

Background

- The American Academy of Pediatric Dentistry recommends establishing a child’s dental home by 12 months of age¹.
- This first dental visit establishes a dental home and provides a foundation upon which a lifetime of dental education, prevention and oral health care can be built¹.
- Previous studies have shown a relationship between parents and their children’s dental fear and anxiety but have not explored if it affects when a child’s first visit is conducted³.
The purpose of this study is to explore whether parental dental fear and anxiety resulted in a delay of their child’s first dental appointment.

Methods

Study population:

- Parents who visited the Franciscan Children’s pediatric dental clinic with their children ages 6 and under between the dates of June 2023 and January 2025 were invited to participate in a voluntary and anonymous cross-sectional survey.

Data collection and analysis:

- The survey consisted of 23 questions and was available only in English
- A total of 143 surveys were completed and included in the study.
- The survey utilized 5 questions from the Modified Dental Anxiety Scale (MDAS)⁵. Each question is scored from 1 to 5, for a total score range of 5 to 25. Scores of 14 and under indicate minimally dentally anxious and scores 15 and above indicate moderately to highly dentally anxious.
- Additional questions recorded parent’s demographics, when their child’s first dental appointment took place, what the appointment was for, if they encountered any difficulties for their first dental appointment, and if the child was anxious for their first dental appointment
- Statistical analysis was performed using Microsoft Excel. Significance testing was assessed using a two-sample t-test and Fisher’s Exact Test

Results

- Of the 143 parents who participated in the study, the mean Modified Dental Anxiety Scale (MDAS) score was 9.69 (minimally dentally anxious) with a standard deviation of 4.79
- There was no significant difference between the two groups in the age at which children of minimally anxious and moderately anxious parents had their first dental visit.
- 79% of children with minimally anxious parents had their first dental visit for reasons unrelated to pain or caries. Fisher's exact test indicated no significant association between the timing of a child's first dental visit and parental anxiety levels.
- A Fisher's exact test examining the relationship between the delay in a child's first dental visit and parental anxiety revealed a significant association. Parents in the moderate-to-high anxiety group were more likely to report delaying their child's first dental visit due to their own anxiety (P<0.005)
- Fisher's exact test revealed no significant association between moderate-to-high parental anxiety and affirmatively responding to the question: 'Did you delay your child's first dental visit due to his or her dental fear?'

Table 1. Demographic Characteristics of Sample

Parent gender	n	%
female	48	33.57%
male	95	66.43%
unknown	0	
Parent age	n	%
19 and under	9	6.29%
20-30	34	23.78%
31-40	63	44.06%
41-50	33	23.08%
older than 50	3	2.10%
Parent race	n	%
American Indian/Alaskan Native	1	0.70%
Black or African American	39	27.27%
Asian	22	15.38%
Native Hawaiiin/Pacific Islander	0	0.00%
White	41	28.67%
Other	39	27.27%
Parent Ethnicity	n	%
Hispanic	43	30.07%
Non-Hispanic	94	65.73%
Did not respond	5	3.50%
Recent Immigrant	n	%
Yes, less than 5 years ago	14	9.79%
Yes, more than 5 years ago	34	23.78%
No	95	66.43%
Child Age	n	%
0-1 year old	3	2.10%
2-3 year old	32	22.38%
4-5 year old	53	37.06%
6 year old	55	38.46%
Insurance Status	n	%
Mass Health	105	73.43%
Private insurance	40	27.97%
Age of first visit	n	%
0-1 year old	51	35.66%
2-3 year old	61	42.66%
4-5 year old	27	18.88%
6 year old	3	2.10%
Parent MDAS Score	n	%
Minimally Dentally anxious (<15)	120	83.92%
Moderately to highly anxious (>=15)	23	16.08%

Discussion

- Although the AAPD recommends a child first dental visit take place at age 1, 64% participants brought their child to their first dental visit after age 1.
- Parents who report having moderate- high dental anxiety are likely to delay their child's first dental visit due to the parent’s own fear of the dentist.
- A delay in child's first dental visit can be multifactorial including parental anxiety, access to care and socioeconomic status.
- Dentists, pediatricians, and schools should educate families on the benefits of early dental visits for preventative measures.

