

The impacts of external negative shocks on children's outcomes are widely reported in previous literatures. However, parental responses to such shocks and whether parental responses can mitigate the unfavorable consequences on children remain understudied.

This paper uses a Longitudinal Survey of Newborns in the 21st Century conducted by the Ministry of Health, Labour and Welfare, to estimate the effect of a natural disaster on children's outcomes, parental behavior, and their interaction. Applying difference-in-difference to the regional variation of Great East Japan Earthquake, we find that the maternal labor supply is reduced and the probability that children are hospitalized is not significantly changed. Curiously, children's non-cognitive outcome is not aggravated in the most seriously devastated area, while the children living in the area exposed to comparatively high seismic intensity are more likely to take insubordinate behavior to the parents. Our analyses support the following mechanism: the shortage of parental time investment and intra-household communication after experiencing the traumatic events can cause an adverse impact on children's psychological aspects. This might lead the parents to overlook the changes in the health status of children.