

Informing intervention strategies by understanding cultural beliefs and the logic of traditional parenting practices

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Two intervention studies designed to increase parent engagement with infants



In Senegal, West Africa
partnering with Tostan



In East San Jose, partnering
with First Five SCC



Radical insights from neonatology...

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Enculturating science: Community-centric design of behavior change interactions for accelerating health impact



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One of the key reasons for the **failure of interactions to translate into behavior change** is our failure to recognize that the content, context, and process of interactions need to be designed keeping in mind **an organized community system with a very different worldview and beliefs.**

...these are not black boxes, but in fact thoughtfully designed community systems that have evolved over many years guided by a certain worldview and a common social purpose.

(Kumar et al. 2015)

Intervention interactions occur between **two different socio-cognitive systems**, not just btw individuals: Thus we need a **systems approach**

- Identifying root beliefs related to newborn care
 - Evil eye & evil spirit
 - Ritual pollution
 - Mothers not empowered to make decisions
- Behavior change management strategy
 - Knowledge
 - Skills
 - Motivation
 - Enabling environment

So what does this have to do with talking to children?



Many infants in the world grow up in very different circumstances

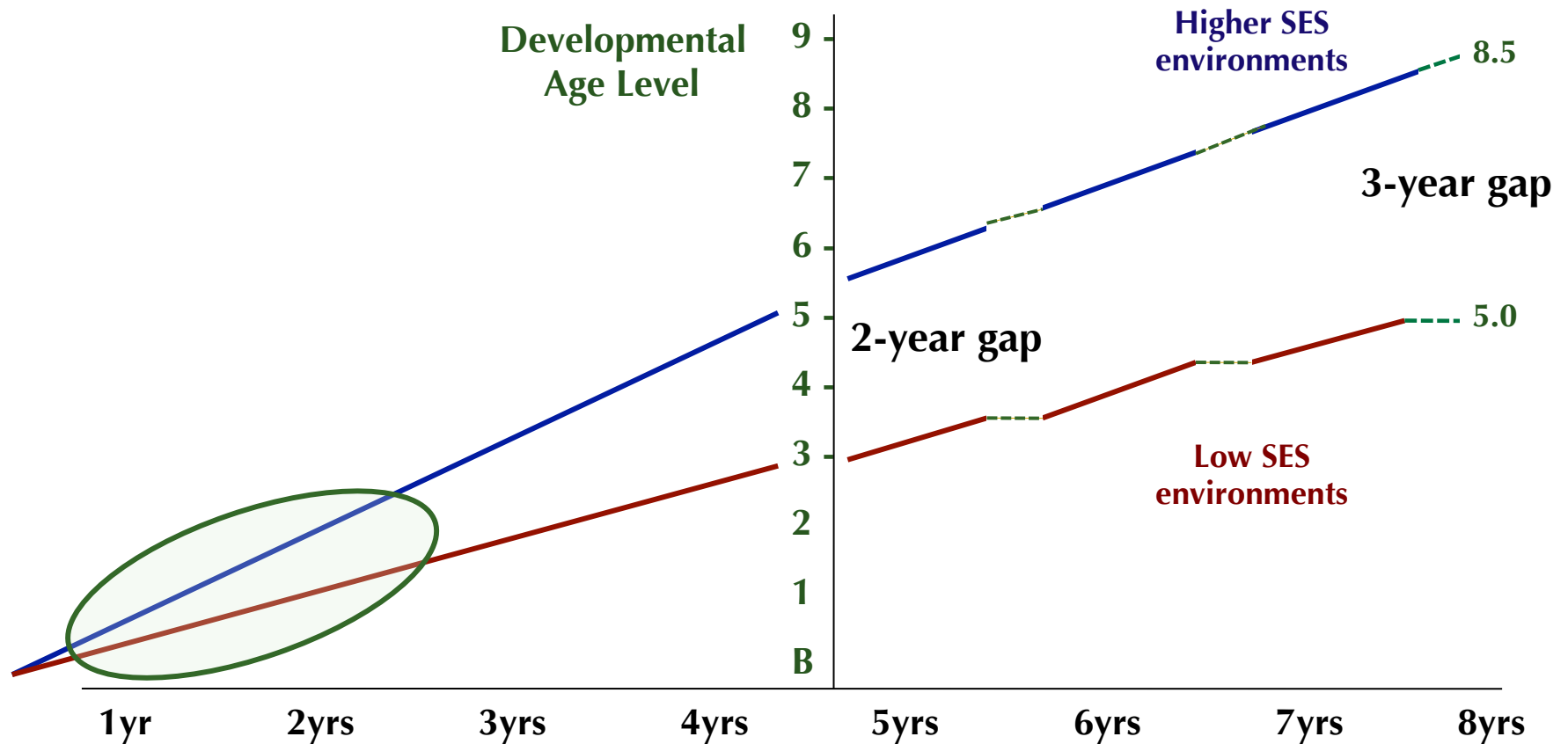


And many infants are cared for extensively by other children



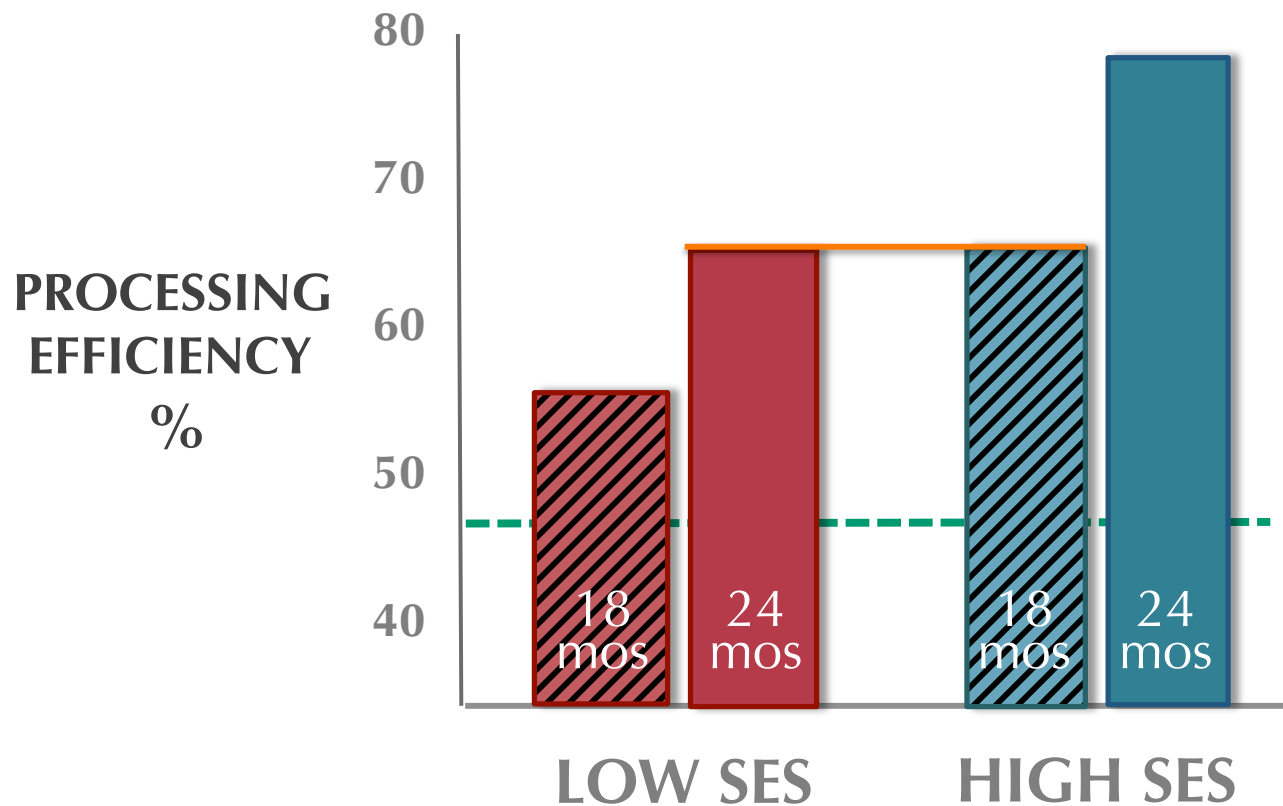
Do we have any business recommending that parents change their cultural beliefs and traditional practices???