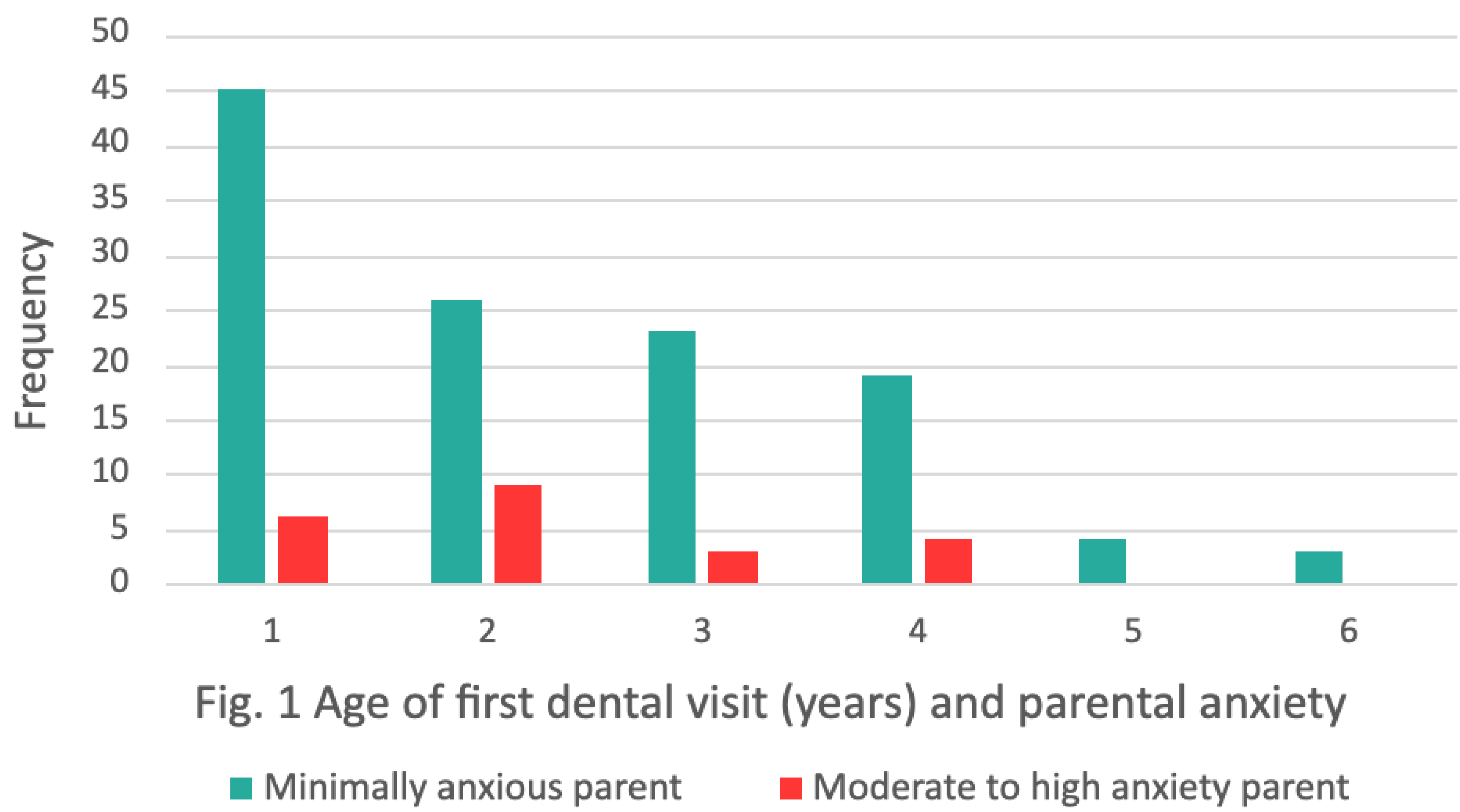


Fig. 1 Age of first dental visit (years) and parental anxiety

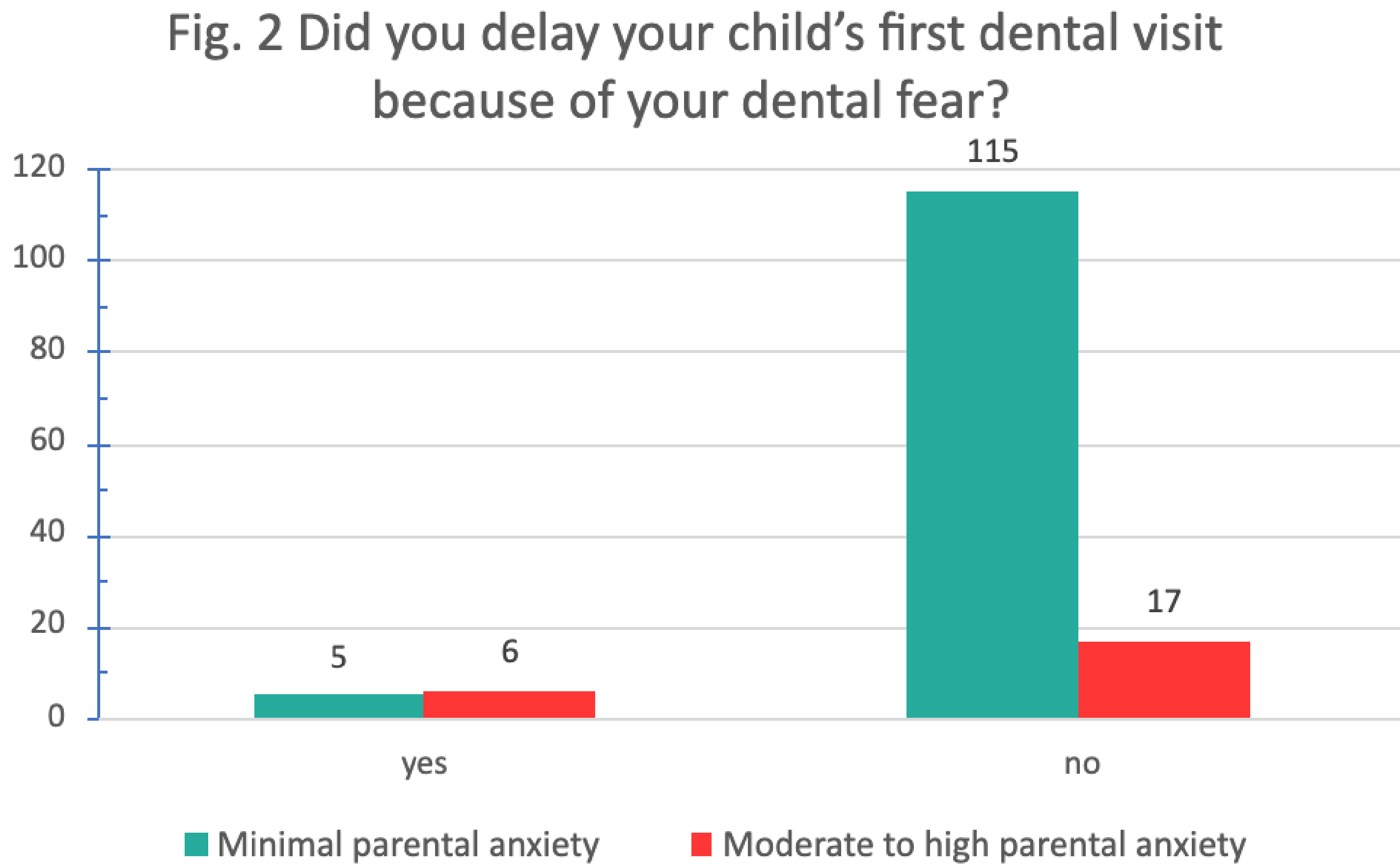
