



THE PARENTING NUDGE – INCREASING PARENTAL SELF-EFFICACY TO IMPROVE PARENTING: EVIDENCE FROM A RANDOMIZED VIDEO INTERVENTION IN RWANDA¹

Conducted by the Institute of Development Studies, in partnership with Save the Children

A number of factors are decisive in the development of a child, ranging from biological factors, the socioeconomic environment in which the child is raised and parenting. In recent years, research has increasingly focused on the importance of parenting in child development outcomes. One factor that has gained prominence in this literature is parental self-efficacy.² Parental self-efficacy is defined as the perceived confidence of parents in tasks associated with parenting. Self-efficacy has been linked to positive early childhood development outcomes because when parents feel confident in their ability to be parents, they are more likely to use parenting strategies that will foster positive development outcomes.³

Although parental self-efficacy has been shown to be correlated with parenting and, consequently, with child development outcomes, few studies to date have provided causal evidence of the importance of self-efficacy in improving parenting outcomes. To further explore this relationship, the Institute of Development Studies at the University of Sussex partnered with Save the Children in Rwanda to further explore ways in which parental practices, attitudes and beliefs could be affected by increasing parental self-efficacy. The study, as presented in the paper, *The Parenting Nudge – Increasing Parental Self-Efficacy to Improve Parenting Practices: Evidence from a Randomized Video Intervention in Rwanda*, was carried out in 2018 on the back of another research activity exploring the short- and medium-term impact of an ECD parenting programme called First Steps.⁴

¹ Patricia Justino, Marinella Leone, Pierfrancesco Rolla, Monique Abimpaye, Richard Germond and Diane Uwamahoro

² Coleman, P. K. and Karraker, K. H. (2003). Maternal self-efficacy beliefs, competence in parenting, and toddlers' behavior and developmental status. *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health*, 24(2): 126–148.

³ Bloomfield, L., Kendall, S., Applin, L., RHV, V. A. R., Dearnley, K., Edwards, L., Hinshelwood, L., Lloyd, P., and Newcombe, T. (2005). A qualitative study exploring the experiences and views of mothers, health visitors and family support centre workers on the challenges and difficulties of parenting. *Health & Social Care in the Community*, 13(1): 46–55.

⁴ First Steps was implemented by Save the Children and its local partner, Umuhuza, and designed as a cluster-randomised controlled trial. More information about this research and the related programme intervention can be found in the paper titled "Improving Parenting Practices for Early Child Development: Evidence from a Radio Supported Group-Parenting Programme in Rwanda".

FOUR SOURCES OF SELF-EFFICACY BELIEFS⁵

- **Performance accomplishment** – Relates to having a direct experience that builds self-belief through one's perception of having mastered a task;
- **Vicarious experience** – Relates to one's observation of surrounding people, especially role models; seeing others succeed by their effort increases one's own beliefs in being able to succeed in that area;
- **Verbal persuasion** – Relates to influential people in one's life strengthening one's belief that he has what it takes to succeed;
- **Emotional state** – Relates to one's state of mind or emotional well-being.

RESEARCH PURPOSE

This research aimed to investigate: 1) The causal impact of a video intervention on parental self-efficacy and parenting practices, attitudes and beliefs; and 2) How much of the effect on the latter parenting outcomes is because of the experimentally increased parental self-efficacy.

INTERVENTION SUMMARY

This intervention takes the form of a video intervention coupled with a group discussion, which was implemented as a randomized controlled trial. For this purpose, two videos were developed and shown to parents who had previously participated in the First Steps ECD Parenting Programme.⁶

Video 1:

Sought to boost parental self-efficacy through focusing on **vicarious experience** and **verbal persuasion**. The video illustrated the vicarious experience source through scenes of actors impersonating a typical family going about their daily life (working in the field, cooking, cleaning and taking care of their children, playing with them, and reading books) followed by an 'ECD Specialist' emphasising that as parents, they can really make a difference for their children (illustrating the verbal persuasion source of self-efficacy).



Video 2:

Same content as Video 1, but with an additional focus on **performance accomplishment** in addition to **vicarious experience** and **verbal persuasion**. In the additional part of the video, the 'ECD Specialist' presented the results of the First Steps ECD Parenting Programme (which parents in the study had participated in), highlighting from the research results that First Steps children were performing better than peers whose parents did not participate in the programme, and praising parents on their skills and accomplishments as parents (addressing the performance accomplishment source of self-efficacy).



Video 3:

Placebo video on agricultural production techniques set in Rwanda, shown to a control group to ensure that results observed from the intervention were not only due to the fact that a video was shown in a setting where video screenings are rare.

After showing Videos 1 & 2, enumerators facilitated a group discussion with the parents about the key messages from the video, with Video 2 enumerators trained to particularly highlight the performance accomplishment source of Video 2. The total intervention lasted approximately 45 minutes – 1 hour⁷ and occurred only once, one week after the baseline data were collected.

⁵ Bandura, A. and Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive therapy and research*, 1(4):287–310.

