

[IZA News](#)[About IZA](#)[Organization Chart](#)[People](#)[Research](#)[Labor Policy](#)[Publications](#)[Discussion Papers](#)[Policy Papers](#)[Standpunkte](#)[Books](#)[Research Reports](#)[IZA Compact](#)[IZA in the Press](#)[Publication Record](#)[Journals](#)[Events](#)[IZA Prize / YLE Award](#)[Teaching](#)[Links / Resources](#)[Press](#)

# IZA



## Explaining the Birth Order Effect: The Role of Prenatal and Early Childhood Investments

by Jee-Yeon K. Lehmann, Ana Nuevo-Chiquero, Marian Vidal-Fernández  
(July 2012)

### Abstract:

The critical role of prenatal and early childhood conditions on adult outcomes has been the focus of a rich body of research. In this paper, we examine various pre- and postnatal investments as possible sources behind the "birth order effect" – significant differences in the educational and labor market outcomes across children of varying birth orders. Taking advantage of a rich set of information on in utero and early childhood conditions in the Children of the NLSY79, we find that, within the same household, siblings of higher birth order experience a lower reduction in cigarette usage during pregnancy, are breastfed less often, and experience less cognitive stimulation and emotional support at ages 0 to 1. Next, we test for the presence of birth order effects in early cognitive and non-cognitive test scores and examine whether these differences can be explained by variations in prenatal and early childhood investments. Although there exists a significant negative relationship between birth order and early cognitive/non-cognitive test scores, the size and the significance of the negative birth order effects in test scores and educational attainment are robust to controlling for variations in early childhood factors.

**Text:** See [Discussion Paper No. 6755](#)

[Back](#)