

Preschool as a strategy for tackling inequality: *The role of access, quality & accountability*

Stanford CEPA: Education and Inequality in 21st Century America
May 19, 2016

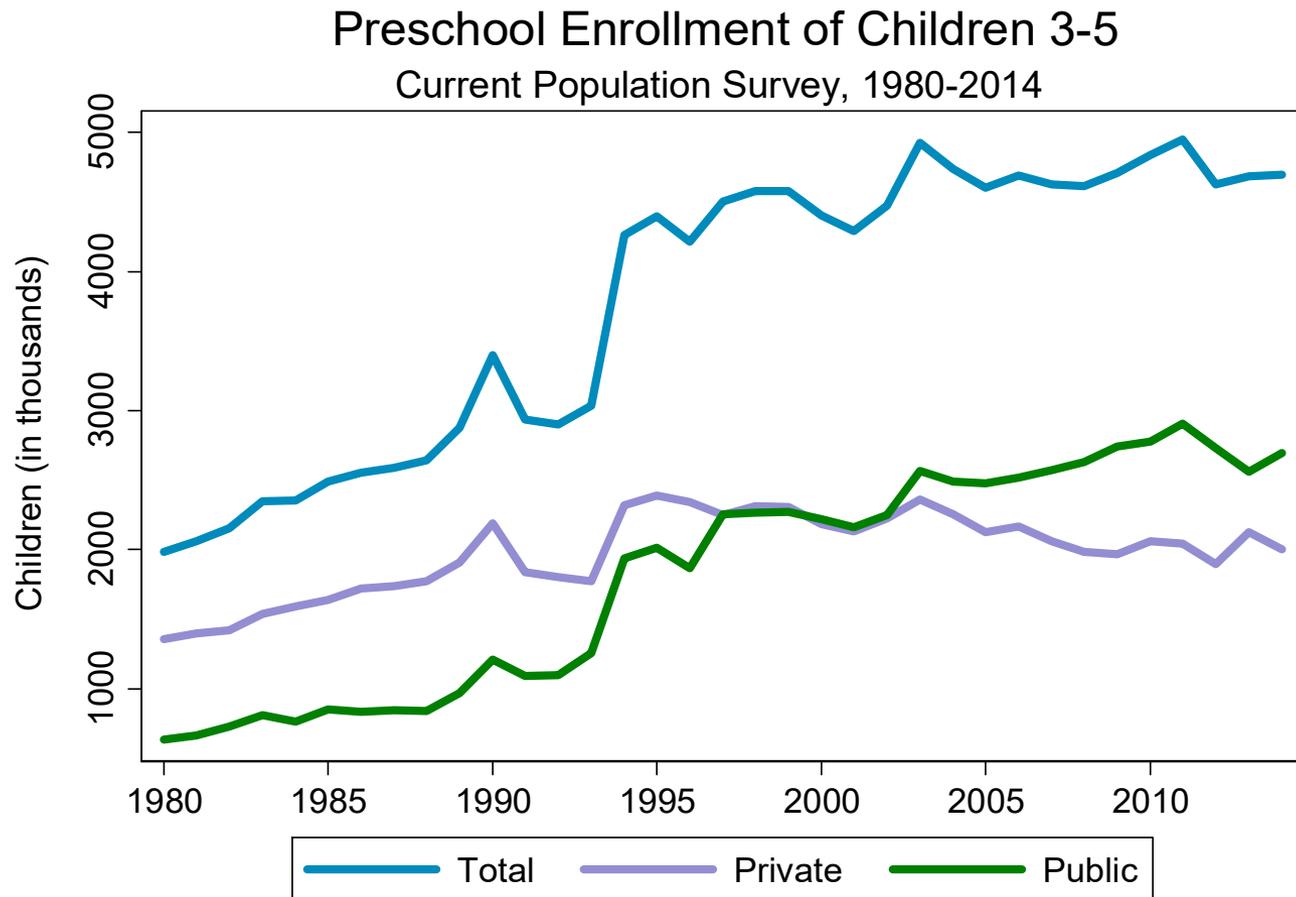
Daphna Bassok



Early achievement gaps are large and persistent

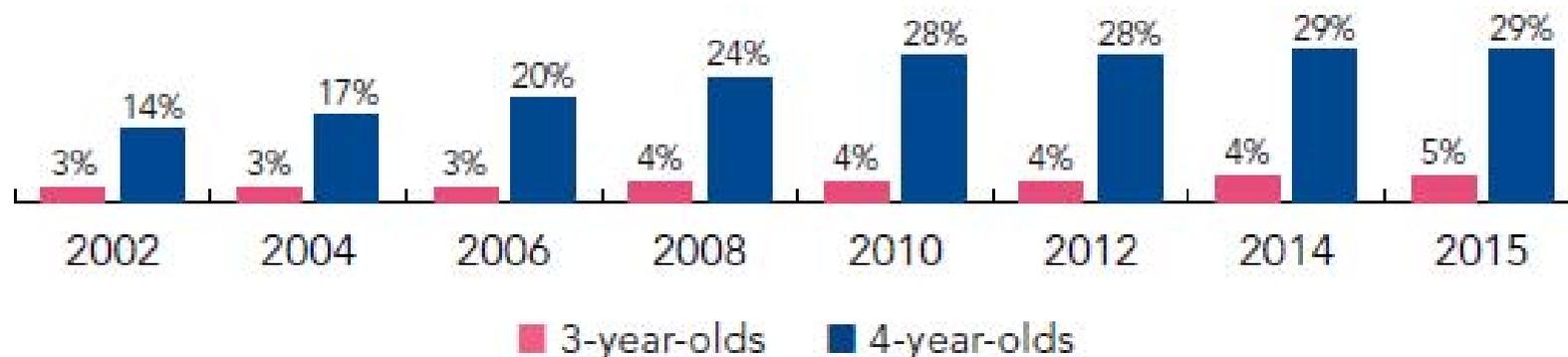
- In 2010, low-income kindergarteners scored more than a standard deviation lower than high-income kindergarteners on both reading and math. (Reardon & Portilla, 2016)
- Large gaps emerge early and are strongly predictive of later life outcomes including achievement, educational attainment, and income. (Chetty et al., 2011; Duncan et al., 2007)
- Early childhood interventions are often seen as a promising strategy to tackle inequality.
- *Investing in disadvantaged young children [...] reduces the inequality associated with the accident of birth and at the same time raises the productivity of society at large. (Heckman & Masterov, 2007)*

Access to preschool, particularly public preschool, has grown rapidly



