

TALK

BEHAVIORAL AND PHYSIOLOGICAL RESPONSES AS A FUNCTION OF DENTAL ANXIETY AMONG BRAZILIAN CHILDREN

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ABSTRACT

Dental anxiety (DA) is a prevalent emotion experienced by children worldwide, with potential implications for their oral health due to avoidance of dental treatment. Individuals experiencing DA often exhibit behaviors associated with fight-or-flight responses. Aiming to investigate the influence of anxiety and sex on reactions to the dental environment, we observed 20 twins (aged 10 ± 3.3 years) divided into Low (LA) and High Anxiety (HA) groups, equally distributed by sex, during their first dental appointment. We employed the Modified Child Dental Anxiety Scale (MCDASf) and captured one facial thermographic image before treatment, focusing on three areas of interest: nose, ear, and forehead, and recorded their behavior for one minute. The observed behaviors included touching—either their own body or equipment—smiling, talking, and displaying tension. Regardless of sex, frequency of behaviors was different between HA and LA children, $X^2=17.439$, $p=0.004$. As expected, HA children exhibited greater awareness of their surroundings, more frequently looking around and talking. Conversely, LA children were more focused on touching parts of their bodies, such as hair, hands, arms, or equipment. Additionally, HA children displayed lower nose and forehead temperatures compared to LA children, and the same pattern was observed when comparing males to females. Further analysis will involve a larger sample size to compare twin siblings and assess the influences of zygosity and previous experiences on their reactions to dental treatment. This study provides insights into behavioral patterns in HA and LA children and identifies factors that may influence DA, contributing to more effective clinical practice.

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