Adolescent Fear of Pain is a Function of Parent Fear of Pain

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\section*{INTRODUCTION}

- Emotions, particularly fear, play an important part in the experience of both acute and chronic pain.
- Across clinical and non-clinical samples, fear of pain has been implicated in several aspects of pain, including pain-related disability, pain intensity, chronic pain behavior (e.g., avoidance, help seeking), and the dental experience.
- Etiological models of fear suggest that parents may play an important role in the development of abnormal fears in children and adolescents.
- Past research has shown a unique mediational role of fathers’ dental fears on the dental fear of their children (Lara et al., 2011) and adolescents (McNeil et al., 2014).
- The aims of this study were to determine if fear of pain levels are associated among family members, if parents’ fears can predict their adolescent’s fears, if mothers’ and fathers’ influences on adolescent fears are similar or different, and if gender differences in fear of pain are evident.

\section*{METHOD}

- **Measures**
  - Demographics Questionnaire
  - Fear of Pain Questionnaire – 9 (FPQ-9; McNeil et al., 2014) – 9-item, self-report measure of pain-related fear, with a total score and three subscale scores (i.e., fears of Severe Pain, Minor Pain, and Medical/Dental Pain).

- **Procedure**
  - Participants completed questionnaires and were matched to their parent(s), who completed the same questionnaire battery.
  - Pearson Product-Moment correlations, regression analyses, and t-tests were utilized to address the research questions; statistical analyses were completed with SPSS 21 (IBM, 2012).

\section*{RESULTS – con’d}

- Across the FPQ-9 total score and Fear of Medical/Dental and Fear of Minor Pain subscales, mothers’ scores had a small but significant correlation only for Medical/Dental Pain and the total score; father’s scores were not significantly correlated for these scores.
- Gender differences in reported fears about pain were evident both in adolescents and their parents, with females reporting higher scores and males reporting lower scores, with the exception that Fear of Minor Pain did not differ between adolescent males and females.

\section*{DISCUSSION}

- Fathers appear to have a unique influence on their adolescents’ fears about severe pain, but not other types of pain.
- Mothers may influence fears about medical/dental pain, and fear of pain generally, although perhaps to a lesser degree.
- These findings lend some support to the possibility of intergenerational transmission of fears about pain.
- Fear of pain is unlike dental fear, in which fathers’ fear mediates mothers’ dental fear, in terms of influence on child and adolescent dental fears.
- Gender differences observed in many other (but not all) fears and anxieties are evident in most fears about pain, in both adults and adolescents.

\section*{PARTICIPANTS}

- Adolescents participating with the Center for Oral Health Research in Appalachia (COHRA), as part of a larger biopsychosocial cohort study on determinants of oral disease in families.
- 384 adolescents for whom complete data were available.
  - Female \( n = 192 \) (50%)
  - Age 11-17 years (\( M = 13.5, \ SD = 1.8 \))
  - 179 from two-parent households for whom both parents’ data were useable.
  - 192 for whom only their mother’s data were available.
  - 13 for whom only their father’s data were available.

\section*{RESULTS}

- **Fear of Severe Pain** appears to be unique in terms of intergenerational transmission, in that only the analysis of this subscale produced a reliable model, as shown in the above figure.
- Fathers’ but not mothers’ Fear of Severe Pain predicted such fear in adolescents.

\section*{FIGURE}

Parental Influence on Adolescents’ Fear of Severe Pain

**RESULTS**

- Fear of Severe Pain appears to be unique in terms of intergenerational transmission, in that only the analysis of this subscale produced a reliable model, as shown in the above figure.
- Fathers’ but not mothers’ Fear of Severe Pain predicted such fear in adolescents.

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