Enrollment in state preschool has doubled since 2000...

PERCENT OF NATIONAL POPULATION ENROLLED



Between 2002 and 2015 state spending on preschool initiatives nearly doubled from \$2.4 to \$6.2

Have these investments narrowed achievement gaps?

- We don't know.
- What we do know:
 - High-quality early interventions can have large & long-lasting effects.
 - Today's large-scale preschool initiatives tend to yield short-term benefits (and there's mixed evidence on longer-term effects)
 - In recent years program's tend to yield smaller benefits than those from several decades ago.

Slide 5

db2

Need to fix

Bassok, Daphna (db9ec), 5/18/2016

A changing counterfactual

- Treatment contrast generally smaller today
- Most four-year-olds today already experience “formal care”
- Home environments are improving
 - May be improving at differential rates across the income distribution
 - “Parental investment” gaps have expanded dramatically since the 70’s (Murnane & Duncan, 2011)

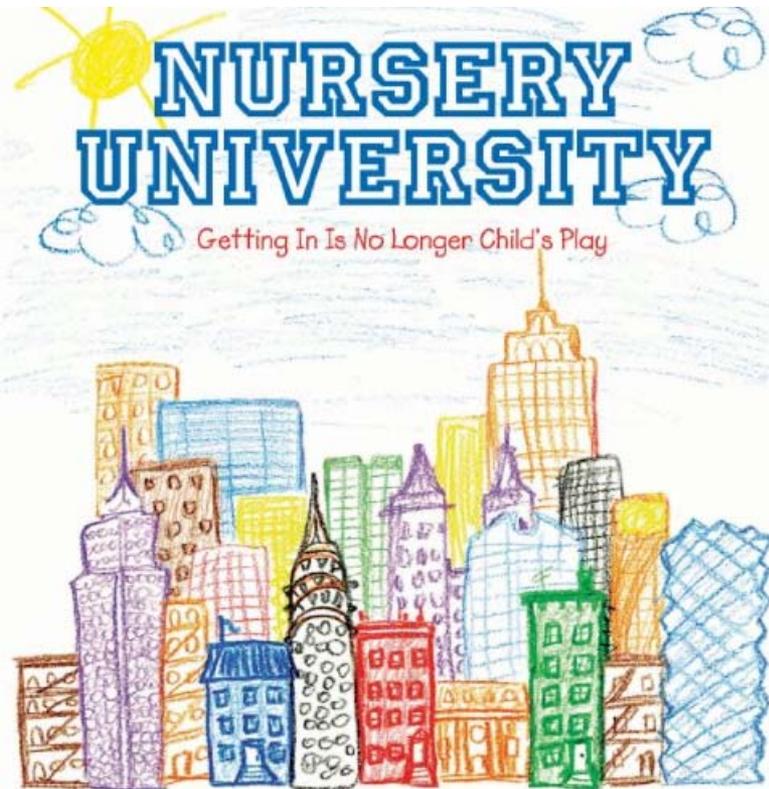
Fast-Tracking to Kindergarten?

