

Research report

How direct cash supports the development of children: groundbreaking evidence from Côte d'Ivoire



Problem statement

Poverty significantly affects family well-being and children's development, particularly in sub-Saharan Africa, where addressing these challenges can have the greatest impact.¹ It limits access to food, education, and healthcare, often leading to poorer family health and lower child learning results. One simple solution is cash. Giving families money directly has been proven to be an efficient way to reduce poverty and allows parents to cover basic needs. It is also a powerful tool to break the poverty cycle, while supporting children's development and strengthening overall family well-being.

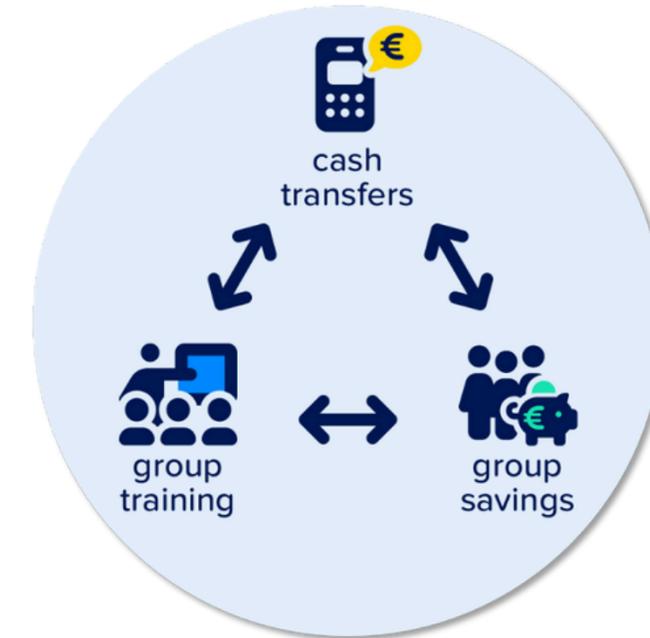
This is 100WEEKS

At 100WEEKS, we prove that temporary cash transfers can lead to permanent change. It's a simple idea with a lasting impact: give women living in extreme poverty the opportunity and the trust to build their own future.

100WEEKS supports women living in poverty through a 100-week Cash+ program of weekly cash transfers, entrepreneurial training, and participation in savings groups (VSLA's - Village Savings and Loan Associations). The approach is simple, direct, and effective.

Women have the freedom to decide how to use the money. With the right support, they improve their living conditions, invest in their businesses, and eventually achieve financial independence.

- 1 100 weekly unconditional cash transfers**
- 2 100 weekly trainings**
- 3 100 weekly savings groups**



Until now, over 10,000 women have participated in the Cash+ program across five countries, reaching a total of 60,000 people. By monitoring 100WEEKS participants, the effects become clear: incomes increase, savings grow, and families achieve long-term financial stability. Most importantly, 78% of all participants remain out of poverty 1 year after the program ends.

78%

stays out of poverty 1 year after the program

Research design

We decided to put the 100WEEKS Cash+ program to the test. We partnered with academic researchers to conduct a randomized controlled trial (RCT). An RCT is a type of study design where people are randomly split into groups and each group gets a different treatment (or no treatment). By comparing groups, one can see if the treatment works. This RCT was conducted to evaluate whether the 100WEEKS program (in this case cash + savings groups) - compared to only savings groups - reduces the negative effects of poverty on mothers, their family wellbeing and their children's development.

This study is interesting because there is very little existing evidence on the impacts of cash transfers on family circumstances, as well as on child learning and development.²

The study was conducted in rural cocoa-farming communities of Côte d'Ivoire, one of the countries where 100WEEKS is active. The country struggles with high levels of poverty, child labor, and low-quality education. According to a report by the World Bank, many rural households in major cocoa-producing areas of Côte d'Ivoire live under or near the international poverty line.³ Also, as the world's largest cocoa producer, Côte d'Ivoire depends on child labor, with over 40% of children engaging in cocoa-related work, keeping them out of schools and their families in the poverty cycle.⁴

This report has been written in close cooperation with researchers of University of Pennsylvania, University of Toronto, and Carnegie Mellon University and is based on their research conclusions. The data is in no way mixed with 100WEEKS data. This means that graphs and visualisations could look different than normal. All pictures are of mothers and children that were part of the treatment group of this research.



Kaja Jasinska
University of Toronto



Sharon Wolf
University of Pennsylvania



Amy Ogan
Carnegie Mellon University



Samuel Kembou
Jacobs Foundation



The study has worked with a total of 2,015 mothers and their households in 140 communities. The average household size was 6.5, and data was collected on mothers, fathers, and 4,701 children across these households, following their progress from the start of the program in March 2021 through the end in September 2023.