In the U.S. the “achievement gap” at 5 years starts early as a gap in learning opportunities



(Ramey & Ramey, 2004)

A **6-month gap** in language processing skill between children from higher- and lower-SES families has emerged by age 24 months



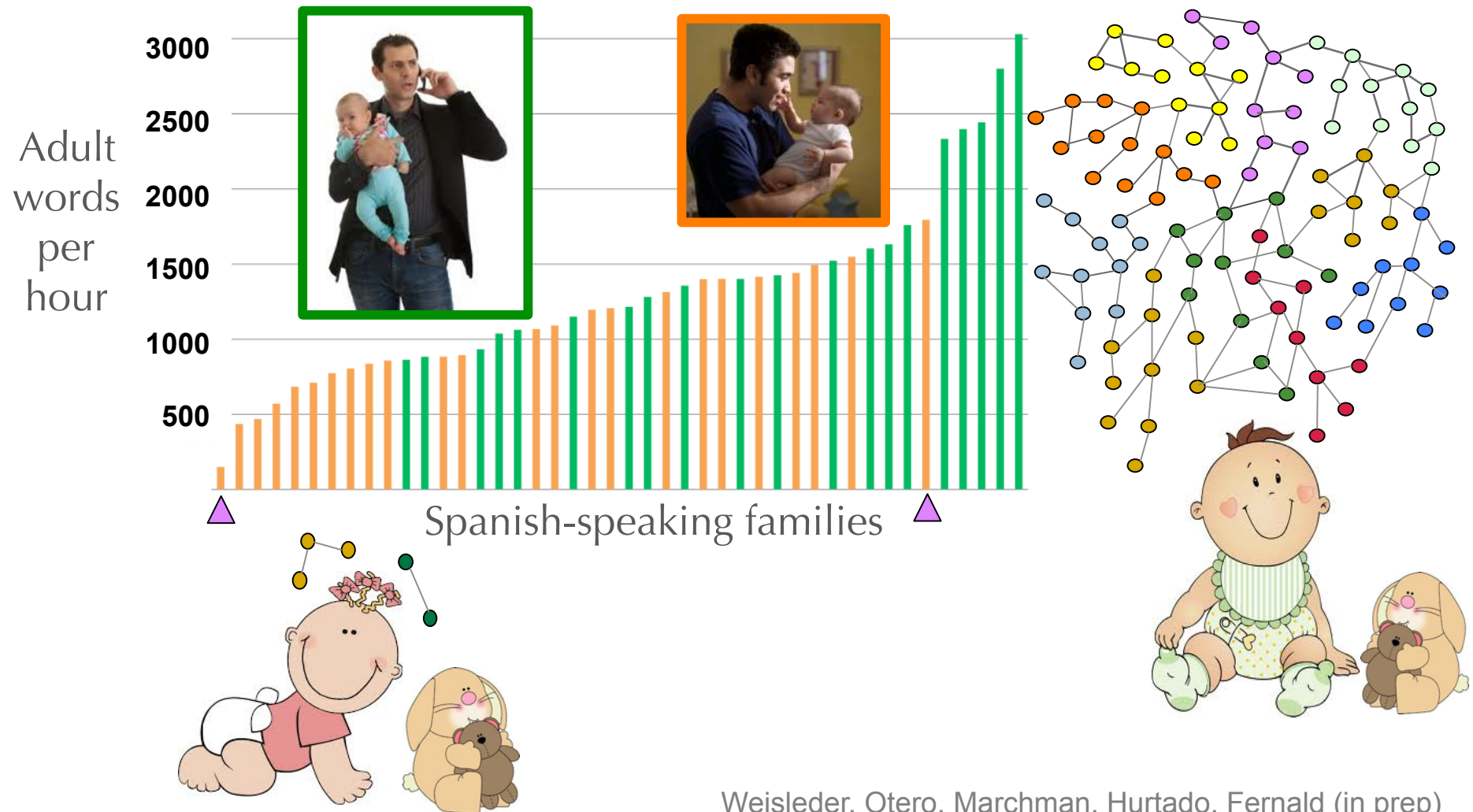
Speech to 18-mo-olds in 43 families over a 10-hr day is linked to later measures of language proficiency

Higher-SES

Latino families in Mexico City

Lower-SES

Latino families in California



Weisleder, Otero, Marchman, Hurtado, Fernald (in prep)

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Tostan's Community Empowerment Program (CEP)



- provides African communities with the knowledge and skills to lead initiatives for social change in a sustainable way
- a 30-month program based on a fundamental respect for human rights
- focus on **social norm change** and “organized diffusion” to other communities

The New York Times

October 16, 2011



Lynsey Addario for The New York Times

Sare Harouna, in southern Senegal, is one of more than 5,000 villages where female genital cutting has been abandoned.