By KATE ZERNIKE MAY 13, 2011



Eze Schupfer at Junior Kumon in Battery Park City. James Estrin/The New York Times

ON command, Eze Schupfer reads aloud the numbers on a worksheet in



A Film By Marc H. Simon and Matthew Makar



ARGYLE PRODUCTIONS PRESENTS A PRODUCTION BY ELEMENTARY FILMS "NURSERY UNIVERSITY" FEATURING JULIANA JACKSON, JAYLA NIERON, GHAN AND FRANCESCA
COMING BY SAMIIFI HENRIQUES AND BOB RICHMAN AND CHRIS HA TAN APPROVED BY M. WATANABE MUMFORD AND TIM PATTERSON DIRECTED BY ERIC TAUFEL

Redshirting: Holding Kids Back For An Edge

More parents are "red-shirting" their children in kindergarten—holding them back for a year, hoping they'll have an edge. Does it work? We look.



Jasmin Torres helps classmate Brianna Rameles with a worksheet at the Diloreto Magnet School in New Britain, Conn., Wednesday Feb. 22, 2012. (AP/Charles Krupa)

They call it "redshirting," like college athletes kept on the bench until they're bigger, stronger. Except it's "academic redshirting" – for kindergarten kids. Five-year-olds held out of starting school –

Three questions for the rest of this talk...

1. What has happened to “school readiness” gaps over this period of heightened investment in early childhood?
2. Are changes in access to preschool related to changes in early achievement gaps?
3. [Briefly] Can early childhood accountability efforts aimed at improving program quality— offer a promising strategy for narrowing achievement gaps?

Q1: Have school entry gaps changed over time?

Data: Early Childhood Longitudinal Study (ECLS-K)

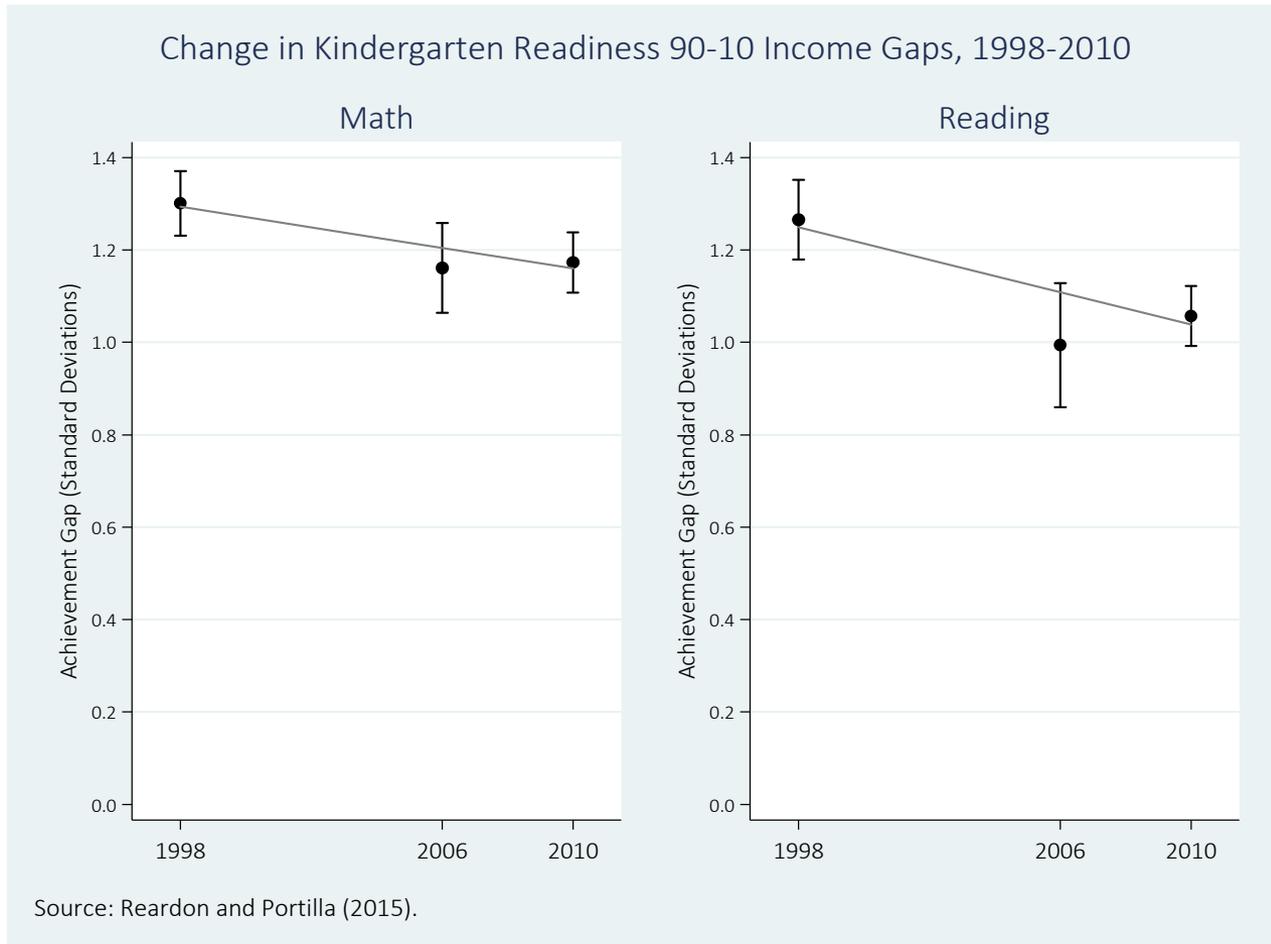
1998 Kindergarten Cohort (N = 16,000)

