Financial concerns suppress parents’ speech with their children

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Introduction to the “word gap”: what it is and why it matters
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Words addressed to child

Child vocabulary

Hart & Risley, 1995
Advances in quantifying the natural language environment

LENA DLP sits in children’s front pockets and records up to 16 hours, automatically quantifies:

• Adult words near child
• Child vocalizations
• Back and forth adult-child vocalizations
Interventions around the world aim to train parents to talk with their children.

- Effects of feedback on parent–child language with infants and toddlers in Korea
- Effects of Quantitative Linguistic Feedback to Caregivers of Young Children: A Pilot Study in China
- Evaluation of a LENA-Based Online Intervention for Parents of Young Children
- When Cultural Norms Discourage Talking to Babies: Effectiveness of a Parenting Program in Rural Senegal
- A parent-directed language intervention for children of low socioeconomic status: a randomized controlled pilot study

Pae et al., 2017; Zhang et al., 2015; Weber et al., 2017; Gilkerson et al., 2017; Suskind et al., 2016
SES gradations in child-directed speech across time and space

- Milner 1951
- Hess & Shipman 1965
- Snow et al. 1976
- Barnes et al. 1983
- Hoff-Ginsberg 1991
- Dwyer et al. 2018

1950 Atlanta, GA USA
1960 Chicago, IL USA
1970 Amsterdam, Netherlands
1980 Bristol, England
1990 Parkside, WI USA
2000s Sydney, Australia
Is the “word gap” really about parenting skill or knowledge?

• Very little evidence for a strong link
• Some interventions improve parenting knowledge without increasing child-directed speech long-term

Our hypothesis: financial scarcity might be one cause of parental differences in child-directed speech

• Observational study makes use of natural variation in financial scarcity
• Experimental study induces feelings of resource scarcity
Looking to the data for a cause
Financial scarcity increases at the end of the month

In the last week of the month, Americans:

- Less likely to report having any savings
- Less likely to say they are financially secure
- Less likely to say they have enough savings to replace one month of income

Pew Research Center, 2017
Does child-directed speech decrease at the end of the month?

- children ages 0-3
- 191 children; 1,043 recordings
- 39 hrs/child on average (range: 8-395)
- recorded in 3 different U.S. locations
Parents speak less with their children in the last week of the month
Parents speak less with their children in the last week of the month

- 2.73 fewer conversational turns per hour in the last week of the month
- 306 fewer conversational turns that week
- 15,955 fewer conversational turns that year
Designing an experimental test
Is it really about the experience of scarcity?

- Caregivers and their 3 year-olds
- Randomly assigned to a scarcity or control condition
Caregivers talk less on average in the scarcity condition

- Effects are particularly pronounced when parents reflect on financial scarcity
Conclusions
To close the word gap, close the resources gap?

- Parents seem to talk less when they are affected by financial scarcity
- This might help to explain the prevalence of an SES word gap across time and space
- Possible mechanisms include stress or diminished attention due to the prioritization of a child’s more basic needs
- Interventions may be most successful if they ease barriers in parents’ lives rather than attempting to teach them parenting techniques
THANK YOU

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