PHOTO: COURTESY TOSTAN

Abandoning female genital cutting (FGC) and child/forced marriage



- lead by grass-roots activists in Tostan's community empowerment programs
- Since 1997, over 5000 communities in Senegal and 7 other countries have publically abandoned these harmful traditional practices

“Jinn” babies



- many mothers believe that **making eye contact with** or **talking to an infant** attracts spirits who replace them with “jinn” or “goblin” infants, endangering the family and community
- “jinn” infants are often abandoned or euthanized by traditional healers as a way of protecting the family
- **How has this worldview been “adaptive” over time in particular cultural contexts?**

Tostan's RPP Intervention:

Renforcement des Pratiques Parentales

Building on Tostan's principles of *emphasizing human rights and community empowerment*, RPP is a 9-month **parent education program** taking place in >200 rural villages throughout Senegal, influencing >6000 children



STEP: The Stanford-Tostan Evaluation Project

- Our charge was to help Tostan assess whether the RPP was successful in **encouraging parents to engage more effectively** with their infants
- And if so, whether **change in parents' behavior would lead to change in children's language skills**



Tostan's Reinforcement of Parenting Practices Program (RPP)



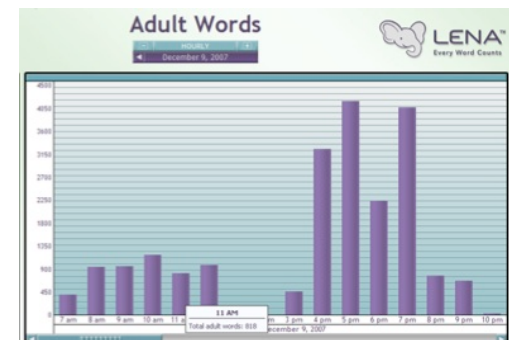
Video observation of caregiver and child



- Enabled us to measure important aspects of adult-child interaction that support language learning:
 - Eye contact
 - Child-directed speech
 - Turn-taking
 - Attention-sharing
 - Object play
 - Object naming

LENA recording of natural language environment from the perspective of the child

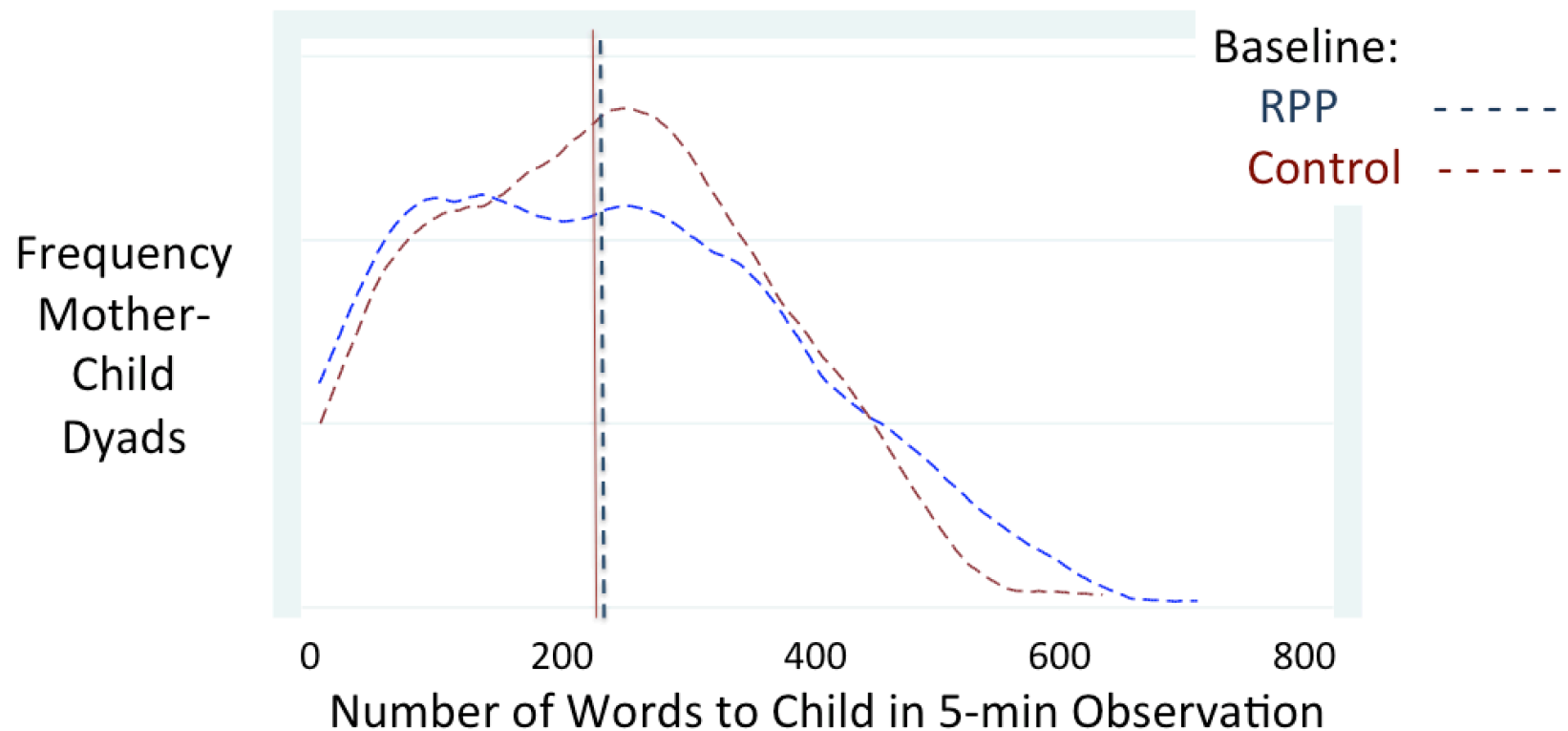
- Enabled us to measure speech from many different sources in the child's daily interactions with other people



