# Association Between Screen Time, Anxiety, and Sleep Bruxism in Pediatric Dental Patients Ages 5–8 at Woodhull Medical Center

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## BACKGROUND

- Children are exposed to screens in various ways including through smartphones, tablets, laptops, and televisions.
- Sleep Bruxism has been associated with anxiety in the past
- Screen time has been associated with anxiety and stress in the past.
- Excessive screen use can lead to shorter sleep duration and increased behavioral and emotional problems in children.

## Objectives

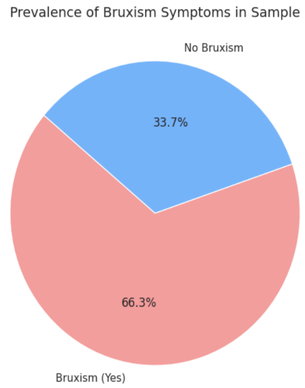
- To determine if screen time prior to bed-time affects patients' anxiety measured through night-time grinding (bruxism)
- Use the findings to inform parent education and behavioral guidance during pediatric dental visits

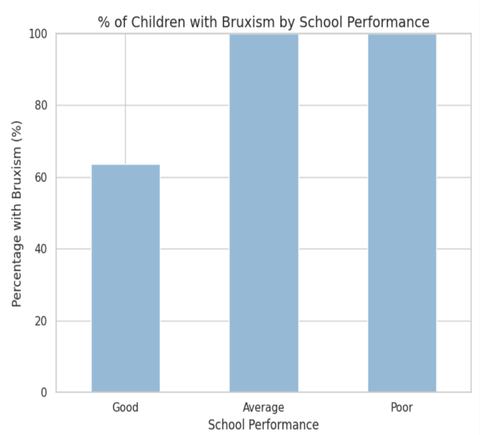
## METHODS

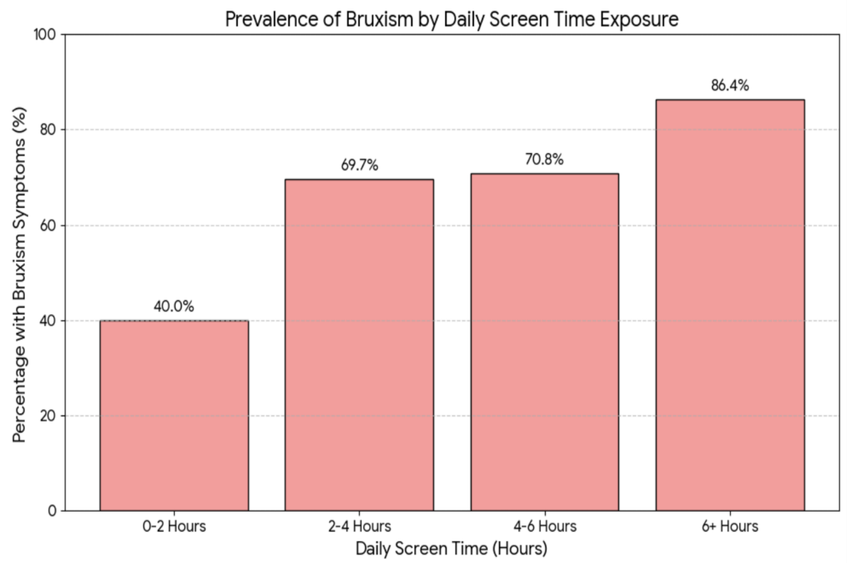
- Cross-sectional study
- Designed as a physical survey consisting of eleven questions
- Survey distributed to the parents or legal guardians of pediatric dental patients at Woodhull Medical Center aged 5 – 8 years old during their child's appointment
- Results were transferred onto an Excel sheet for analysis

## RESULTS

- Parents of 104 children aged 5 – 8 were surveyed
- 49M/55F
- 69 (66.3%) of surveys reported signs of sleep-bruxism
- 100% of children with "average" or "poor" school performance reported sleep bruxism symptoms
- 73 (70%) children are exposed to screen-time prior to bed-time
- Indicators of sleep-bruxism increased with increased average daily screen time usage




## DISCUSSION

- Association: screen time prior to bedtime vs. sleep bruxism
  - Result: No Significant Association (p=1.0)
- Association: Total Daily Screen Time vs. Nighttime Grinding
  - Result: Highly Significant Association (p=0.001)
- Social Behavior Association
  - Nervous Habits: No statistically significant association (p=0.21)
  - School Performance: No statistically significant association (p=0.11)
  - Observation: Although not statistically significant (likely due to the small number of children in the "Average" or "Poor" categories), it is noteworthy that 100% of children with "Average" or "Poor" school performance reported bruxism symptoms. A larger sample size might be needed to confirm if this trend is a true association

## KEY POINTS

- There is a need for targeted preventative strategies to inform parents of the risks of excessive screen time
- Future studies to increase sample size and incorporate clinical evaluation of patient's Mallampati score and attrition values into findings

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