All participating households were located within communities associated with cocoa farming cooperatives, where community leaders selected the women they considered as most in need.

Communities were randomly divided into two groups: the treatment group, who received the Cash+ program (cash and savings groups), and the control group, who participated only in savings groups. The study compares the two groups to evaluate the effects of weekly cash transfers. The impact has been assessed using brain imaging techniques, parent and child surveys and child learning assessments.

The research looked at 3 main issues:



Economic and maternal well-being of mothers

Including multi-dimensional poverty, income, consumption and spending, and food security



Child brain development

Measuring brain activity and growth



Child learning outcomes

Including language, math, thinking skills, and school attendance



1. Economic and maternal well-being of mothers

This chapter explores the impacts on the economic well-being of the family and maternal well-being. Economic well-being is a household's financial stability and access to resources. Maternal well-being is a mother's physical, mental, and emotional health, including stress and caregiving ability. Also the study looked at the investments the household did in childrens' education.

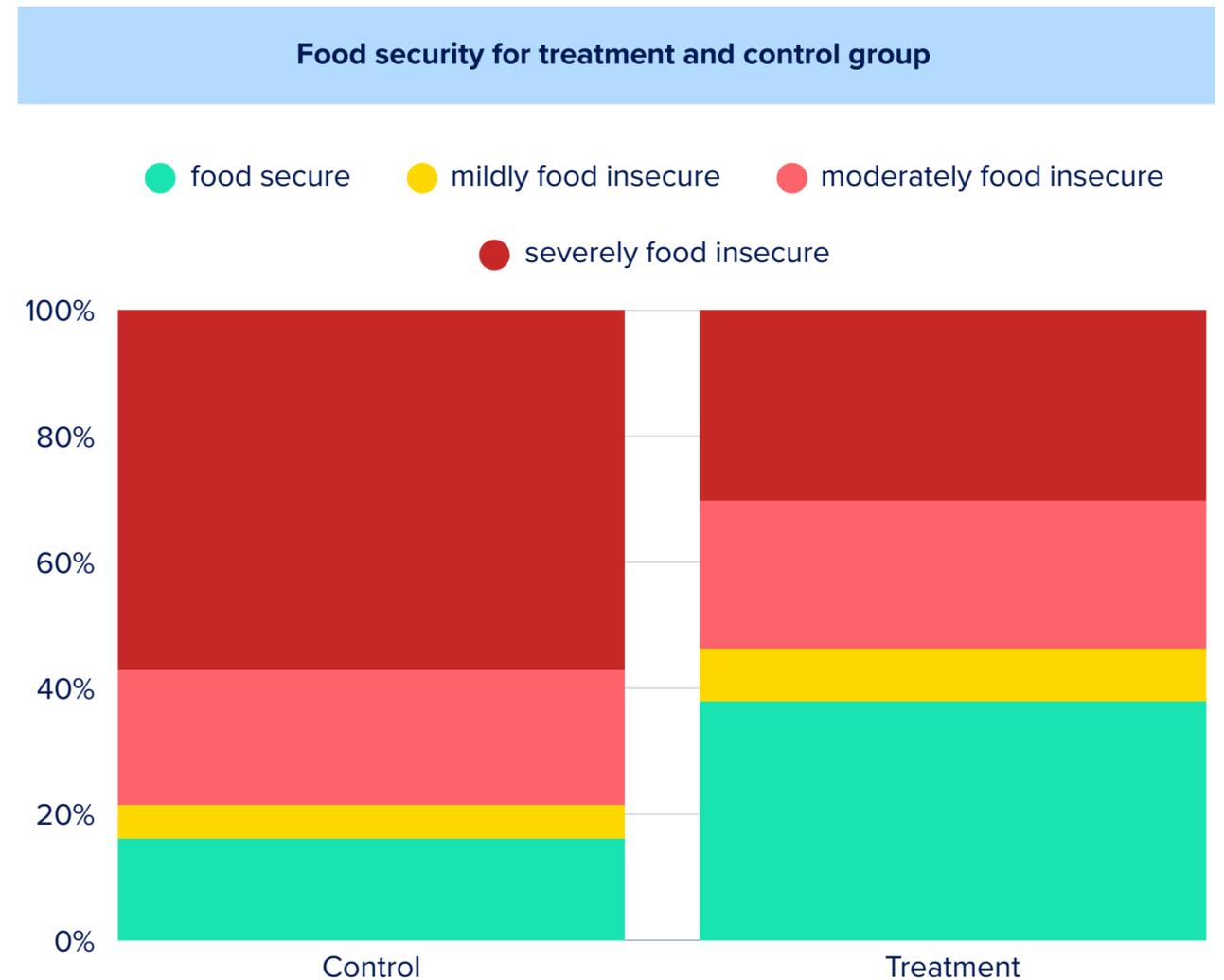
Data was collected from one school-aged child (5-15 years) per family at baseline and two additional children (preschool-aged and adolescent) at endline, using structured interviews and child assessments. For this part of the research, the total sample size was 2,015 mothers.