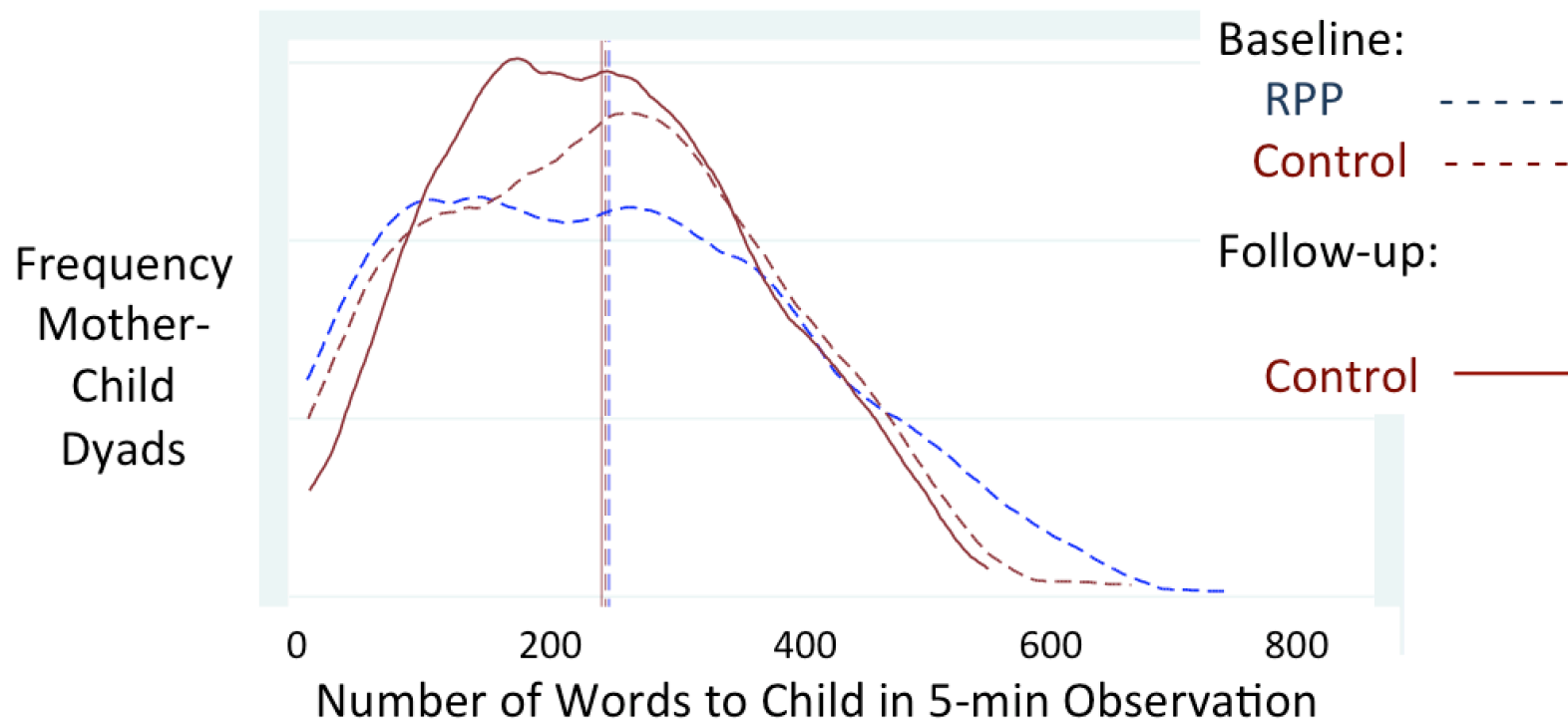


Changes in amount of mothers' and children's speech in the play session

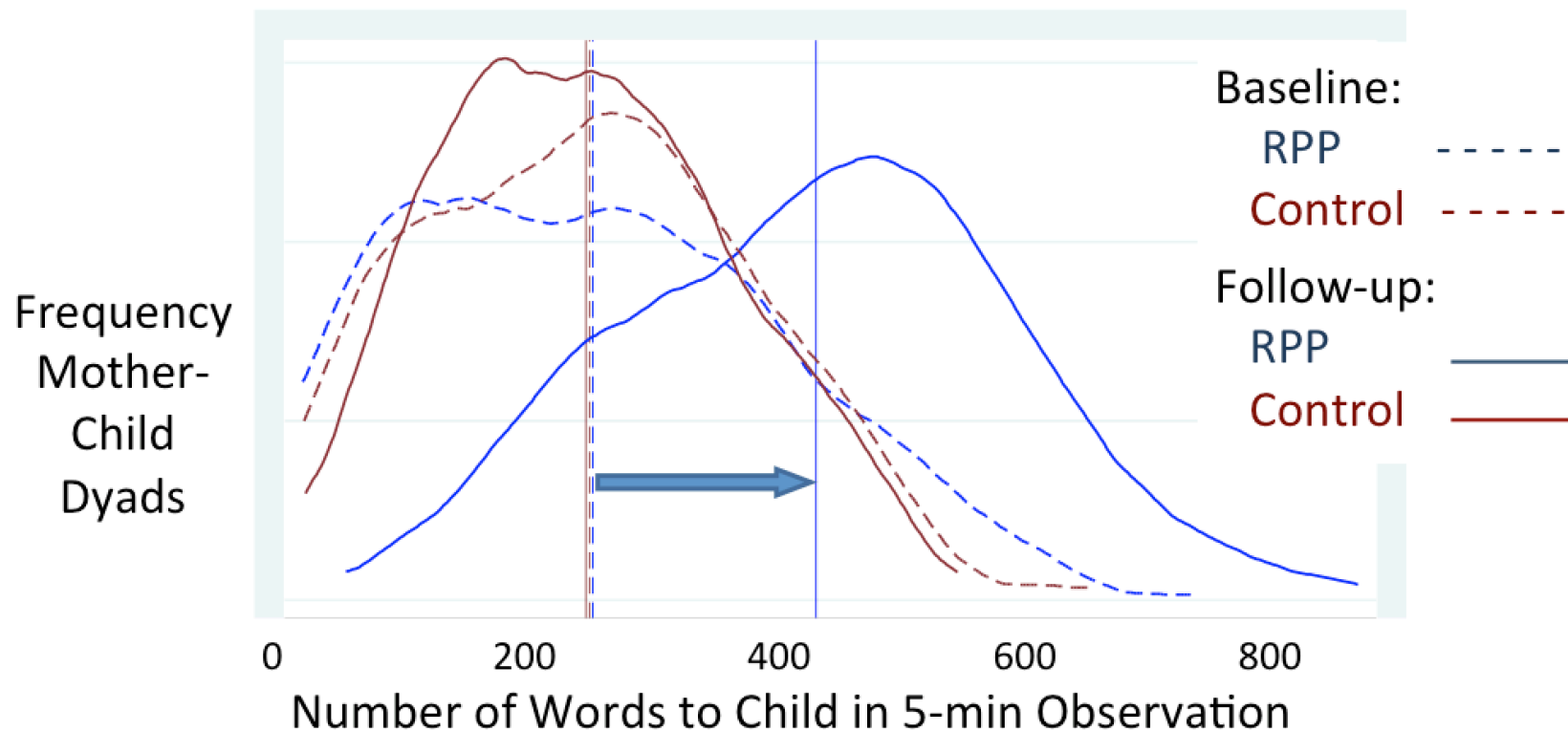
No differences in **amount of child-directed speech** between **RPP Group** and **Control Group** at Baseline



One year later: No change in **amount of child-directed speech** in the **Control Group** at follow-up



One year later: BIG change in **amount of child-directed speech** in the **RPP Group** at follow-up



But when the village is raising the child...



