Ghana Children and Caregivers Panel Study (GCCPS)

Sector(s): Education

Fieldwork: Innovations for Poverty Action (IPA)

Location: Ghana

Sample: Approximately 2,500 children (and 2,000 primary caregivers)

Target group: Children under five Parents Secondary schools

Outcome of interest: Student learning

Intervention type: Early childhood development

Partner organization(s): Ghana Education Service

Around the world, studies show that children's health and cognitive development tend to be higher when parents have more education. However, it is unclear whether education itself causes improved child health, or if other factors account for this relationship. In Ghana, researchers are building on an ongoing study to evaluate the causal impact of parental education on child health and cognitive development, and to identify the specific channels through which increased parental education might improve child health.

Policy issue

Around the world, research has found positive correlations between parental (especially maternal) education and children's health and cognitive development. For example, studies have found that higher parental education is associated with things like increased prenatal care and improved infant health,[1], improved child nutrition,[2], and superior cognitive abilities.[3] However, the extent to which this reflects the causal effect of parental education on child health and development remains unclear. The correlations between parental education and children's health and cognitive development could in part be driven by other factors that cause both higher parental education and child development, for example if areas that provide greater access to education also provide greater access to health care, or have lower food prices. Understanding whether investments in education have inter-generational effects is of primary importance for governments as they consider expanding access to secondary education: if there is a causal effect from parental education to child health and cognitive development, the impact of investments in education is multiplied.

Context of the evaluation

Like many other countries in the region, Ghana faces significant challenges in the area of early childhood development. In 2014, a national survey found that, while the nutritional status among Ghanaian children had improved over the previous decade, nearly one in five children in Ghana under five were stunted.[4], Moreover, no more than 37 percent of primary school students achieved proficiency levels in math or English in 2016.[5], National statistics also show that rates of child mortality, chronic malnourishment, and stunting are higher among parents with lower education.[6]

In this study, called the Ghana Children and Caregiver Panel Survey (GCCPS), researchers are building on the Ghana Secondary Education Project to evaluate the impact of parental education on child health and cognitive development. The Ghana Secondary

Education Project identified 2,064 rural youth who had qualified for Senior High School but did not enroll for financial reasons, and randomly assigned 682 to receive scholarships for Senior High School. Seventy four percent of students who won the scholarship completed secondary school compared to 47 percent of non-winners (a 62 percent increase), and they attained an average of 1.25 more years of education.



High school graduates in Ghana. Photo: Nataly Reinch | Shutterstock.com

Details of the intervention

Researchers are exploiting the earlier randomized assignment of scholarships to measure the impact of increased parental education on child health and cognitive development. They also examine what mechanisms drive these effects. The study is measuring outcomes for all children under the age of seven whose parents participated in the Ghana Secondary Education Project. By comparing outcomes for children whose parents received a scholarship to outcomes for children whose parents did not, researchers will be able to measure the impact of increased parental education on child health and cognitive development.

To measure child health and development, surveyors interview each child's primary caregiver to learn about the child's overall health, eating habits, and preventive health behaviors. They also measure each child's height and weight. Children's cognitive development is measured through a series of games developed specifically for children in the following age groups: 14-22 months, 39-53 months, and 60-84 months. At all ages, games measure cognitive skills including language, social cognition, spatial and numerical cognition, and executive function. For example, for children aged 14-22 months, games focus on finding objects or detecting changes in a succession of visible events. For children aged 39-53 months, games focus on finding, giving, or pointing to objects and on answering simple questions about visually and verbally presented events. For children aged 60-84 months, children play interactive games on a computer as well as more challenging versions of the games for younger children.

Results and policy lessons

Project ongoing; results forthcoming.

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