

Does modernization affect children's cognitive development?

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Societal and technological changes have taken place at a dizzying pace over recent decades. A new cross-cultural study aimed to determine whether these dramatic changes have had an effect on the thinking skills that are learned over the course of childhood.

The study, by researchers at the University of California, Riverside, and Pitzer College, is published in the November/December 2009 issue of the journal [Child Development](#).

Using previously collected data from the late 1970s, the researchers looked at almost 200 children ages 3 to 9 in Belize, Kenya, Nepal, and American Samoa. When the data were collected, these four communities differed in the availability of resources that are typically associated with modernity, such as having writing tablets and books, electricity, a home-based water supply, a radio and TV set, and a car.

Children in communities with more modern resources performed better in some areas of [cognitive functioning](#), such as certain types of memory and pattern recognition, and they took part in more complex sequences of play. The researchers note that these differences don't mean that children from more modern communities are more advanced intellectually; rather, the findings reflect the [cognitive skills](#) that are valued and promoted in the communities where the children live.

"Childhood is changing rapidly around the world," according to Mary Gauvain, professor of psychology at the University of California,

Riverside, and the study's lead author. "Increased urbanization; massive shifts in economic, political, and social conditions; and changes in how we communicate have a significant impact on children's everyday lives. Better understanding of how [intellectual development](#) is shaped and directed by the forces of modernization can give us insights into the psychological consequences of globalization."

The investigators chose to examine children from 3 to 9 because they wanted to explore the shift in cognitive performance and social responsibility that occurs in most [children](#) between ages 5 and 7, regardless of where they live. In the study, they also explored the role of the Flynn effect, which asserts that there's been a rise in performance on certain parts of IQ tests over the past several generations due to modernization. This study showed that such changes reflect the presence of certain modern resources.

More information: *Child Development*, Vol. 80, Issue 6, Contributions of Societal Modernity to Cognitive Development: A Comparison of Four Cultures by Gauvain, M (University of California, Riverside), and Munroe, RL (Pitzer College).

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