

Caregiver Mental Health and Early Childhood Parenting Interventions in Rural China

Qi Jiang

PhD Candidate, UC Berkeley School of Public Health

Research Affiliate, Stanford REAP (Rural Education Action Program)

Early childhood developmental delays and caregiver mental health challenges are both prevalent in rural China

- 45% of children under age 3 were at risk of **cognitive** delay, and 46% were at risk of **language** delay (Emmers et al., 2021)
- 25% of caregivers reported **depressive** symptoms, 29% reported anxiety symptoms, 16% reported stress symptoms (Wang et al., 2021)

While early childhood parenting interventions are expanding in rural China, caregiver mental health remains understudied

How does caregiver mental health shape early childhood parenting interventions?

1. How did early childhood parenting interventions affect caregiver mental health?
2. How did caregiver mental health moderate the effectiveness of ECD interventions on child development outcomes, and why?

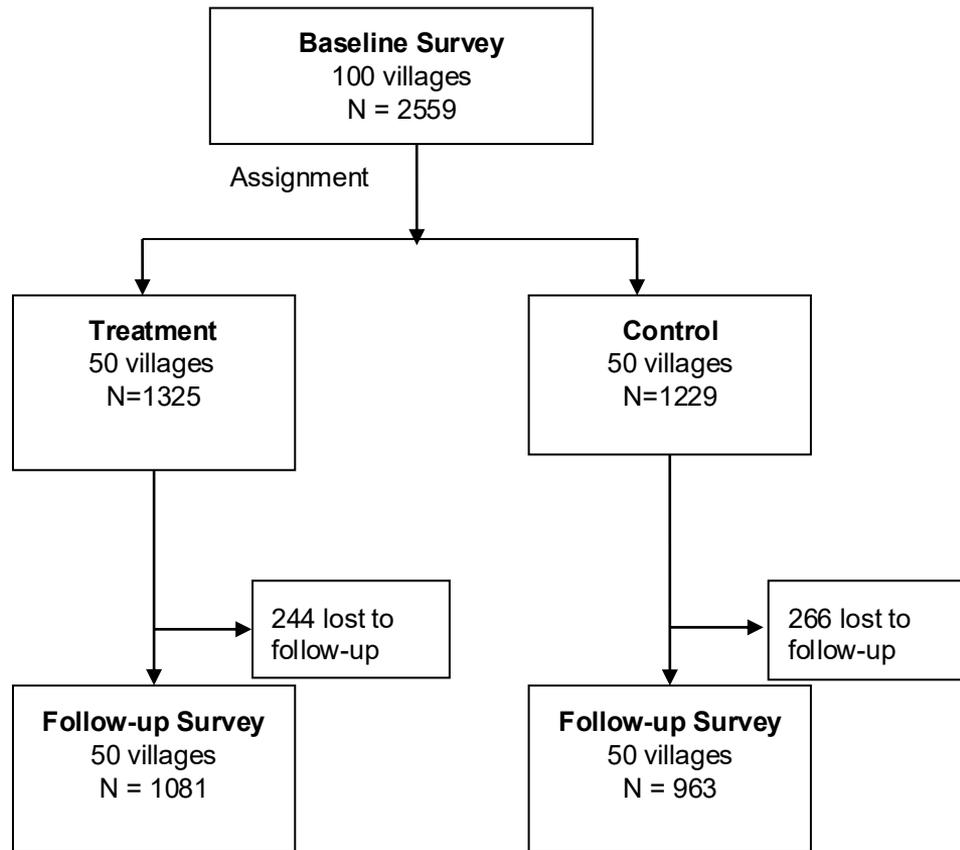
Data: A clustered-RCT in 100 rural villages

50 treatment villages + 50 control villages

Inclusion criteria:

- Children aged **6-24 months** and their primary caregivers (usually mothers or grandmothers)

2040 caregiver-child dyads were included in the study



1-year Intervention: parenting centers at treatment villages



Uniform setting

- **Free play area** with child-friendly decorations, toys, and children's books
- **Weekly one-on-one parenting sessions** delivered by community health workers
 - Curriculum adapted from *Reach Up and Learn*
- Weekly **group activities** delivered by village peer mothers
- **Did NOT target caregiver mental health**



Previous findings on its evaluation found significant effects on child development index and stimulating parenting practices (Sylvia et al., 2022)

Question 1

What were the effects of parenting centers on caregiver mental health?

