Gene x Environment Interaction on Developmental Outcomes in Germany: What is the Environment that matters?

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A common a priori assumption of research on Gene x Environment interaction is that a high socioeconomic status (SES) is a good proxy for favorable home environments, given the well-documented relation between socioeconomic advantage and positive consequences for adults and children. With respect to the question whether SES moderates the heritable potential of developmental outcomes (e.g., cognitive abilities), this underlying tenet seems to be appropriate for samples from the United States, but not for samples from other Western nations. Given this, other factors of the home environment might be better indicators of a supportive or adverse rearing environment, especially in countries with less SES disparities. Here, the family stress model (Conger & Elder, 1994) can serve as a theoretical framework for the search for the family mechanisms that may moderate the heritability of developmental outcomes.

The present study examines different factors of the family environment (i.e., maternal/paternal parenting style, family chaos), as moderators of the heritability of developmental outcomes, i.e., cognitive abilities, internalizing and externalizing behavior. We use data from cohorts 2 and 3 of the German twin family study 'TwinLife' (913 MZ and 1,165 DZ twins), and apply the modified twin-correlation model to investigate the G x E interactions. Results are discussed in light of recent literature on the GxE interplay, and with regard to developmental processes.

Conger, R.D., & Elder, G.H. (1994). Families in Troubled Times: Adapting to Change in Rural America. Social Institutions and Social Change. de Gruyter, Hawthorne, NY

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