- Original ECLS-K study, followed students from kindergarten (fall of 1998) through 8th grade

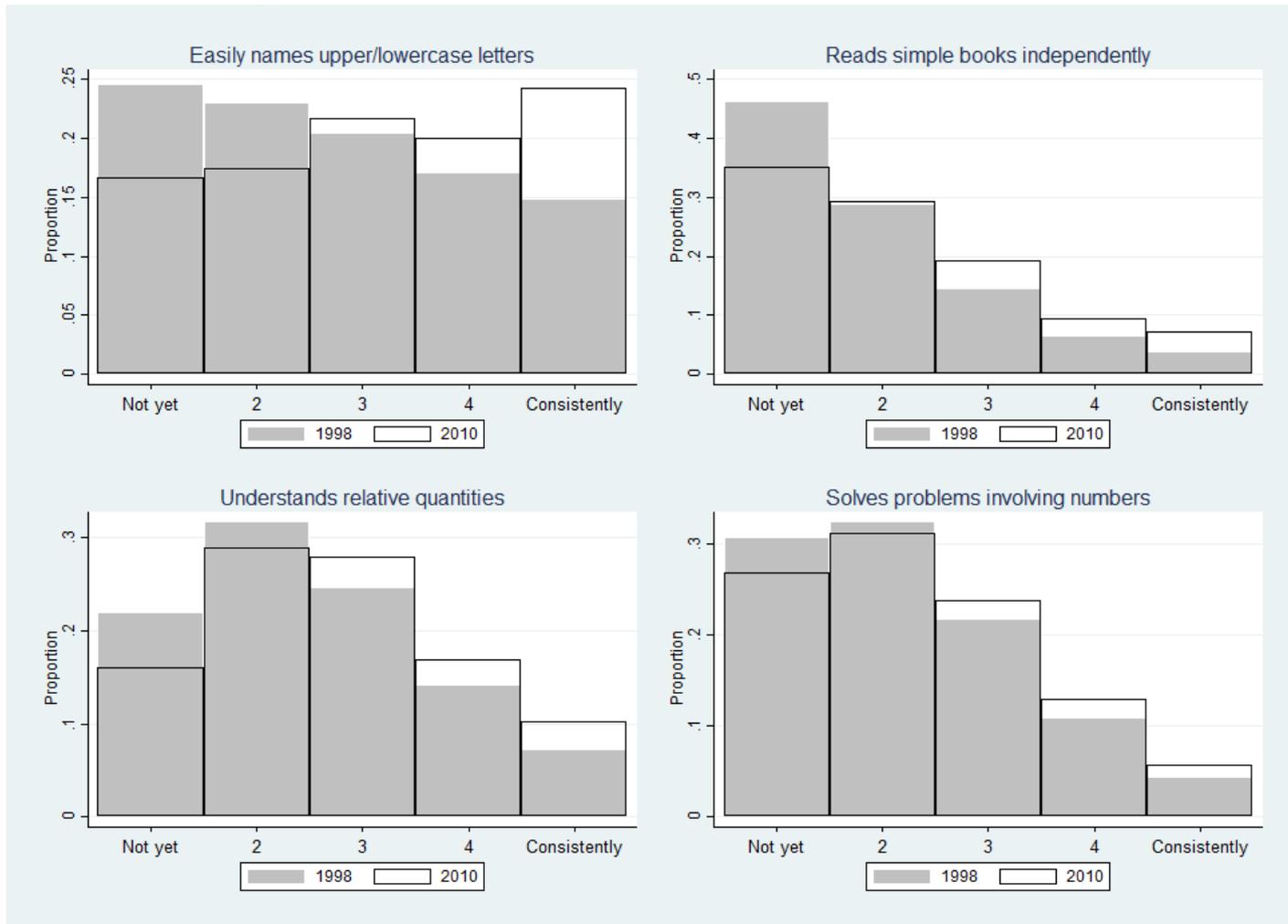
2010 Kindergarten Cohort (N = 13,500)

