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Associations Between Temperamental Negative Affectivity and Parental Anxiety Across Childhood

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Introduction

Extant research suggests evidence of relationships between child temperament and maternal anxiety (Coplan et al., 2005; Jover et al., 2014) and depression (Britton, 2010; McGrath et al., 2008). Most of this research focuses on relatively short postnatal time spans, typically not exceeding six months after birth. In the present study we extended the time span well beyond immediate postnatal infancy and explored associations between children's temperament, parental anxiety, and parental depression. We focused on two major dimensions of temperament: negative affectivity and effortful control. Negative affectivity includes displaying negative emotions, such as fear, sadness, frustration, and anger. Effortful control involves the ability to voluntarily inhibit or activate attention and behavior. Based on temperament theory, we expected positive relationships between temperamental negative affectivity and parental mental health problems, and the reverse relation between effortful control and parental mental health problems.



Methods

Data were collected on child temperament, parental anxiety, and parental depression, using anonymous survey methodology across five age groups:

- Infancy (3-13 months, $N \cong 83$)
- Toddler (14-36 months, $N \cong 94$)
- Early Childhood (3-7 years, $N \cong 81$)
- Middle/Late Childhood (8-10 years, $N \cong 31$)
- Early Adolescence (10-15 years, $N \cong 38$)

REDCap survey links were published on several dozen social media outlets, including Reddit, and relevant listservs. Across all datasets, parental respondents primarily identified as white and female. Child gender distribution was approximately equal between girls and boys.

We used the Rothbart family of instruments to assess temperamental negative affectivity and effortful control in each sample: the IBQ-R Short Form, ECBQ Short Form, CBQ Short Form, TMCQ Standard Form, and EATQ-R Short Form, respectively. Parental anxiety was measured by the Generalized Anxiety Disorder Assessment (GAD-7). An example of a GAD-7 item included "not being able to stop or control worrying." Parental depression was measured by the Patient Health Questionnaire-9 (PHQ-9). An example of a PHQ-9 item included "little interest or pleasure in doing things."

Results

Pearson correlation coefficients were computed to assess the relationships between temperament and parental mental health. Associations involving child negative affectivity were generally consistent with expectations. As shown in Table 1, results indicated positive correlations between parental anxiety and child negative affectivity in four out of five groups, and between parental depression and child negative affectivity in all age groups. Thus, parental mental health issues tended to be higher for children higher in negative affectivity. Effortful control was not as consistently associated with parental mental health. Effortful control was negatively, but less robustly, correlated with parental anxiety and depression.

Table 1
Correlations between Child Temperament and Parental Mental Health as a Function of Child Age Group

Child Temperament Measures	Parental Anxiety	Parental Depression
IBQ-R (Infant Sample)		
Negative Affectivity	.25*	.26*
Effortful Control	-.01	-.14
ECBQ (Toddler Sample)		
Negative Affectivity	.27**	.22*
Effortful Control	-.22*	-.29**
CBQ (Early Childhood Sample)		
Negative Affectivity	.37**	.26*
Effortful Control	.01	.01
TMCQ (Middle Childhood Sample)		
Negative Affectivity	.02	.42*
Effortful Control	.15	.45*
EATQ-R (Early Adolescent Sample)		
Negative Affectivity	.57**	.42**
Effortful Control	-.44**	-.26

Note: * $p < .05$; ** $p < .01$.

Conclusions

Overall, this study provides an important expansion of the timeframes of associations between parental mental health and child temperament. Although we make no assumptions regarding directions of effect between child temperament and parental mental health, bidirectional influences seem likely. For example, parental mental health problems probably exacerbate temperamental negative affectivity, and temperamental negative affectivity probably exacerbates parental mental health problems. Interpretation of these findings are qualified by at least two study limitations: (1) our survey methodology provided no assurances that respondents would respond accurately and (2) common source bias could have occurred. The same parents completed surveys about both themselves and their children, such that perhaps their mental health status informed their perceptions of their children's temperament.

References

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