The effects of parenting centers on caregiver mental health

1. **No significant average effects** on caregiver depressive, anxiety, or stress symptoms
2. Heterogenous effects emerged across subgroups:
 - By household assets: **depressive** symptoms **decreased** among caregivers from **higher-asset** households but **increased** among those from **lower-asset** households
 - By caregiver type: **anxiety** symptoms increased among **mothers**, with no effects among grandmothers

DOI: 10.1111/cdev.13782

EMPIRICAL ARTICLE

CHILD DEVELOPMENT

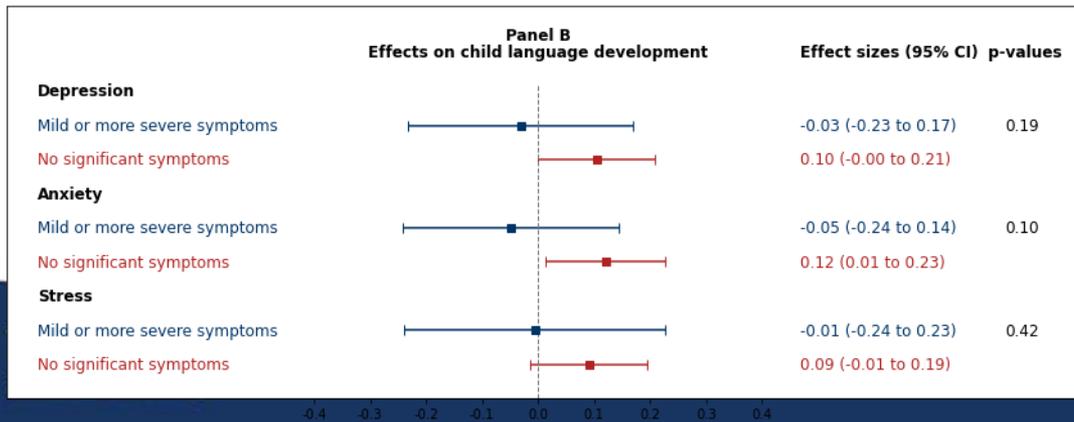
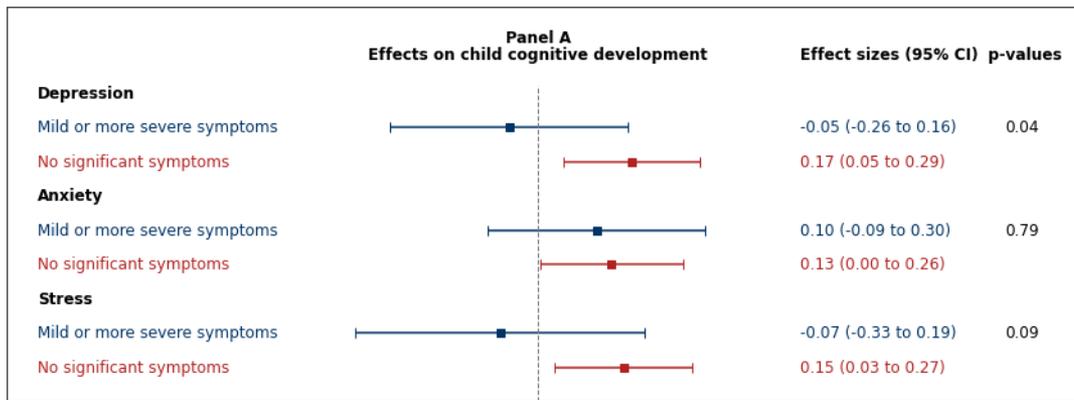
Parenting centers and caregiver mental health: Evidence from a large-scale randomized controlled trial in China

Qi Jiang¹ | Sarah-Eve Dill¹  | Sean Sylvia² | Manpreet K. Singh^{3,4} | Xinshu She³ |
Eric Wang¹ | Alexis Medina¹ | Scott Rozelle¹

Question 2A

Did caregiver mental health moderate the intervention effects on child developmental outcomes?

Caregiver mental health symptoms moderated the intervention effects on child cognitive and language development



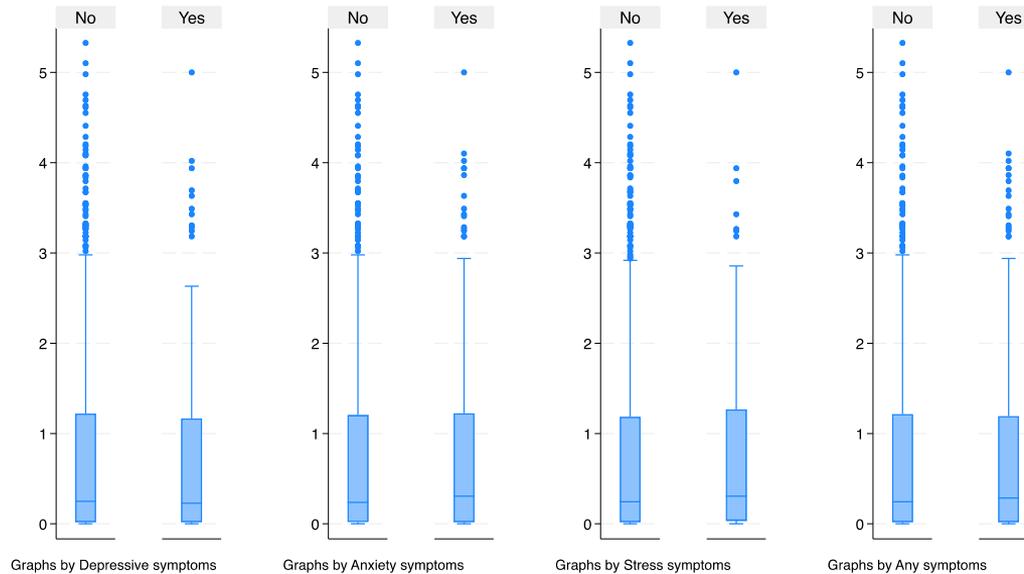
The intervention **increased** development outcomes **only** for children whose **caregivers did not have** depressive or anxiety symptoms