⁶ Video(s) produced by Looking for Livingstone (Rwanda) (<http://www.lookingforlivingstone.com/>)

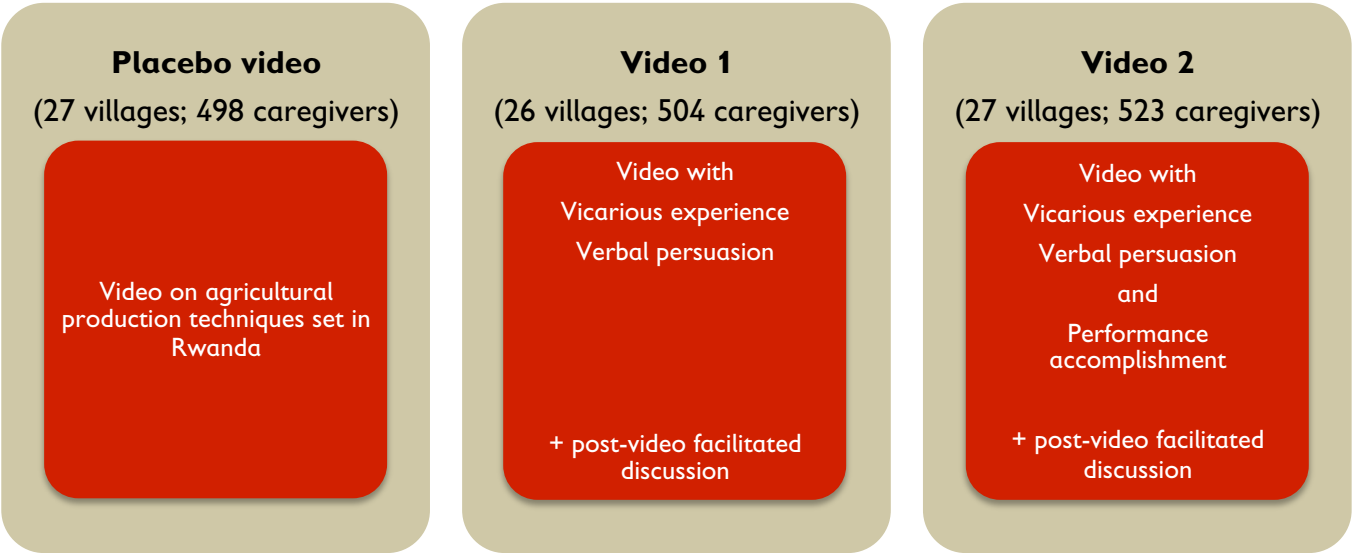
⁷ Video 1 was 9 minutes long, Video 2 was 16 minutes long, and discussions lasted 30-60 minutes, depending on the village.

RESEARCH OVERVIEW

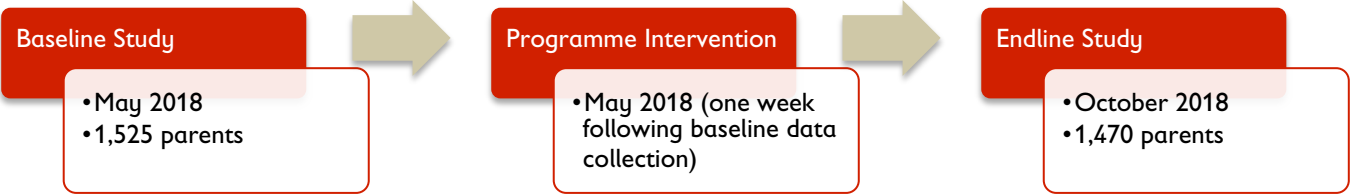
Research Questions

- What is the impact of a video intervention and group discussion in a low-income context (Rwanda) in the short-term on parental self-efficacy?
- Does a short video, supported by group discussion improve parenting outcomes?
- To what extent does the change in parental self-efficacy mediate the effect on parenting outcomes?

A total of 80 villages in 9 sectors of Ngororero District were assigned to 3 different treatment arms – a Placebo, Video 1 and Video 2. The sample included 3 cells in each of 9 sectors⁸; within each cell, 3 villages were randomly assigned a different treatment status as follows:



Research Timeline & Sampling



Measurement Tools Used

Parent Time Investment & Influence:	Expanded version of the Home Observation for Measurement of the Environment – Short Form (HOME-SF)
Parental Self-Efficacy:	Tool to measure Parenting Self-Efficacy (TOPSE)

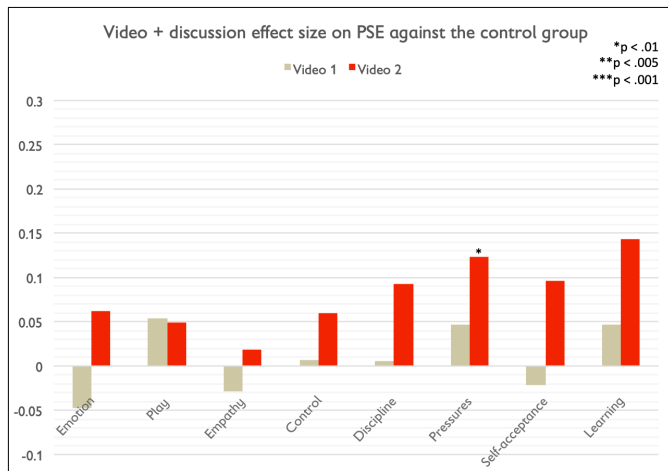


Excerpts from the videos showing Vicarious Experience, Verbal Persuasion and Performance Accomplishment sources of parental self-efficacy.

