

Exploring Intergenerational Transmission of Dental Fear in School-Aged Children

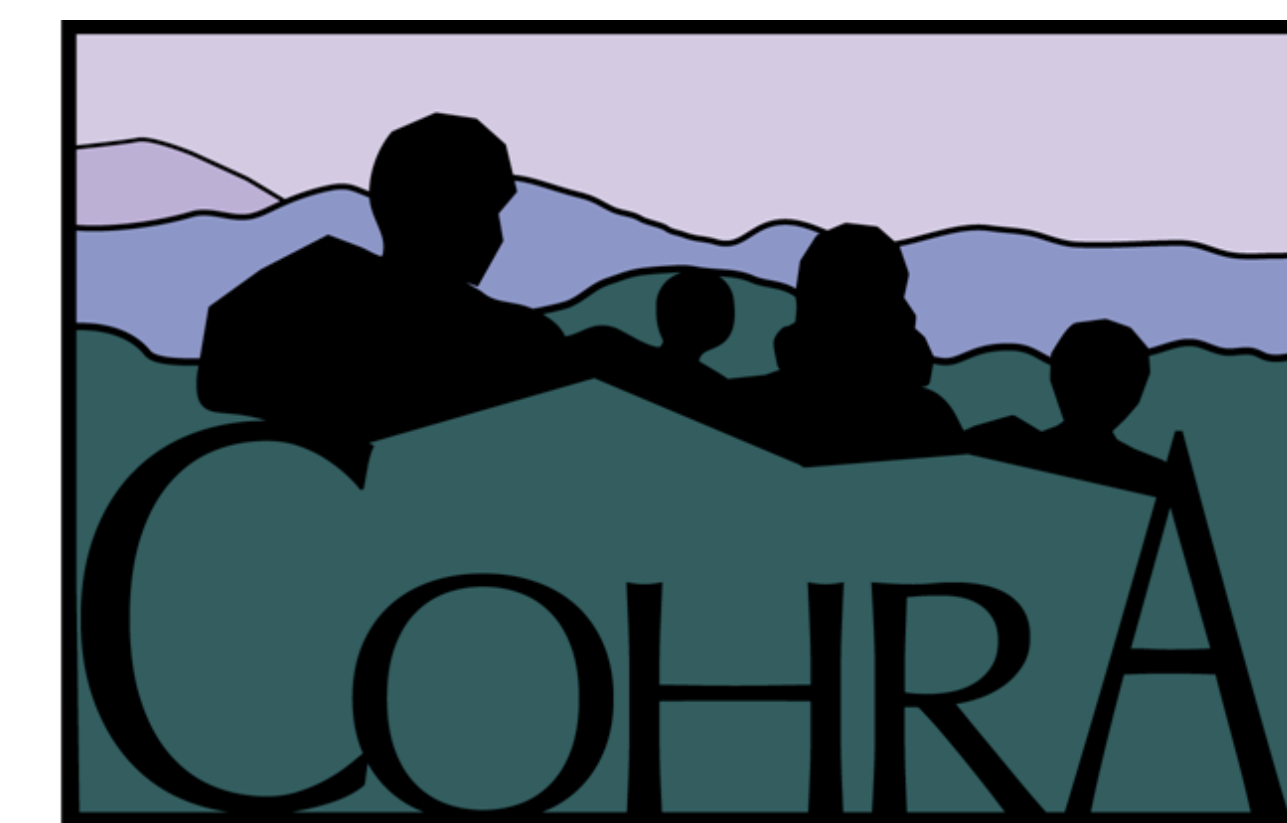
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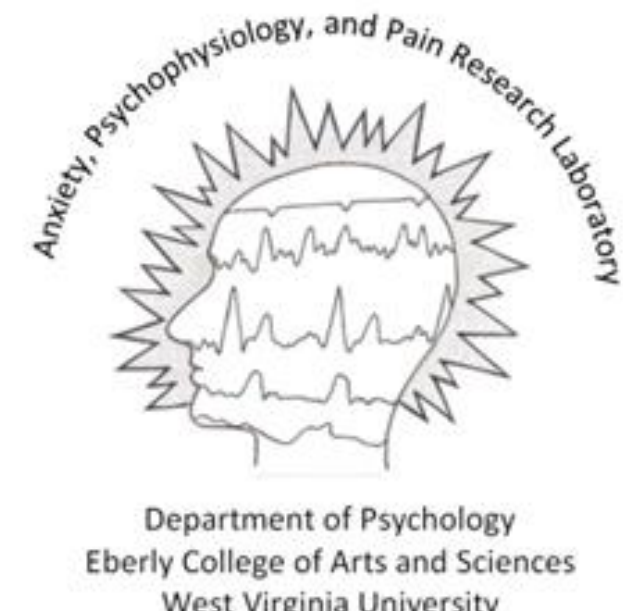