- Sample of children beginning kindergarten in fall 2010
- Kindergarten-second grade data available, data collection is ongoing

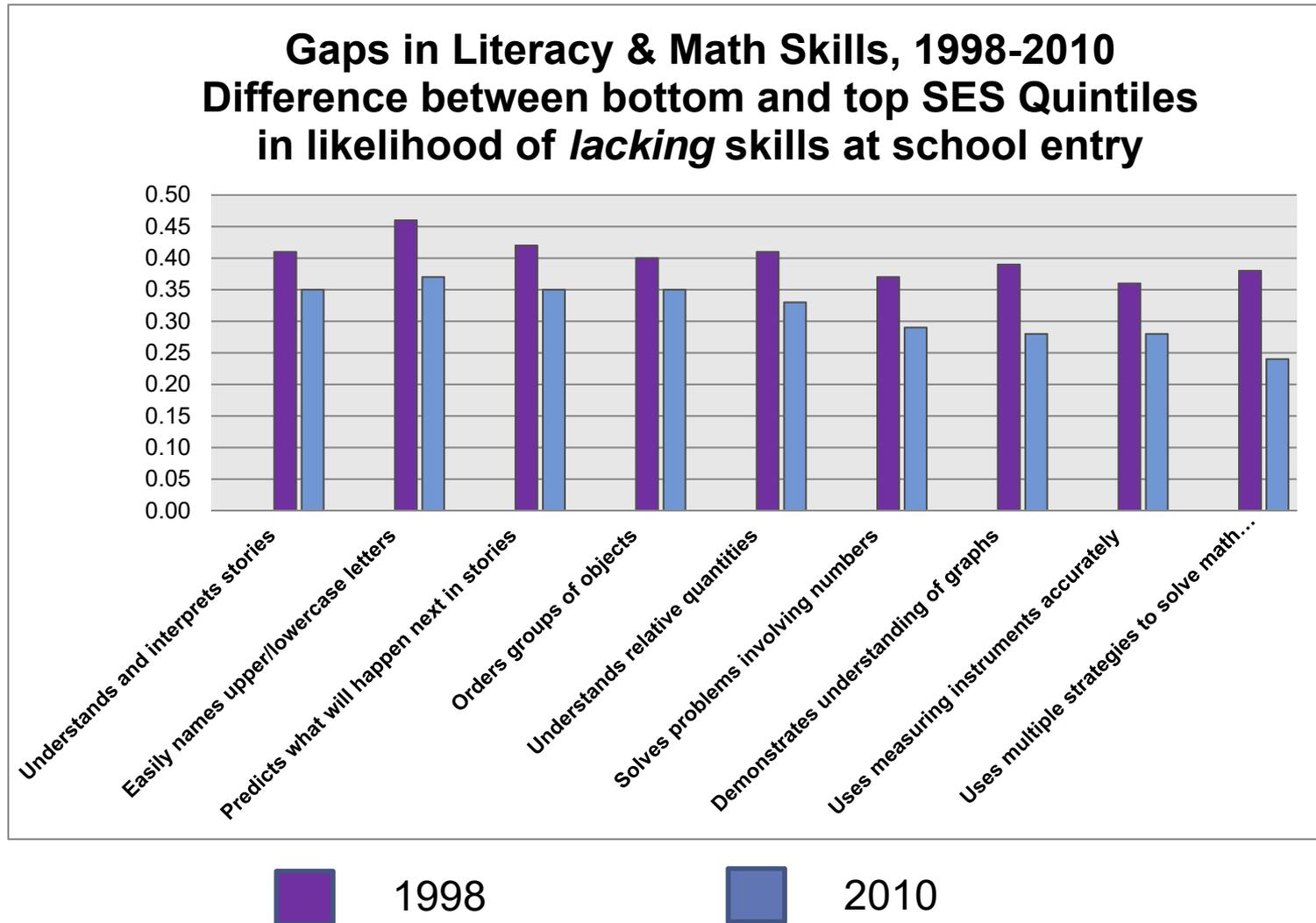
Achievement gaps at school entry have *narrowed* over time...



