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Understanding the Effects of the COVID-19 Pandemic on Youth Psychopathology: Genotype-Environment Interplay

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ABSTRACT:

Adversity has consistently been found to predict poor mental health outcomes in children and adolescents. Perhaps the most omnipresent form of adversity in the last several decades is the coronavirus pandemic of 2020, a global health crisis that has been linked to elevated rates of numerous forms of youth psychopathology. The ongoing nature of the pandemic renders it critical to identify the mechanisms underlying its effects on mental health. The current study examines pandemic-related disruption across multiple domains (e.g., home life, work, finances) as an etiologic moderator of several common forms of youth psychopathology. Participants were 637 adolescent twin pairs from the Twin Study of Behavioral and Emotional Development in Children (TBED-C). Mothers reported on the disruption experienced by the family using the Epidemic-Pandemic Impacts Inventory. A series of biometric genotype-environment interaction models revealed that disruption augmented the nonshared environmental contributions to emotional distress and conduct problems but had little effect on the etiology of attention-deficit hyperactivity problems. Our results indicate that children in the same family became less alike in their conduct problems and symptoms of emotional distress following exposure to pandemic-related disruption. Furthermore, this process of differentiation occurred regardless of the twins' genetic resemblance. In other words, pandemic-related stress appeared to differentiate twins in their psychopathology, and this was not due to their genetics, or even the experiences they shared, but rather to their own idiosyncratic responses to the current pandemic.

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