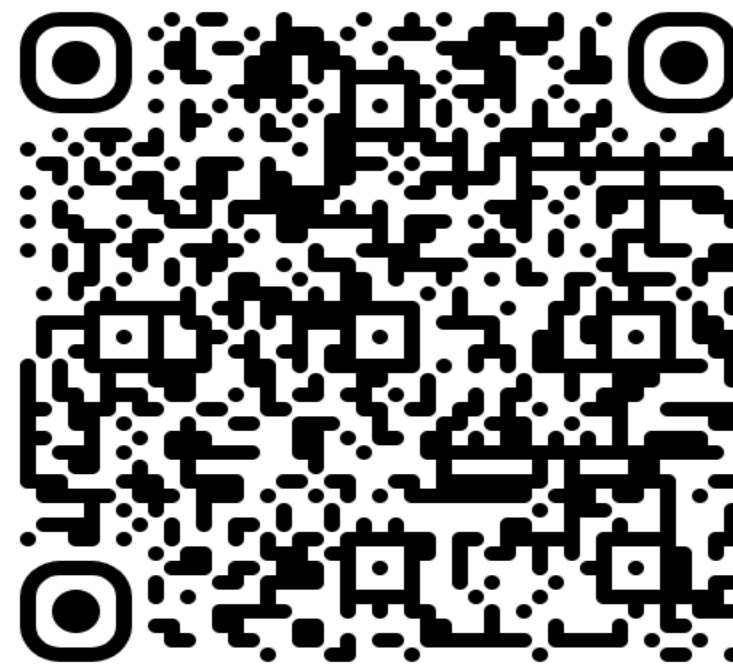


Fig. 2 Did you delay your child’s first dental visit because of your dental fear?

References



Please scan for references