Over the same period, large increases in teacher-reported school readiness skills



And these changes were particularly pronounced for low-income children

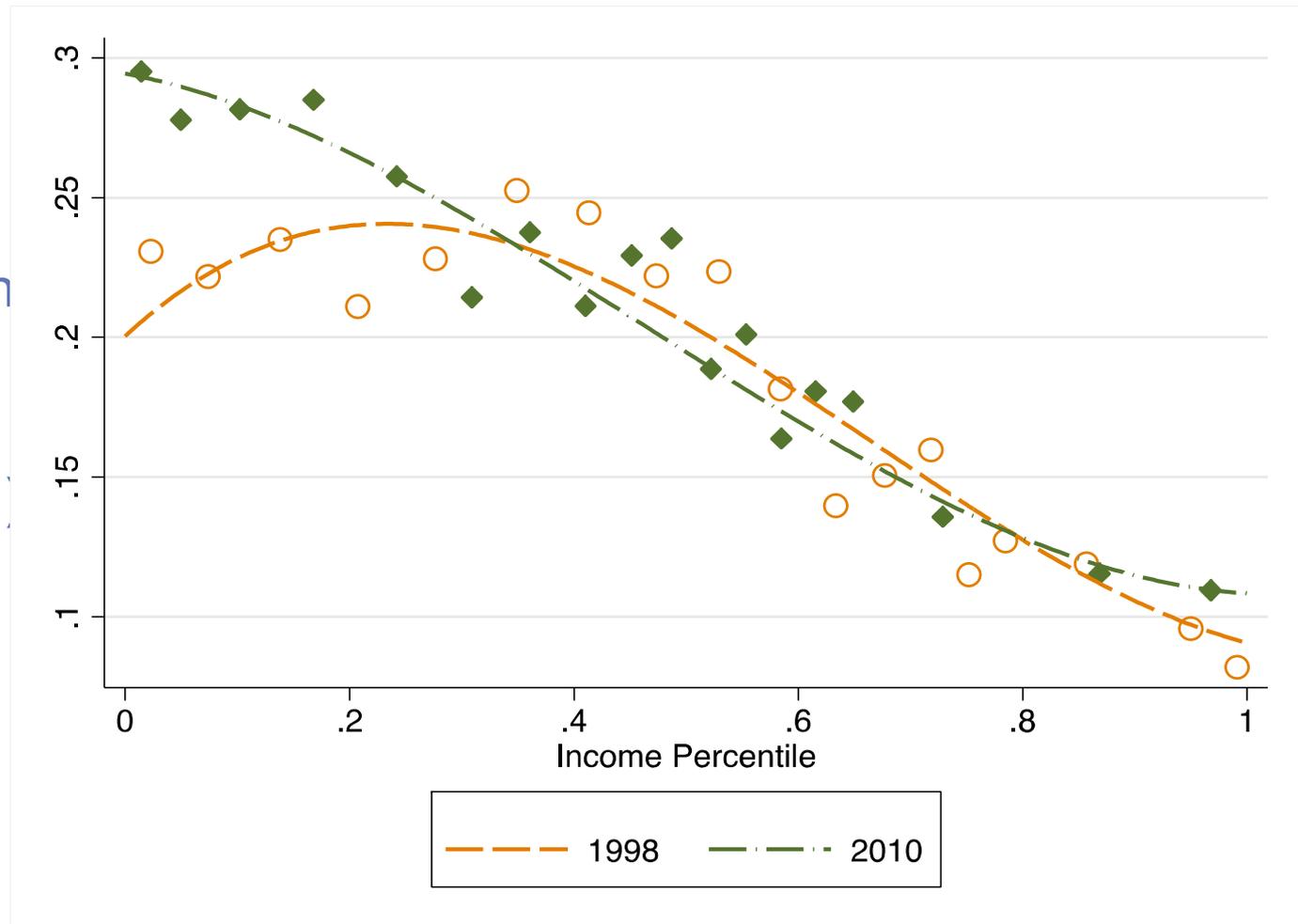