Question 2B

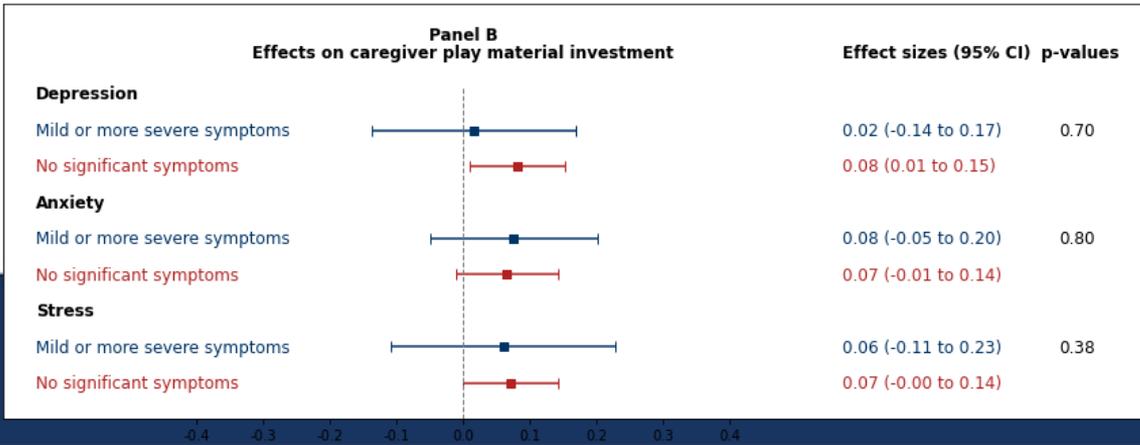
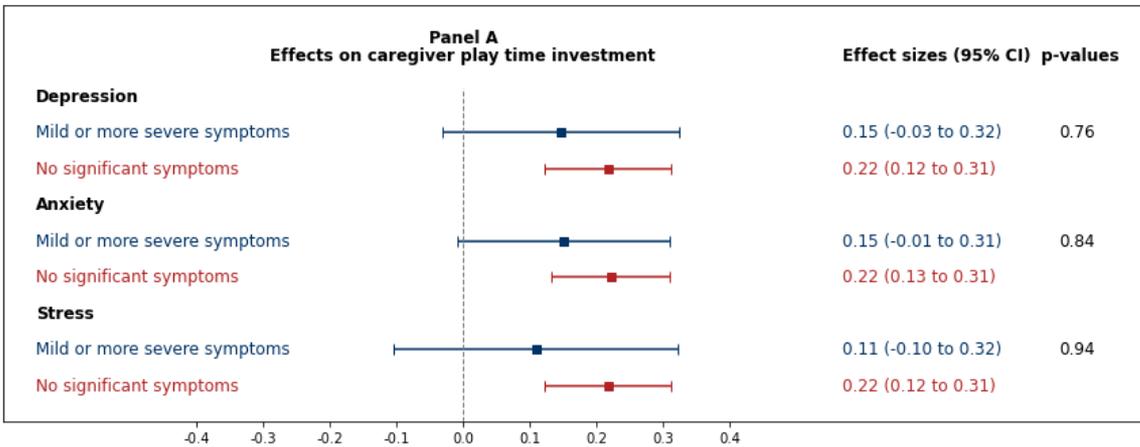
How did caregiver mental health moderate the intervention effects?

