By Book Authorship** 

**Total No.** 

**Book Author** 

P-value

#### RESULTS



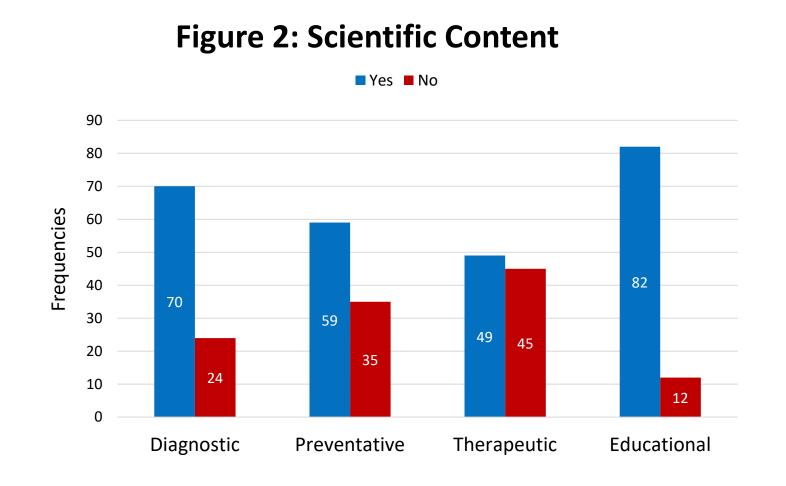
Company

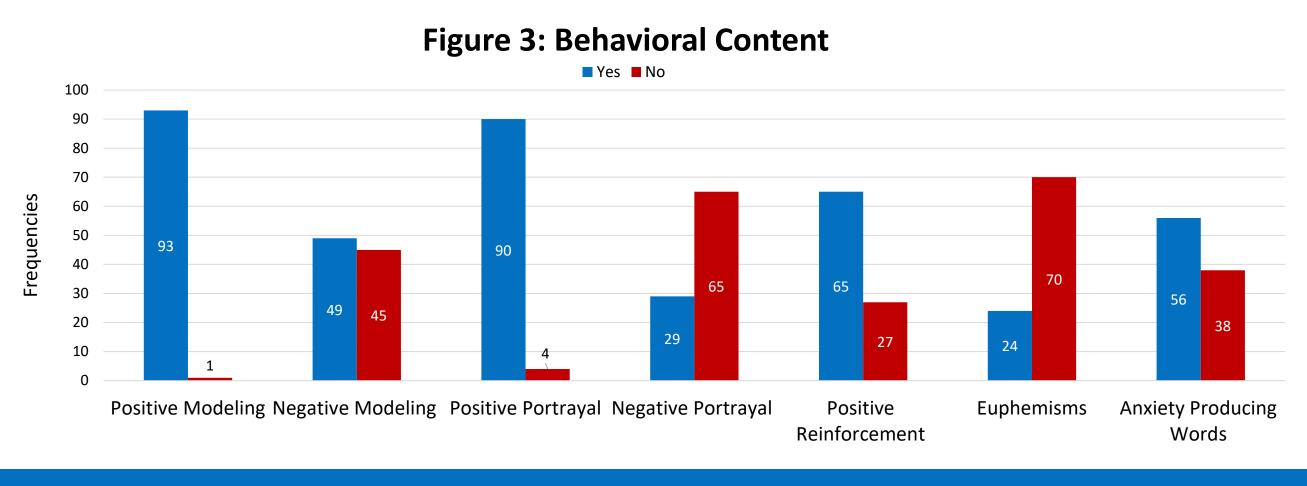
Publishing Type

Therapeutic

Purpose

**Figure 1: Book Characteristics** 





## DISCUSSION

Authors with a healthcare background were more likely to author books available in both English and Spanish, and to publish independently. There was no significant difference between groups in the purpose of the book. Authors with a healthcare background were more likely to include educational (oral health information, nutrition, anticipatory guidance) and behavioral components (dental euphemisms) in their children's literature. Authors with a healthcare background also included more elements of diagnosis and prevention, as well as anxiety-producing words, though these results were not significant. With a more equivalent sample size of books written by healthcare professionals and non-healthcare professionals, it is likely that these findings would have been significant.

While books written by healthcare professionals tend to have more accurate information, they are not the most accessible or available to consumers. This points to a need for more educated professionals to contribute to children's dental literature either through direct authorship or contributing their expertise.

A future direction for this study includes examining the representation of women doctors in children's dental books. Books with medical-related content consistently portray a gender imbalance that can influence children to believe in a false reality.<sup>3</sup>

#### Non-Healthcare **Books (n=94)** Healthcare Professionals (n=74) Professionals (n=20) **Book Characteristics Available in Spanish** 0.033\* Yes 10 15 **Publishing Type** 33 0.001\* Company Independent **Purpose** 0.305 Routine Therapeutic **Scientific Content Mentions Diagnostics** 0.600 70 55 15 Yes 19 24 **Mentions Prevention** 0.451 59 14 29 **Mentions Therapeutic** 0.026\* 49 43 6 45 31 14 **Mentions Education** 20 82 62 0.046\* Yes 12 12 No **Behavioral Content Anxiety** 47 0.134 56 11 **Dental Euphemisms** 0.000\* 12 **12** 24 Yes 62 No **Positive Reinforcement** 0.237 Yes 65 53 12 19 **Positive Portrayal** 0.377 90 20 70 **Negative Portrayal** 0.018\* 27 29 18 **Posative Modeling** 20 0.787 Yes 93 73 No **Negative Modeling** 0.472 49 40

#### CONCLUSION

Overall, the content of children's books about going to dentist vary according to the author's professional background. Books written by healthcare professional providers provide the most accurate and *positive* information about dental visits and oral homecare. Caregivers, educators, and healthcare professionals should pay attention to the content of children's book which should contain accurate and engaging information about oral health and positive portrayals of dental visits.

#### REFERENCES

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- 2. Duijster D, de Jong-Lenters M, Verrips E, van Loveren C. Establishing oral health promoting behaviours in children parents' views on barriers, facilitators and professional support: a qualitative study. BMC Oral Health. 2015 Dec 10;15:157.

No

\*Statistically Significant

45

3. Rao H, Smith H. The representation of women doctors in children's picture books. J R Soc Med. 2014 Dec;107(12):480-2.