Economic well-being

The results show that families in the 100WEEKS program saved about €74 more in the first year compared to the control group that didn't receive cash. The program made it more likely that households could afford external farm labor, suggesting they had greater financial flexibility. The Cash+ program also led to a small but meaningful decline in multidimensional poverty (an international standard measure to measure poverty that assesses education, health, and living standards) (OPHI and UNDP, 2024) .

These improvements in financial stability translated into better food security and dietary practices for households. Mothers reported higher total savings and lower rates of food insecurity. In addition, mothers reported a greater chance of their households consuming a variety of healthy foods over the past week. Such changes in dietary diversity and nutrition are crucial for a healthy children's development.

The graph on food security shows how food security differs between participants in the control and in the treatment group at the end of the program. More households in the treatment group had enough food, and fewer faced moderate or severe food shortages compared to the control group.



Fathers were also asked about their income, economic stability, and well-being at the end of the program. However, they reported no meaningful improvements. This could be due to the fact that the program primarily targeted mothers. This impact is reflected in the households' finances and wellbeing, but there are no direct effects on the fathers' finance and wellbeing.

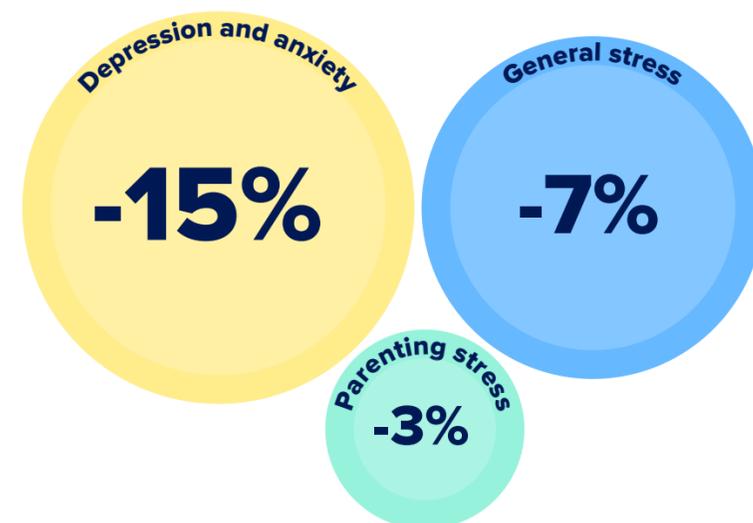
Maternal well-being

The program led to moderate decreases in mothers' stress, depression and anxiety. Stress was measured with a standard survey, which asks about feelings of being overwhelmed or having trouble managing daily life. Depression and anxiety were measured with questions about experiences of low mood and worry over the past month.

The results suggest that receiving cash transfers helped mothers feel less stressed and improved mental health, showing that financial support can reduce some of the mental pressures that come with living in poverty.

These results are remarkable. Maternal well-being is not just important for the mothers themselves, but is deeply connected to the well-being of their children. Research consistently shows that when mothers struggle with stress or poor mental health, their children are also more likely to struggle. That means the positive effects seen here extend far beyond the individual mothers: they have the potential to improve family life as a whole and to give children a stronger foundation for healthy development.

Reductions in maternal stress and depression and anxiety symptoms



Investments in children's education

The researchers also looked at the types of learning activities mothers did with their children at home, children's school participation, and mothers' goals and hopes for their children's education. The results show no clear effects of the program on how much mothers were involved in their children's schooling or on their educational goals and expectations. These results suggest that mothers may not have seen the cash transfers as directly connected to their children's education.

This may be because the program focused on general household support rather than explicitly linking the cash transfers to educational expenses or activities. Another important factor is that school participation at the primary level is already relatively high in this context, which means there may be less room for measurable improvement at that stage. The real challenge often arises during the transition to secondary school, where enrollment and retention rates typically drop.

Future research could therefore focus on whether cash transfers - perhaps designed with a clearer educational link - might help families overcome the financial and social barriers that prevent children, especially girls, from continuing their education beyond primary school. In this way, the potential impact of such programs could be even greater, helping not only to reduce immediate hardship but also to support long-term opportunities for the next generation.



