

Perfecting parenting: an evaluation of a program to improve parenting practices in rural China

Submission date 06/11/2015	Recruitment status No longer recruiting	☒ Prospectively registered ☐ Protocol
Registration date 09/11/2015	Overall study status Completed	☐ Statistical analysis plan ☐ Results
Last Edited 10/11/2015	Condition category Other	☐ Individual participant data ☐ Record updated in last year

Plain English summary of protocol

Background and study aims

Research has shown that young babies and children living in rural China are not reaching their full developmental potential. A 2013 survey of 2,000 rural (country-based) infants aged 6-12 months in Shaanxi Province, for example, showed that around 40% were significantly delayed in either their cognitive (thinking) or psychomotor (physical) development. Furthermore, rather than improving over time, the number of children suffering from developmental delays actually increased to 53% as the children became toddlers, indicating that rural children are falling further and further behind their healthy urban (town-based) counterparts. The Chinese Ministry of Health is aware of these numbers and is extremely concerned, as these infants represent nearly one-half of all those in China.

Why are rural Chinese children performing so poorly, and what can be done to solve this problem? A growing number of economic and psychology studies point to the importance of early childhood interventions (or programmes) for reaching childhood development milestones. The critical period before age two or three is considered to be a crucial “window”, during which interventions designed to improve cognitive development can have significant and lasting effects, even into adulthood. There is evidence to suggest that this critical developmental window is being ignored in rural China. Previous research suggests that only 13 percent of parents read or tell stories to their children. There is evidence that many rural Chinese babies live a life of silence, with minimal interaction with their adult caregivers. Indeed, many caregivers fully admit to not engaging with their young children as much as they might. “Why would I talk to her? She can’t understand me yet.” is a common response to questions about why they are not interacting with their children. Officials at China’s National Health & Family Planning Commission (NHFPC) have taken note of this issue, and are eager to take action. They have embraced the idea of village-based parenting centers as a way of bringing parental training into the areas most in need of assistance. The NHFPC has already committed both local cadres (i.e. government) and financial resources towards the parenting center project. Now, they have approached a research team to help them identify the best way in which to design and implement the village-based centers. The aim of this study is to identify the best way to develop these village-based parenting centers and measure the impact that these centers have on parental knowledge and behavior and, most importantly, on child development outcomes

Who can participate?

All babies aged 6-24 months and their caregivers (for example, parents) who live in a participating village.

What does the study involve?

Participating villages are randomly allocated into one of two groups. Those in group 1 are allocated a parenting center. Those in group 2 (control group) are not. All caregivers and their children aged 6-24 months are invited to attend a weekly parenting training program. Caregivers are taught how to interact with their children in ways that could improve their cognition, language, social-emotional, and motor skills. They also have access to a variety of age-appropriate toys in the parenting center, and are shown how to use these toys for playing, talking, and singing activities with their child. Caregivers are also taught to read to their child and given access to a small library of children's books based at the parenting center. Data collected for the study include measuring how much the carer knows about best parenting practices, their attitudes and how they behave towards best parenting practices, the and children's cognitive, motor, and language development. The study takes place over 21 months.

What are the possible benefits and risks of participating?

This study is expected to benefit those children whose caregivers participate in the parenting intervention. By directly engaging with their children more, it is expected that children's cognitive, language, and motor outcomes will improve. It is hoped that the knowledge caregivers gain from participating in the parenting intervention can also be applied to improving direct engagement with other children and grandchildren living in the sample households. If proven successful, this curriculum has the potential to be upscaled to cover all households in poor areas of rural China. There are no risks associated with taking part in the study.

Where is the study run from?

Shaanxi Normal University, Xi'an (China)

When is the study starting and how long is it expected to run for?

November 2015 to August 2017

Who is funding the study?

1. UBS Optimus Foundation
2. Porticus Foundation

Who is the main contact?

Ms Alexis Medina

Contact information

Type(s)

Public

Contact name

Ms Alexis Medina

Contact details

616 Serra Street
Encina Hall E501
Stanford

Additional identifiers

Study information

Scientific Title

A cluster-randomized controlled trial to measure the impact of a parenting intervention on child and parent outcomes in rural China

Study objectives

We hypothesize that participation in our parenting intervention will lead to significant improvements in parenting knowledge, parenting behavior, and child development outcomes.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Stanford University Institutional Review Board Protocol

Primary study design

Interventional

Study design

Single-centre, interventional randomized controlled trial

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Parenting attitudes, knowledge, and practice among rural Chinese caregivers; children's cognitive, language, motor, and social-emotional development.

Interventions

The project will be run as a randomized controlled trial with one intervention group and a control group with no intervention. Parenting centers will be based in a central location in each village, and all caregivers living in the village with children aged 6-24 months will be welcome to drop by at any time during regular operating hours. The parenting centers will be based in re-purposed office spaces that will be renovated to be child friendly (e.g. colorful walls, non-lead-based paint, soft floors). All parenting centers will include a central playroom, will be the same size, and have the same types of toys.

The parenting curriculum that will be used in the parenting centers has been carefully developed according both to child development needs, and to the local environment in rural China. It consists of weekly interactive lessons targeting caregivers of babies aged 6 to 36 months (124 lessons total). Each month consists of activities (involving both caregivers and children) designed to teach caregivers how to interact with their children in ways that stimulate development in four dimensions considered essential by child development experts:

1. Cognitive

2. Motor
3. Language
4. Social-emotional development

This parenting curriculum has already undergone preliminary field testing and evaluation in rural China by our government partners at the National Health & Family Planning Commission (NHFPC) and our own evaluation team. It is loosely based on the "Jamaica curriculum" developed by Sally Grantham-McGregor and adapted to many different underdeveloped settings around the world, but it is fully designed and developed for a rural Chinese population, and is owned and copyrighted by the NHFPC.

Work on the full-scale RCT should begin in November, 2015. It is anticipated the parenting intervention will continue for 21 months, through August, 2017.

A sample of all households in the village with children aged 6-24 months will be selected for participation in the evaluation surveys. All data on primary outcomes will be collected from these households.

Intervention Type

Behavioural

Primary outcome(s)

1. Children's cognitive, language and motor development (as measured by the Bayley Scales of Infant Development—BSID)
2. Children's social-emotional development (as measured by the Ages & Stages Questionnaire)

Measured prior to treatment assignment (baseline), and at the conclusion of all interventions (endline).

Key secondary outcome(s)

1. Caregiver attitudes, knowledge, and behavior
2. Child anthropometrics and micronutrient status (as measured by a HemoCue 201+ technology fingerprick blood test for hemoglobin levels)

Measured prior to treatment assignment (baseline), and at the conclusion of all interventions (endline).

Completion date

15/08/2017

Eligibility

Key inclusion criteria

All babies aged 6-24 months at the start of the study (and their caregivers) who live in the sample villages

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Mixed

Sex

All

Key exclusion criteria

We are not including rich, urban areas in the randomized selection. These areas are not known to have large problems with child development.

Children found in the initial blood test to be severely anemic will be excluded (and sent to a doctor for treatment).

Date of first enrolment

15/11/2015

Date of final enrolment

15/08/2016

Locations

Countries of recruitment

China

Study participating centre

Shaanxi Normal University

Xi'an

China

710119

Sponsor information

Organisation

Rural Education Action Program (REAP), Stanford University

ROR

<https://ror.org/00f54p054>

Funder(s)

Funder type

Charity

Funder Name

UBS Optimus Foundation

Funder Name

Porticus Foundation

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Available on request