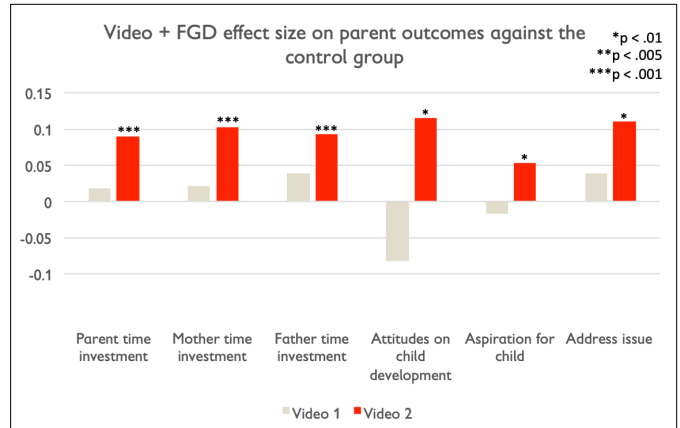
⁸ These sectors and cells were previously part of Save the Children and Umuhiza's First Steps ECD parenting programme; in a previous RCT assessing the impact of First Steps, randomization of treatment and control arms occurred at sector level. Following the RCT intervention, most of the control sectors also received the intervention.

KEY RESEARCH FINDINGS

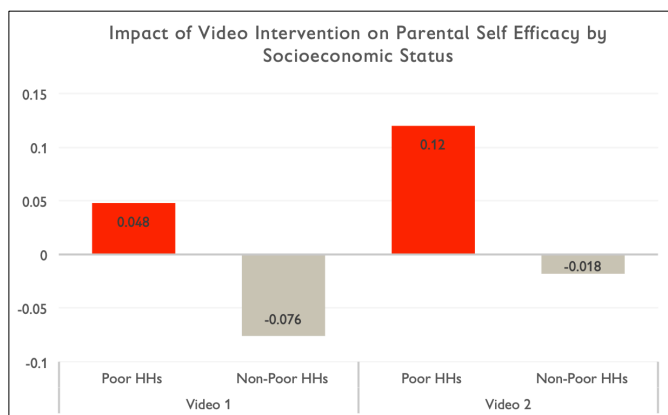
1. Video 2, which had the addition of the performance accomplishment source, positively impacted parental self-efficacy.



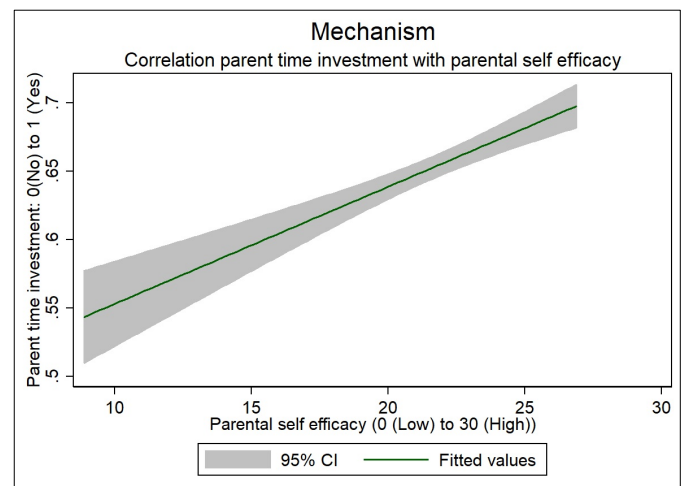
2. There was a positive and significant effect of Video 2 on parents' time investment in their children, attitudes towards child development, and aspirations for their children.



3. The impact of the performance accomplishment video intervention (Video 2) on parental self-efficacy (mostly empathy and learning dimensions) was larger for poorer households.



4. Parents' time investment is positively correlated to parental self-efficacy.



5. 20% of improvements in parents' practices, attitudes and beliefs are attributed to the increase in parental self-efficacy.

CONCLUSIONS

This study showed that parental self-efficacy can be experimentally improved through a simple, low-cost additional intervention. It also demonstrated that improvements in parental self-efficacy translate to improved parenting practices.

- The performance accomplishment component, in addition to the vicarious experience and verbal persuasion components, was necessary to produce changes in parental self-efficacy. In other words, by showing parents a video that reminds them of positive parenting practices, models behaviour, provides encouragement and demonstrates their actual accomplishment in parenting, parents that previously benefited from a parenting programme intervention are more likely to not only continue, but increase, positive behaviours introduced in the programme.
- Poorer households can particularly benefit from this positive reinforcement.
- Implicit within these findings is the importance of sharing positive intervention results with programme beneficiaries as an additional means to sustain and augment programme interventions.