INTRODUCTION

- ❖ Oral health problems in Appalachia begin very early in life (McNeil et al., 2012), and are related to various cultural issues, as well as psychosocial and environmental barriers.
- ❖ Parents and familial ties also can be a strength in terms of promoting health in Appalachia (McNeil et al., 2012).
- ❖ Negative dental experiences, often precipitated by lack of dental care, can contribute to the cycle of dental fear and subsequent dental problems (Wigen, Skaret, & Wang, 2009).
- ❖ This study focused on the relation of parental dental fear and fear of pain to the dental fear of school-aged children. These relations are tested in the context of evidence for the heritability of dental fear (Randall et al., 2016), .
- ❖ It was hypothesized that there would be evidence for intergenerational transmission of dental fear from parents to children.

PARTICIPANTS

- ❖ The Center for Oral Health research in Appalachia (COHRA) was created in 2002 as a partnership project between the University of Pittsburgh and West Virginia University.
- ❖ Recruitment of families from six rural sites in West Virginia and Pennsylvania in the COHRA1 project involved children 1-18 years of age, with at least one biological parent in the household.
- ❖ The current sample was restricted to families with at least one child between the ages of 5 and 10.
 - ❖ 635 children
 - ❖ 48% female
 - ❖ M age = 7.4 years, SD = 1.7

