The Role of Prenatal Distress on Children’s Early Social Competence: Disentangling Heritable and Environmental Influences

Amanda M. Ramos1, Elizabeth A. Shewark2, David Reiss3, Leslie D. Leve4, Misaki N. Natsuaki5, Daniel S. Shaw6, Jody M. Ganiban7, and Jenae M. Neiderhiser8

1 Department of Epidemiology, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina, USA
2 Department of Psychology, Michigan State University, East Lansing, Michigan, USA
3 Child Study Center, Yale University, New Haven, Connecticut, USA
4 Prevention Science Institute, University of Oregon, Eugene, Oregon, USA
5 Department of Psychology, University of California, Riverside, Riverside, California, USA
6 Department of Psychology, University of Pittsburgh, Pittsburgh, Pennsylvania, USA
7 Department of Psychological and Brain Sciences, George Washington University, Washington, DC, USA
8 Department of Psychology, The Pennsylvania State University, University Park, Pennsylvania, USA

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ABSTRACT:

Prenatal distress has been associated with lower levels of child social competence in early childhood in some studies. However, most studies cannot distinguish between genetic or environmental explanations for these findings. Using the Early Growth and Development Study (N=561), a prospective parent-offspring adoption design, we examined inherited and prenatal influences on child social competence at 4.5 years as well as potential meditational pathways of toddler reactivity and dysregulation. Birth parent (BP) temperament (Emotion Dysregulation and Agreeableness) indexed inherited characteristics. Prenatal distress was assessed using birth mother reports of her anxiety and depressive symptoms during pregnancy. Adoptive parents reported on child anger proneness and ADHD symptoms at 18 and 27 months and social competence at 4.5 years old. We used structural equation modeling and found that BP emotion dysregulation was negatively associated with social competence at age 4.5 years (β = -.09, p < .05). Prenatal distress was not significantly related to social competence directly or indirectly via child reactivity or dysregulation. Child reactivity and dysregulation at 27 months were negatively associated with social competence (β = -.15, p < .05; β = -.20, p < .01, respectively). BP emotion dysregulation was positively associated with prenatal distress (β = .18, p < .01).

These findings support the importance of early regulatory behaviors and heritable factors for child social competence, but not prenatal distress. The findings reflect the importance of examining prenatal effects within a genetically informed design.

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