

Family environment moderates the impact of genetic propensity on externalizing behaviors during late childhood and adolescence

Family environment plays an important role in the development of mental health problems in late childhood and adolescence. We still do not understand how individual processes within the family environment may uniquely impact the development of externalizing problems while also accounting for measured genetic risk. Therefore, in the current study we sought to characterize how these environmental processes, along with genetic risk, relate uniquely to externalizing outcomes at two developmental stages, ages 10 and 14. The analytic sample (N=10,633) was drawn from the Adolescent Brain Cognitive Development (ABCD) Study. We examined the associations between eight family variables and externalizing (EXT PGS) as well as externalizing behaviors. We also tested for moderation of the PGS by the family variables in predicting the externalizing behaviors. Models were run as linear mixed effects models with random effects of family and cross-sectionally at ages 10 and 14. Broadly the family level variables were associated with the EXT PGS as well as the externalizing behaviors at both ages. The EXT PGS significantly predicted the externalizing behaviors at both ages. Parental substance use problems, family conflict, and parental knowledge significantly moderated the EXT PGS. This study demonstrated that family processes are robustly associated with externalizing and internalizing as well as moderating the impact of genetic influences on the development of externalizing psychopathology and that these effects are largely consistent in late childhood and adolescence.

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