...many toddlers typically spend increasingly less time with the mother over the second year (and more time with other children), so may not experience more enriched verbal interactions overall.

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Habla Conmigo Academy

A child development program for low-SES Spanish-speaking families with children 1 to 4 years (with matched control group)

- Vulnerable Latino population with unique obstacles for preparing children for language growth and school-readiness
- Group workshops and practice thru play
- Focus on building knowledge, skills, motivation, and community

Rigorous evaluation methods

- Direct assessment of **change in mothers' parenting behaviors** and **change in children's language skills**

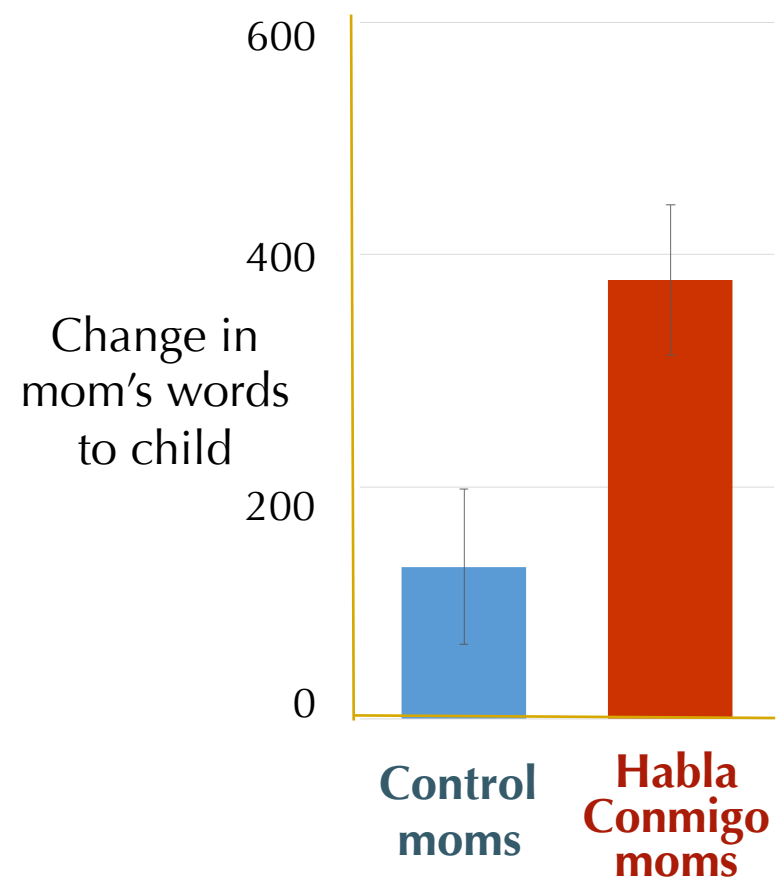
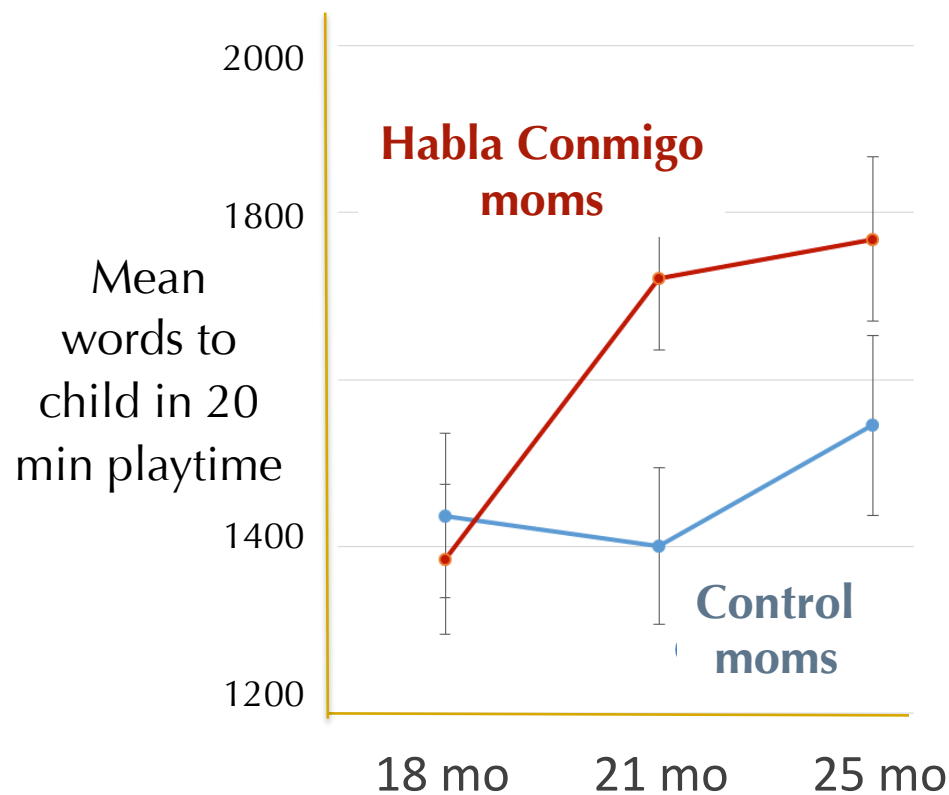




