

Maternal depression predicts child temperament: Mediation by self-efficacy in the nurturing role



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Background

- Lahey and colleagues (2008) found that maternal ratings aspects of fussiness are related to child conduct problems later in childhood
- Research has shown that depressed mothers and anxious mothers tend to rate their infant's temperament significantly differently than non-depressed and non-anxious mothers, rating their infants as more difficult, having a more negative affect, poorer effortful control, and more fearful (McGrath et al. 2007; Henrichs et al., 2009)
- Mental health, particularly depression and anxiety, have been found to be negatively correlated with maternal parental self-efficacy (Porter & Hsu, 2003)

Method

Participants:

- 482 pairs of first-time parents were recruited prenatally as a part of an international longitudinal study from hospitals, OB/GYN practices and birth centers in New York, NY, Cambridge U.K. and Leiden, Netherlands
- Data were collected from N = 406 families when infants were 4 months
- Over 86% of parents had attained a bachelor's degree or higher before enrolling in the study
- On average, families earned between \$67,000 (NL & UK) – 185,000 (US) annually (figures converted to nearest \$1000, USD for 2015)

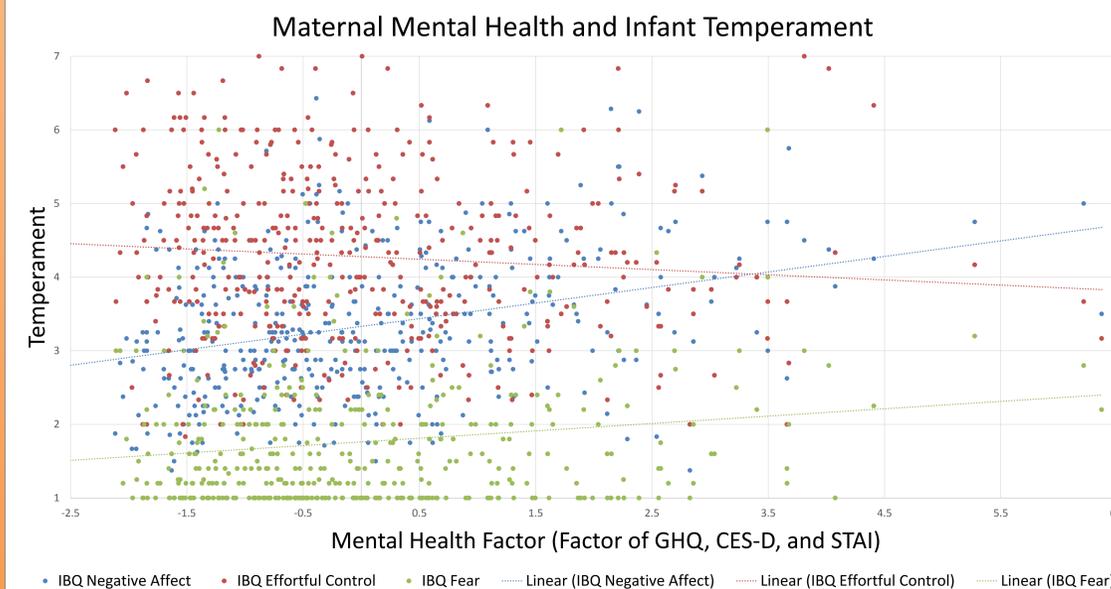
Measures: Mothers responded to the following questionnaires

- Center for Epidemiologic Studies Depression Revised (CES-D)
- General Health Questionnaire (GHQ)
- State-Trait Anxiety Inventory (STAI)
- Infant Behavior Questionnaire (IBQ)

