Pathways to Health Outcomes for Mothers of Children with and without Activity Limitations

Motivation

- Limited research on the effect of family members’ health conditions on the health and mental health of other members of family system
- Need empirical investigation of pathways through which health of family members affects health and mental health of other members of family system
- Most studies are cross-sectional
- Many studies use convenience samples

Research aims

- Investigate whether there is a direct effect of having a child with activity limitations on maternal health and mental health using longitudinal, nationally representative data
- Investigate whether this effect is mediated in part or completely by other factors often cited in literature

Data

- National Longitudinal Study of Youth 1979 (mothers)
  - Child data beginning in 1986
  - N=3,608
- Dependent variables (1998-2006)
  - Mother’s self-reported health
    - (higher value=better health)
  - CESD score
    - (higher value=more depressive symptoms)
  - Any activity limitation reported for child
- Mediators of interest (1996/2004)
  - Home environment
    - (higher value=better home environment)
  - Child’s behavior problems
    - (higher value=more behavior problems)
  - Marital attitudes
  - Labor market factors

Aim 1 full and best-fitting models

- This model passes Sobel test for significant indirect effect of activity limitation on both SRH and CESD via Home environment

Findings

- Small net negative effect of having a child with an activity limitation on maternal health and mental health
- Home environment is partial mediator of the effect of child activity limitations on maternal health and mental health
- Child behavior problems completely mediate the effect of child activity limitations on maternal health and mental health
- Effect of child activity limitations on maternal marital attitudes and labor market outcomes not significant, and these do not significantly mediate effect of child activity limitations on maternal health and mental health

Policy implications

- Mothers of children with activity limitations are at an increased risk for poorer health and mental health outcomes than mothers of children without
- Implications for individual and family-centered healthcare
- Still need more investigation of the pathways through which this occurs to facilitate proper strategies of care for members of the family system

Future steps

- Lag time between exposures and outcomes of interest may be too long for certain mother-child pairs
- Different trajectories of child activity limitations and maternal health
- Examine more nuanced categorization of activity limitations
  - Current operationalization is broad and may be too similar to behavior problems
- Other marital factors
  - Changes in marital status
- Other socioeconomic factors
  - Employment decisions among the employed
- Other background characteristics or characteristics of shared environment
- Reciprocal relationships between child and maternal (mental) health

Analytic strategy

- Path analysis using Mplus
- Multiple imputation for missing data
- Use chi-square goodness of fit, AIC, and BIC to arrive at best-fitting models
- Sobel test for significant indirect effects

Aim 2 full and best-fitting models

- This model passes Sobel test for significant indirect effect of activity limitation on both SRH and CESD via Home environment

Data

- Future steps
  - Findings
  - Policy implications
  - Analytic strategy
  - Aim 1 full and best-fitting models
  - Aim 2 full and best-fitting models

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