GOALS of the Habla Conmigo Academy

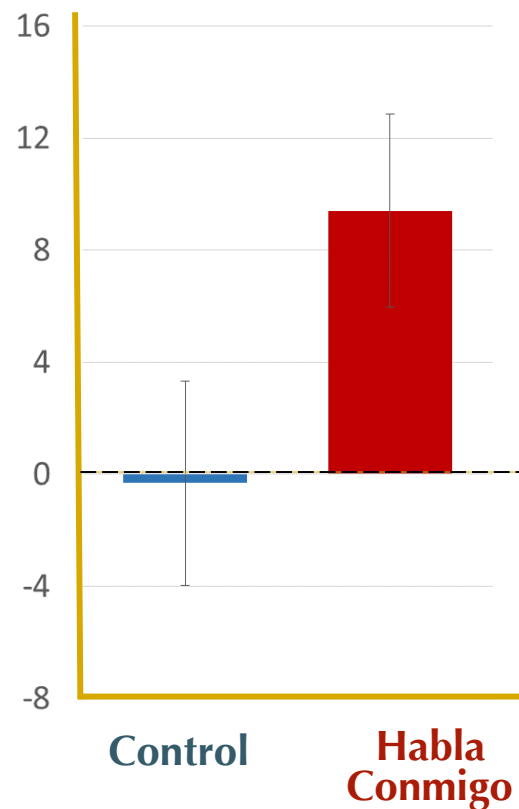
- **Build knowledge:** In 12 group sessions with caregivers, share scientific information about early development, encouraging parents to infer implications for their interactions with children at home
- **Build skills:** Coaching and practice in 8 play sessions with caregivers and children
- **Build motivation:** Encourage parents to Identify cultural barriers to child-centered engagement, using role-play to act out strategies for response
- **Build an enabling environment:** Help parents communicate with each other for support throughout the 3 years of the program.

Amount of child-directed talk increased twice as much for Habla Conmigo mothers as for controls

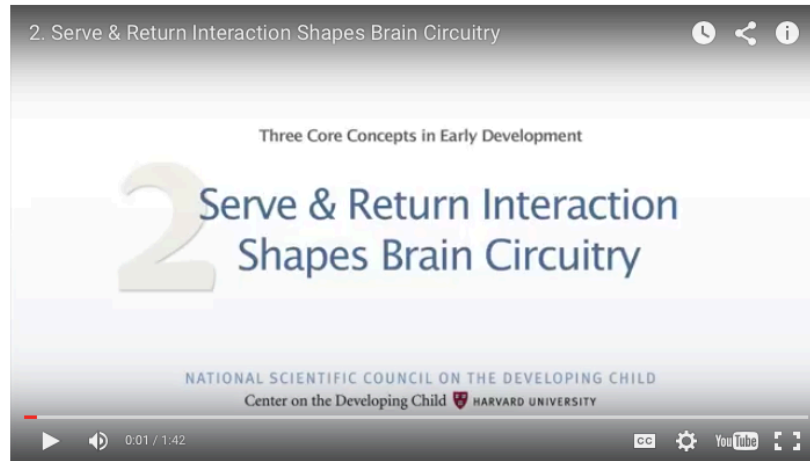


Children's vocabulary scores in the *Habla Conmigo* group increased by 9 percentile points between the ages of 18 and 25 months

Change in children's vocabulary percentile (CDI)



A tennis metaphor...



But providing tips and information to parents is not enough! As in learning to play tennis, learning to engage effectively with infants requires:

- KNOWLEDGE
- SKILL BUILDING
- MOTIVATION
- LOTS OF PRACTICE
- AN ENABLING ENVIRONMENT

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