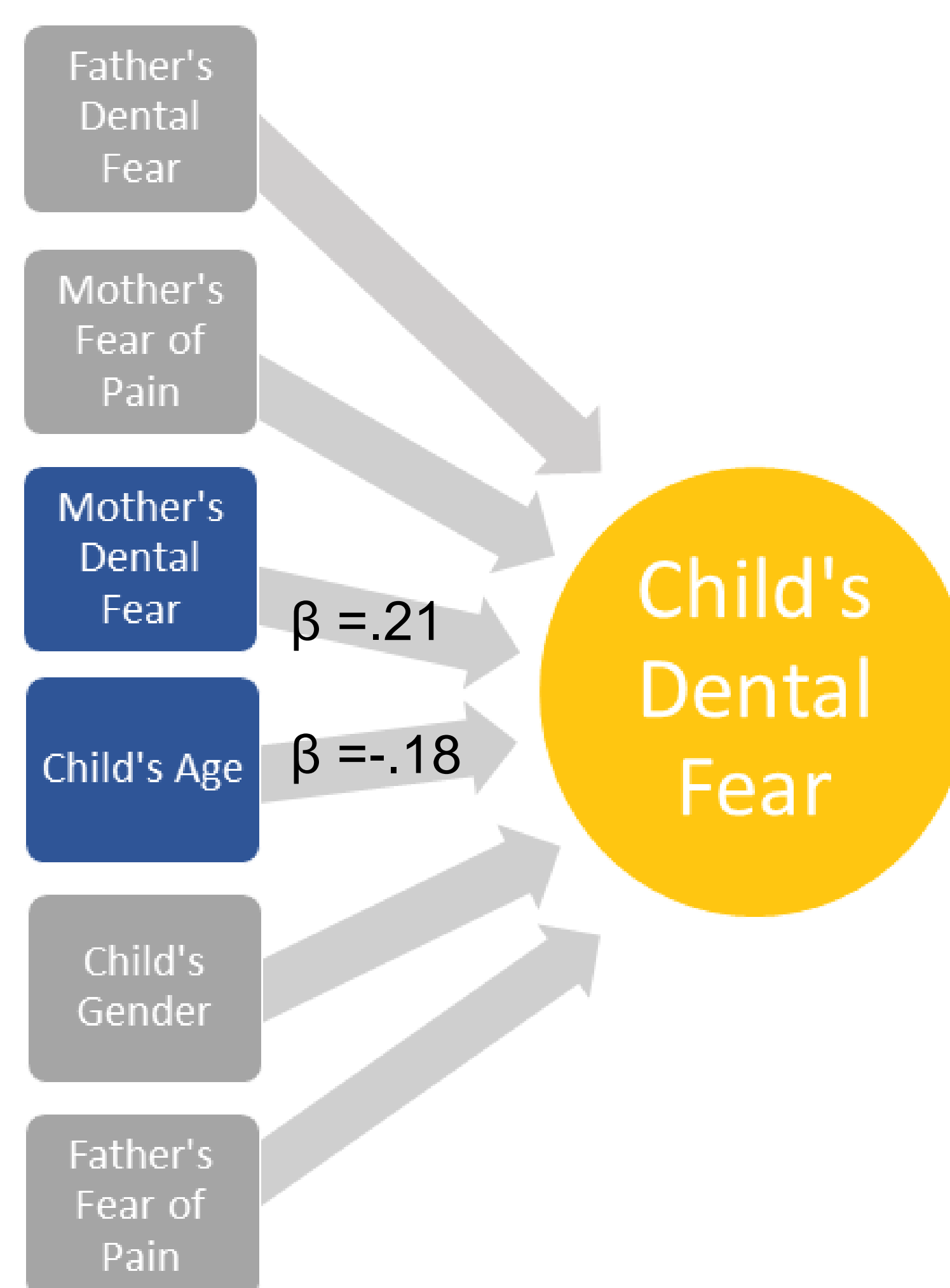


METHODS

- ❖ Data collected by the Center for Oral Health Research in Appalachia (COHRA) project attempts to identify predictors of oral disease, and oral health, in North Central Appalachia.
- ❖ Data collected in the study were obtained via self-report questionnaires, interviews, salivary sampling, caries and periodontal assessments, microbiological sampling, and DNA collection (Polk et al., 2008).
- ❖ Child dental fear was measured by parent/caregiver verbal report using the Children's Fear Survey Schedule – Dental Subscale (CFSS-DS; Cuthbert & Melamed, 1982), with a range of 15-75.
- ❖ Parent dental fear was assessed via self-report with the Dental Fear Survey (DFS; Kleinknect et al., 1973), with a range of 20-100.
- ❖ Parent fear of pain was evaluated with the Fear of Pain Questionnaire-9 (FPQ-9; McNeil et al., 2017), with a range of 9 - 45.

FIGURE

- ❖ Figure 1. Factors tested regarding influence on school-aged children's dental fear.



RESULTS

- ❖ Across the entire sample, mothers' dental fear, but not fear of pain, was positively associated with child dental fear ($r = .23$, $p < .001$).
- ❖ Neither fathers' dental fear nor fear of pain was associated with child dental fear.
- ❖ For children with both mother and father fear data available ($n = 247$), child age ($\beta = -.18$, $p = .007$) and mother's dental fear ($\beta = .21$, $p = .003$) were predictive of CFSS-DS scores ($R^2 = .10$).
- ❖ Child gender, parents' age, fathers' dental fear, and mothers' and fathers' fear of pain were not significantly predictive.

Child Dental Fear Score (CFSS-DS)

Child Age	5	6	7	8	9	10
Mean Score	27.5	28.2	25.6	24.6	26.6	24.5

Table 1. Mean dental fear score by age.

DISCUSSION

- ❖ Among children, fear of dental treatment is prevalent and ranks high on lists of the most common childhood fears. If it persists, this fear can lead to avoidance of dental treatment and poorer oral health and psychosocial outcomes.
- ❖ Young children's dental fear is associated with their mothers' fear; fathers' fear may be less important in this age group, versus during adolescence, when fathers' fear mediates that relationship.
- ❖ Overall findings suggest possible intergenerational transmission of dental fear for school-aged children, consistent with similar research on adolescents.
- ❖ Intergenerational transmission of fears may begin early in life with maintenance across childhood and adolescence.

FUNDING and CONTACT

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