Can Breastfeeding Reduce Socioeconomic Disparities in Children’s Cognitive Skills?

Research results from various disciplines provide clear evidence that children living in poverty perform less well on various tests measuring IQ than children who are not. Understanding the causes of these gaps is important since cognitive skills are themselves related to measures of well-being later in life. By uncovering ways in which these early disparities occur, we can better address a number of interrelated social problems throughout the life course.

In recent years, breastfeeding has been supported by public health officials, for its ability to reduce health inequalities notably. Some breastfeeding advocates go further and suggest that breastfeeding leads children to have higher cognitive skills (IQ) and has the potential to level the playing field between lower and higher income children.

Many researchers dispute this argument and assert that the relationship between breastfeeding and child IQ is spurious: when other factors, such as the quality of the educational environment or the mother’s IQ, are included in the analysis, the effect of breastfeeding disappears.

This article contributes to this debate by assessing the relative impact of breastfeeding and home environment on poverty gaps in child IQ. We used data from the National Longitudinal Survey of Children and Youth (NLSCY) a representative survey of Canadian children. Because this dataset is longitudinal, we can examine how a practice carried out in the first year of life (breastfeeding and educational activities) can affect later outcomes (IQ scores).

Cognitive capacities were measured by the Peabody Picture Vocabulary Test-Revised (PPVT), taken when the children were 4 or 5 years old. Poverty was measured according to Statistics Canada’s Low-


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Data were accessed and the analysis done at the Atlantic RDC.

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Policy and research implications

- Policies to encourage breastfeeding for six months at least may increase overall cognitive skills among Canadian children, but will likely be insufficient to reduce IQ gap. Such policies need to be crafted carefully to avoid expanding economic inequality further since breastfeeding for a long duration can have a negative impact on the income of the mother and of the family.
- Our analysis suggests that policies that help provide a rich educational environment are key means by which to help reduce poverty gap in cognitive skills. This includes encouraging educational activities, such as reading to the child, but also supporting high school persistence and completion among (future) parents.
- The variables included in our analysis do not allow us to fully explain the mechanism driving the poverty gap in children’s IQ. Further research is needed to better understand how these early disparities occur.
- In particular, future research should include an assessment of mothers’ or PMK’s cognitive skills – a variable not provided in the dataset used for this analysis – as past studies in this area show that it is a key factor. Similarly, breastfeeding should be more precisely measured to better appreciate whether its effect is dose dependent (e.g. whether the child was breastfed exclusively or supplemented with formula).