Research Questions

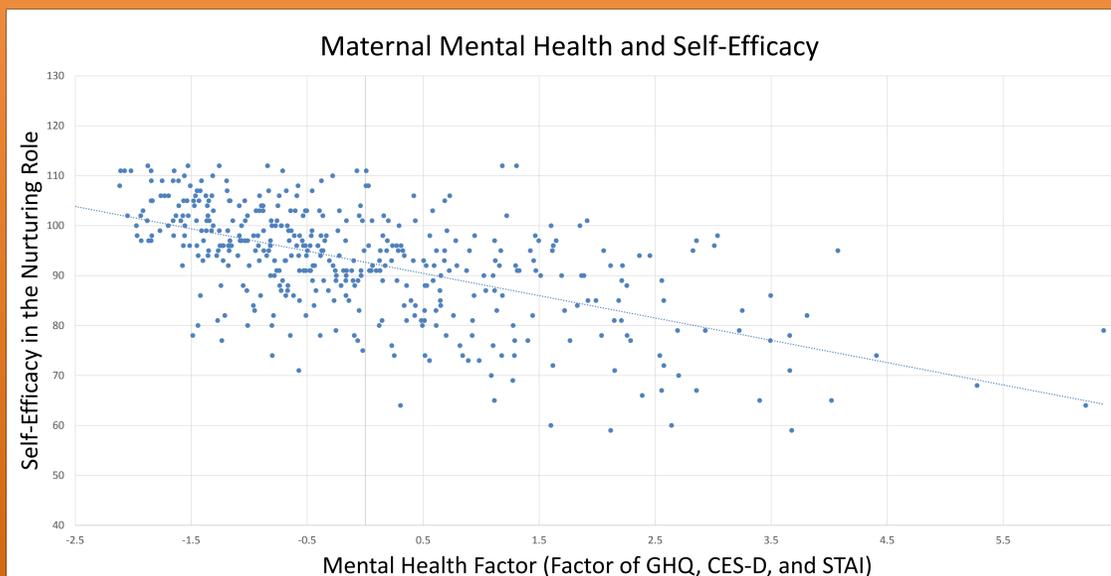
- (1) Is there an association between maternal mental health and child temperament as measured by the Infant Behavior Questionnaire (IBQ)?
- (2) Are ratings of parental self-efficacy associated with ratings on child temperament scales?
- (3) Do ratings of self-efficacy mediate the relations between mental health and ratings of child temperament?

Research Question 1



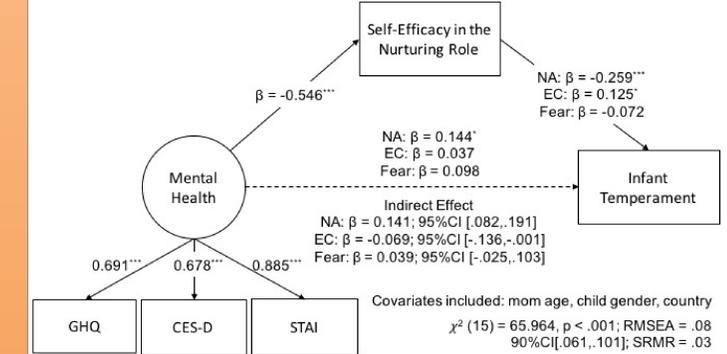
Maternal Mental Health, as modeled by a latent factor of depressive and anxious symptoms measured on the CES-D, GHQ, and STAI (see right) is related to ratings of infant negative affect, $\beta = .283$, $SE = .048$, $p < .001$; effortful control, $\beta = -.106$, $SE = .052$, $p = .044$; and fear, $\beta = .140$, $SE = .054$, $p = .009$. Model controls for child gender, maternal age, and country.

Research Question 2



The maternal mental health factor is related to maternal ratings of self-efficacy in the nurturing role, $\beta = -.547$, $SE = .039$, $p < .001$.

Research Question 3



An indirect effect of self-efficacy in the nurturing role fully mediates the relation between mental health and infant effortful control, $\beta = -.069$, 95%CI [-.136, -.001]; and partially mediates the relation between mental health and infant negative affect, $\beta = 0.141$, 95%CI [.082, .191]. There is no indirect effect on fear.

Conclusion

- The more symptoms identified on inventories of mental health, the more likely a mother is to rate her child higher on negative affect scores, lower on effortful control and higher on fear. Those same mothers are also more likely to rate themselves lower on self-efficacy in parenting.
- This highlights a potential need for depressed and anxious mothers to receive increased support and education around parenting skills as part of their mental health treatment and support network.
- The findings of mediation analyses of maternal mental health and infant temperament suggest two particular aspects of infant temperament of which parenting education and supports programs could increase understanding, and could provide parenting strategies to better support mothers who report depressive and anxiety symptoms.

References

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