2. Child brain development

For this part of the research, the researchers used a “lab in the field” approach, a research method that brings controlled experimental designs into real world settings. This allowed them to monitor children's brain activity while doing several experimental tasks. The study focused on two main aspects of the brain:

- Brain networks: how efficiently different parts of the brain work together
- Brain activity: which areas are most active during mentally demanding tasks

Children wore a **special brain imaging cap**, called Functional Near Infrared Spectroscopy (fNIRS), that measured changes in blood-oxygen levels. This allowed researchers to see which parts of the brain were active and how they responded during tasks involving skills such as reading, numeracy, and self-control. When a part of the brain works harder, like any part of the body, it needs more oxygen. The brain cap can detect changes in blood oxygen in response to neural activity. These measures highlighted how brain regions work together during tasks. By analysing the data, we can see **which brain areas are most active and how these areas are interconnected**.

The sample consisted of 42 infants and toddlers (0-2 years), 118 pre-school-aged children (4-5 years) and 228 school-aged children (6-12 years).



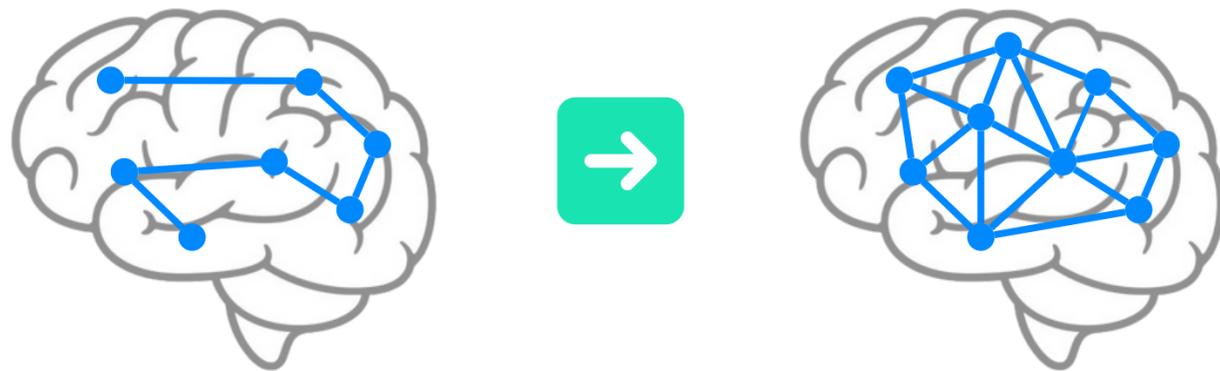
Children who grow up in poverty are more likely to fall behind in their cognitive development. Cognitive development refers to the growth of a child's ability to think, learn, and understand the world. It includes skills such as memory, attention, problem-solving, and the ability to control impulses and make decisions.

Falling behind in their cognitive development happens for several reasons: poor nutrition and illness can hinder brain growth and the creation of brain cell connections; constant stress raises hormone levels that can negatively impact brain development; and a lack of stimulating experiences may cause the brain to adapt to a simpler setting, limiting its growth, and limiting the brain's capacity to adapt.

Parents under stress may also struggle to provide stable learning opportunities. Poor families often have fewer resources such as books, toys, or varied experiences, which can limit opportunities for learning and skill development during these key periods. Also, in stressful settings, the brain may develop too quickly, shortening essential growth phases when it is most able to learning and adaptation.

Overall, we found that the full 100WEEKS program (compared to savings groups only) led to greater brain activity and more efficient organization of brain networks.

This figure shows the impact of the 100WEEKS Cash+ program on brain connectivity. The left brain has fewer, weaker connections, indicating reduced communication within the brain, while the right brain shows stronger, more numerous connections, reflecting improved coordination and skills like focus, self-control, and learning.



Key impacts of the 100WEEKS program on child brain development included:

- Improved brain network functioning, especially for children of mothers with lower education levels
- Increased brain activity in areas linked to focus and behavioral and emotional control
- Enhanced brain activity for learning and math skills, particularly for children who started with weaker math skills.

While the findings showed changes in brain activity and organization, they did not directly translate into improved performance on tasks like impulse control or numerical skills. This may be because changes in the brain often take time to translate in visible academic performance. Previous research suggests that brain network maturation and behavioral skills may develop in different paces, and the full benefits may appear over prolonged periods of time.