No clear differences in the distribution of center attendance by caregiver mental health symptoms

Distributions of Weekly Attendance Encounters by Caregiver Mental Health Symptoms

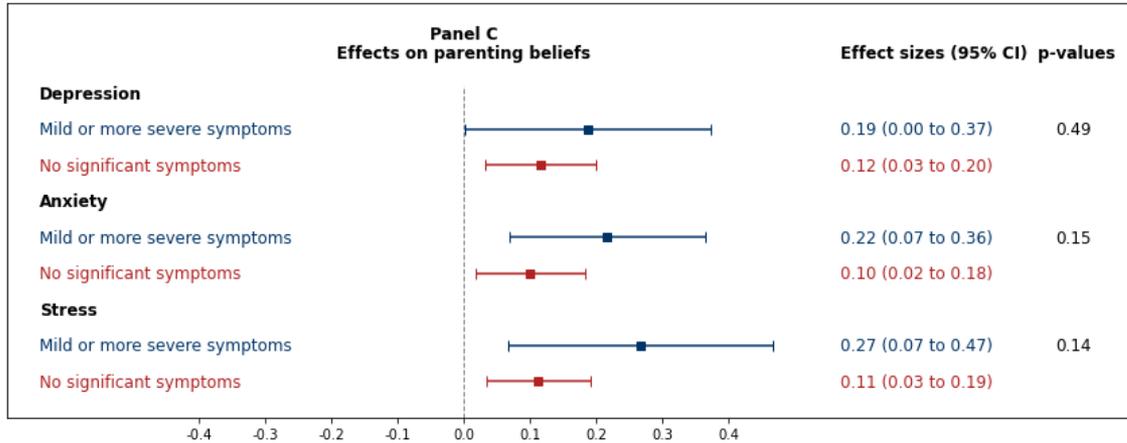


Caregiver mental health symptoms moderated the intervention effects on stimulating parenting practices



The intervention **increased** play time and play material investment among caregivers who **did not** have mental health symptoms

The intervention improved parenting beliefs regardless of caregiver mental health symptoms



Caregiver mental health did not moderate the intervention effects on parenting beliefs

Conclusion and Discussion

1. Parenting interventions without a targeted mental health component **may not improve** caregiver mental health and may even have **unintended adverse effects**
2. Children whose caregivers didn't report mental health symptoms improved developmental outcomes, whereas **children of caregivers with those symptoms did not** **benefits from the intervention**
 - These effects appeared to be driven by differences in **stimulating parenting practices** rather than center attendance or parenting beliefs

Our findings call for greater investment in promoting caregiver mental health as a critical component of early childhood development interventions in LMICs

Thank you for your attention!

Contact: qi_jiang@berkeley.edu

High prevalence of caregiver mental health symptoms at Baseline

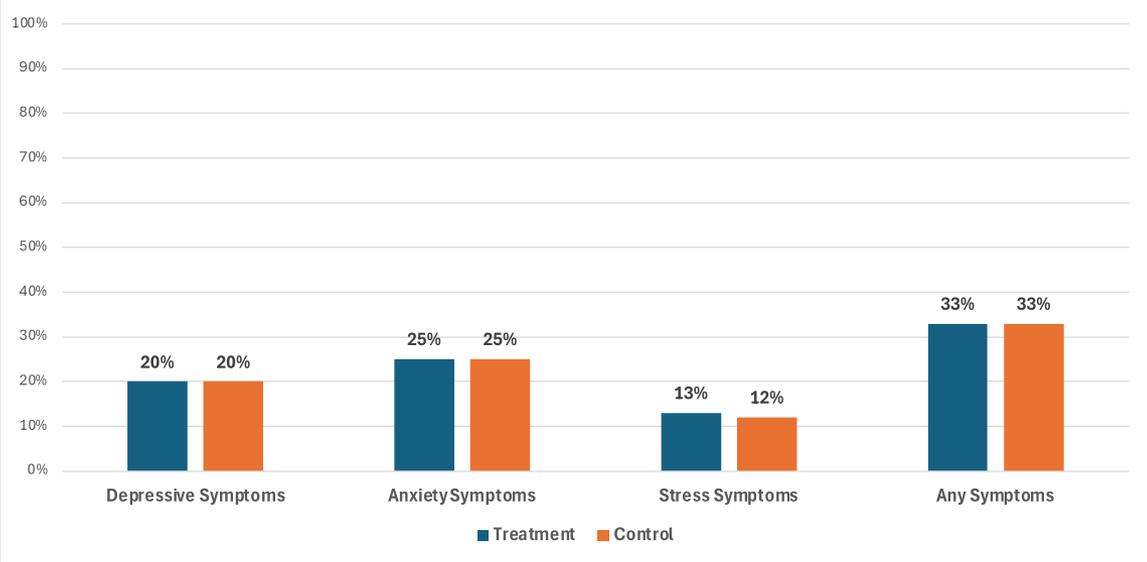


Figure 1. Prevalence of mild or more severe mental health symptoms (N=2044)

Note: Scores at or above the mild threshold were categorized as “Mild symptoms or above”.