Family Shocks and Academic Achievement*

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Abstract

Disruptions in family life can take many forms, but all have the potential to impact student learning. In this paper, I estimate the importance of unexpected changes in the home environment, or “family shocks,” on student achievement using school administrative data matched to birth records. I calculate the variation in family shocks from the covariance of test score residuals for siblings in the same year. Family shocks are an important determinant of achievement: A one standard deviation family shock leads to a 0.13 standard deviation change in math score and a 0.15 standard deviation change in reading score. These magnitudes are similar to recent estimates of the effect of a one standard deviation change in teacher quality. I also find that family shocks have a relatively larger impact on students from affluent families. This heterogeneity is likely due to a greater involvement of affluent parents in their children’s learning, as is evidenced by the students’ time use reports.

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