These results are extremely encouraging because they demonstrate for the first time that providing families with cash can directly shape a child's brain development, even without changing their school or learning environment. This research shows that improving the home environment of a child through financial support to their parents can unlock a child's potential by influencing the underlying brain connectivity necessary for learning, focus, and cognitive growth. It is the first evidence ever linking cash transfers to measurable changes in children's brain development, highlighting the powerful impact that supporting families can have on a child's future.



3. Child learning outcomes

In cocoa-farming communities, school-aged children often have to manage their education with farm labor, which directly disturbs their school attendance and learning opportunities. Child labour keeps the cycle of poverty going, as it creates educational challenges. Low school joining, poor participation, and limited learning progress are all connected problems.

This chapter looks at the effects of cash transfers on child development, educational progress and child labour. More specifically, the research measured the impact of the 100WEEKS program on:

- Children's learning outcomes: skills in reading and writing and math, measured through standardized tests
- School participation and child labour measured through surveys with children

For this part of the research, the sample included a total of 1,675 children (854 boys and 821 girls) between the ages of 5 to 17 years old.

Learning outcomes

Learning outcomes refer to children's progress in both academic and non-academic skills. Academic skills include reading, writing, and mathematics. Non-academic skills include social-emotional skills, such as stress management, empathy, and perseverance.

The 100WEEKS program did not directly boost children's learning results, compared to the control group. Only for older children, there were small signs of progress in reading, though the effect was too small to count as a meaningful improvement. This limited impact is likely because changes in brain development take time to translate into concrete academic gains. With continued support and time, these developmental changes may eventually lead to measurable improvements in learning outcomes.

Marginal effects were found on social-emotional learning. Since emotional and social development often happens before academic progress, these gains may still provide a foundation for learning in the longer term.

Child labour and school participation

Overall, there was little effect detected of the program on child labour. Some small effects were found in older children. They showed a slight drop in child labour and a decrease in the participation of agricultural work. However, this decrease was too small to count as meaningful improvements.

There was a marginal effect of the 100WEEKS program on school enrollment for older children. Older children in the treatment group were more likely to be enrolled in school than those in the control group. This change, though small, is in the right direction, as children are more likely to drop out of school to help with agricultural work as they get older.

Child labor is often deeply rooted in cultural, social, and economic factors, which makes it challenging to achieve meaningful change in the short term. Nonetheless, while a larger, more concrete impact was not observed, the small positive changes suggest that a cash program has the potential to gradually reduce child labour and support their academic progress. More research is needed to understand this change over time.



Next steps

These findings have shown the strong positive impact that the 100WEEKS Cash+ program has on supporting children's brain development, strengthening economic wellbeing, easing maternal stress, and improving mental health. An exciting step forward!

With these results we will continue our mission of helping those living in poverty. With this mission in mind, we are eager to expand our research to better tailor future support. Several areas of further research have been identified:

- **Long-term child learning and labour outcomes:** to determine whether the observed improvements in brain development translate into meaningful positive learning outcomes and decreased child labor.
- **Community and social dynamics:** to examine how the program influences social cohesion, jealousy, and other dynamics within communities
- **Generalizability:** to explore how findings from the 100WEEKS program might apply to other countries and contexts

These next steps will help us refine and improve our programs, maximizing their positive impact on mothers, their families, and their communities. If you have any questions or would like to explore the results in more detail, we warmly invite you to get in touch!

References

1. Chaudry, A., & Wimer, C. (2016). Poverty is not just an indicator: The relationship between income, poverty, and child well-being. *Academic Pediatrics*, 16, S23-S29.
2. McGuire, J., Maara, J., Palermo, T., et al. (2022). Impacts of cash transfer and "cash plus" programs on self-perceived stress in Africa: Evidence from Ghana, Malawi, and Tanzania. *SSM - Population Health*, 22, 101403.
3. World Bank. (2021). Côte d'Ivoire — Country Economic Memorandum: Sustaining the growth acceleration. World Bank.
4. Nkamleu, G. B., & Kielland, A. (2006). Modeling farmers' decisions on child labor and schooling in the cocoa sector: A multinomial logit analysis in Côte d'Ivoire. *Agricultural Economics*, 35(3), 319-333.

Contact

Yvonne van Dalen
Manager Monitoring & Evaluation
yvonne.vandalen@100weeks.org
+31 623705717

Gitte Büch
Fundraising & Partnerships
gitte@100weeks.org
+31 641702580

Sharon Wolf
Associate Professor University of Pennsylvania
wolfs@upenn.edu
+1 2157460283

Mailing address

Postbus 95001
1090 HA Amsterdam
The Netherlands

Visiting address

Impact Hub
Mauritskade 64
1092 AD Amsterdam
The Netherlands

