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PURPOSE: This study aims to evaluate the effect of screen exposure and duration on dental anxiety and dental caries severity in children.

MATERIAL-METHODS: Ethical approval was taken from Altınbas University Ethical Committee before the study. Informed consent forms were obtained from the parents of children.

Inclusion criteria

4-9 years old fifty healthy children who had no indications for general anesthesia.

Study design

The digital screen time that the children were exposed to and demographic information was recorded in the questionnaire asked to the parents. Children's behaviors and anxiety levels were evaluated with Frankl Behavior Scale and Clinical Anxiety Rating Scale, the dental anxiety of the parent was evaluated with Corah Dental Anxiety Scale and children's caries status was recorded according to ICCMS. Statistical analyzes were performed in IBM SPSS Statistics 26 and Smart PLS Version 3.3.2 package software. The reliability and structural validity of the study model were ensured. Spearman correlation test, T test and Path analysis were used for the analysis of the data. The level of significance was accepted as 0.05.

RESULTS: A statistically significant positive correlation was found between the family's and the child's screen exposure time ($\beta=0.289$, $p=0.009$). The screen exposure time of children of working mothers is shorter than children of non-working mothers. There was no significant effect of the education level of the parents, the number of siblings, the child's behavioral problem, dental anxiety, and the duration of screen exposure on the child's caries index. The screen time of children did not have a significant effect on dental anxiety ($p>0.05$).

Table 1: Correlation Test Between Family and Family Screen Exposure

Child Screen Exposure Time	r	Family Screen Exposure Time (Hours)
Child's Screen Exposure Time (Hours)	0.571	0.000*



Table 2: Comparison of Child's

Screen Exposure Time Averages According to Mother's Working Status	Child's Daily Screen Exposure Time (Hours)				
	N	Mean	St.D.	t	p
Mother Non-working	25	5.26	2.46	3.232	0.002*
Mother Working	24	3.17	2.04		

CONCLUSIONS: Children in families with high parental use of digital devices may be more prone to screen exposure. In order to better understand the effect of screen exposure on the severity of dental caries and dental anxiety, it is planned to continue the study with more children.

Table 3: Descriptive Analysis

	Mean	Std. D.	
Child's Age	6.67	1.34	
Child's Screen Exposure Time (Hours/Daily)	4.23	2.48	
Family Screen Exposure Time (Hours/Daily)	2.55	1.49	
N=49	n	%	
Child's Gender	Girl	23	46.9
	Boy	26	53.1
Questionnaire Responder	Mother	34	69.4
	Father	14	28.6
	Grandparents	1	2.0
Type of Screen Exposure	Tablet	30	61.2
	Telephone	22	44.9
	Computer	2	4.1
	TV	19	38.8
Child's FRANKL Scale Degree	Absolutely Negative	4	8.2
	Negative	12	24.5
	Positive	19	38.8
	Absolutely Positive	14	28.6