Q2: Are these narrowing achievement gaps related to improved access to public preschool?

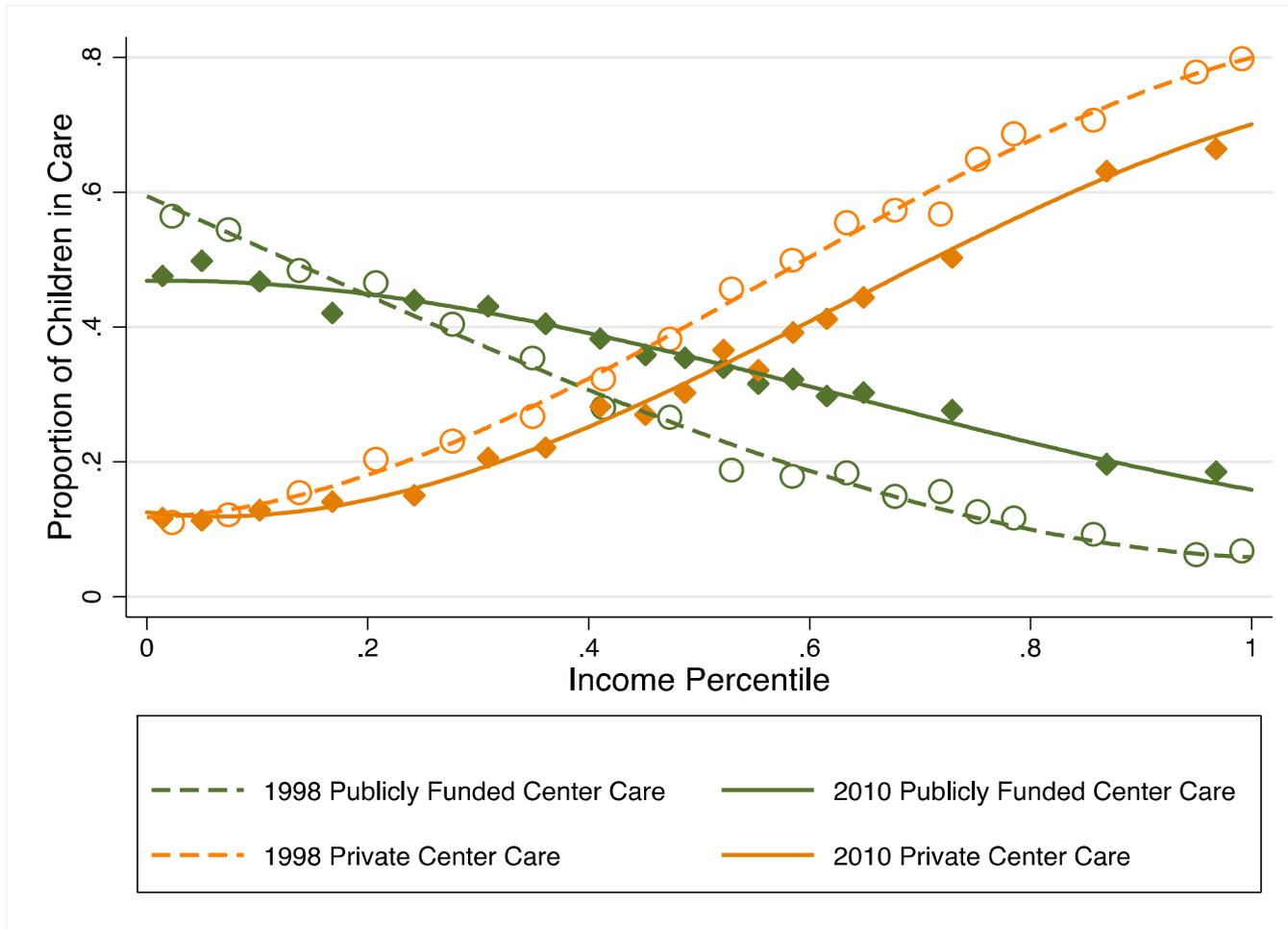
joint work with Jenna Finch, RaeHyuck Lee, Sean F. Reardon, Jane Waldfogel

Low-income children in 2010 are actually *less likely to be in out-of-home care...*

% of children in parental care (year before kindergarten)



Shift from privately-funded to publicly-funded center-based care

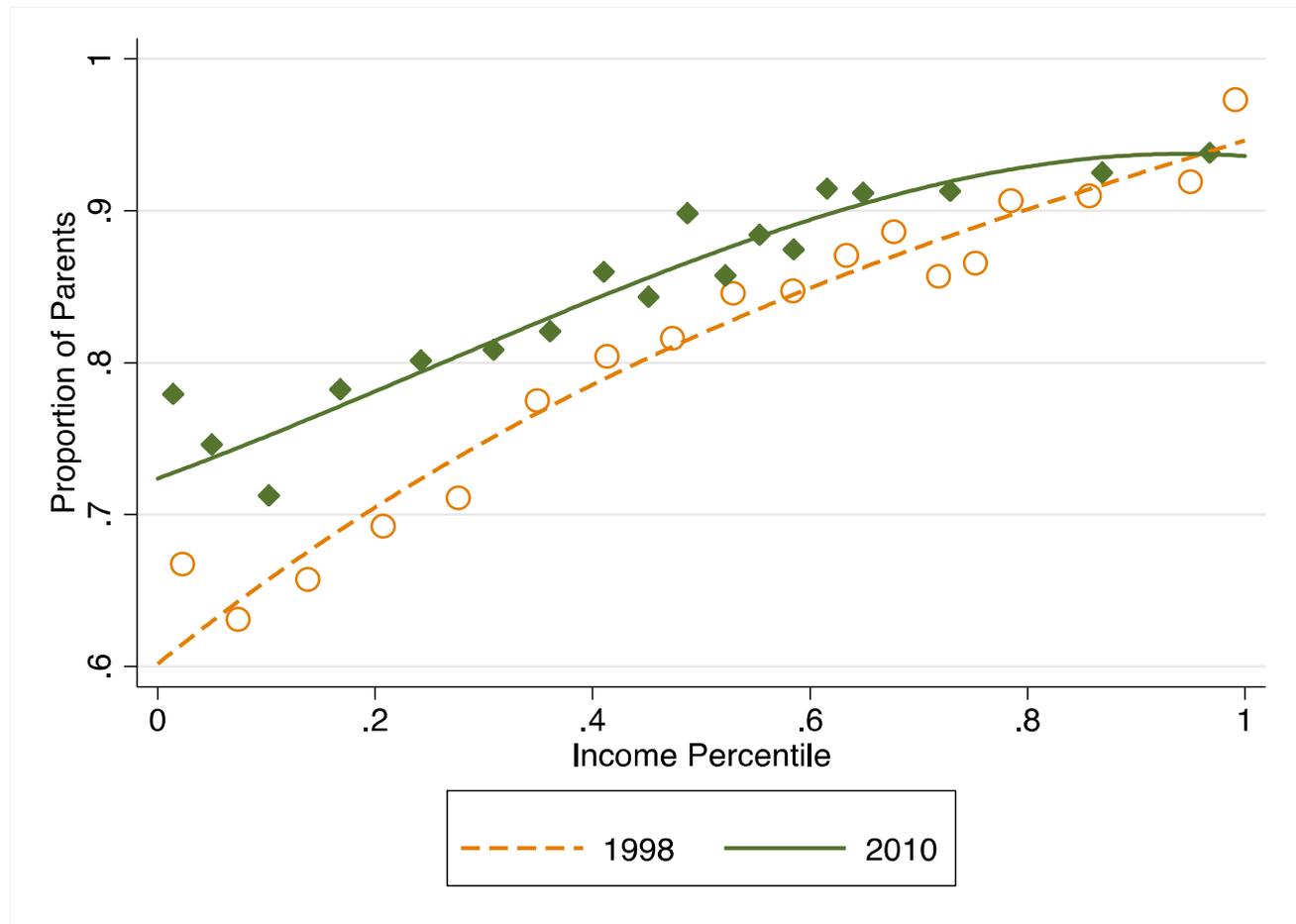


Enrollment patterns do not seem consistent with narrowing gaps...

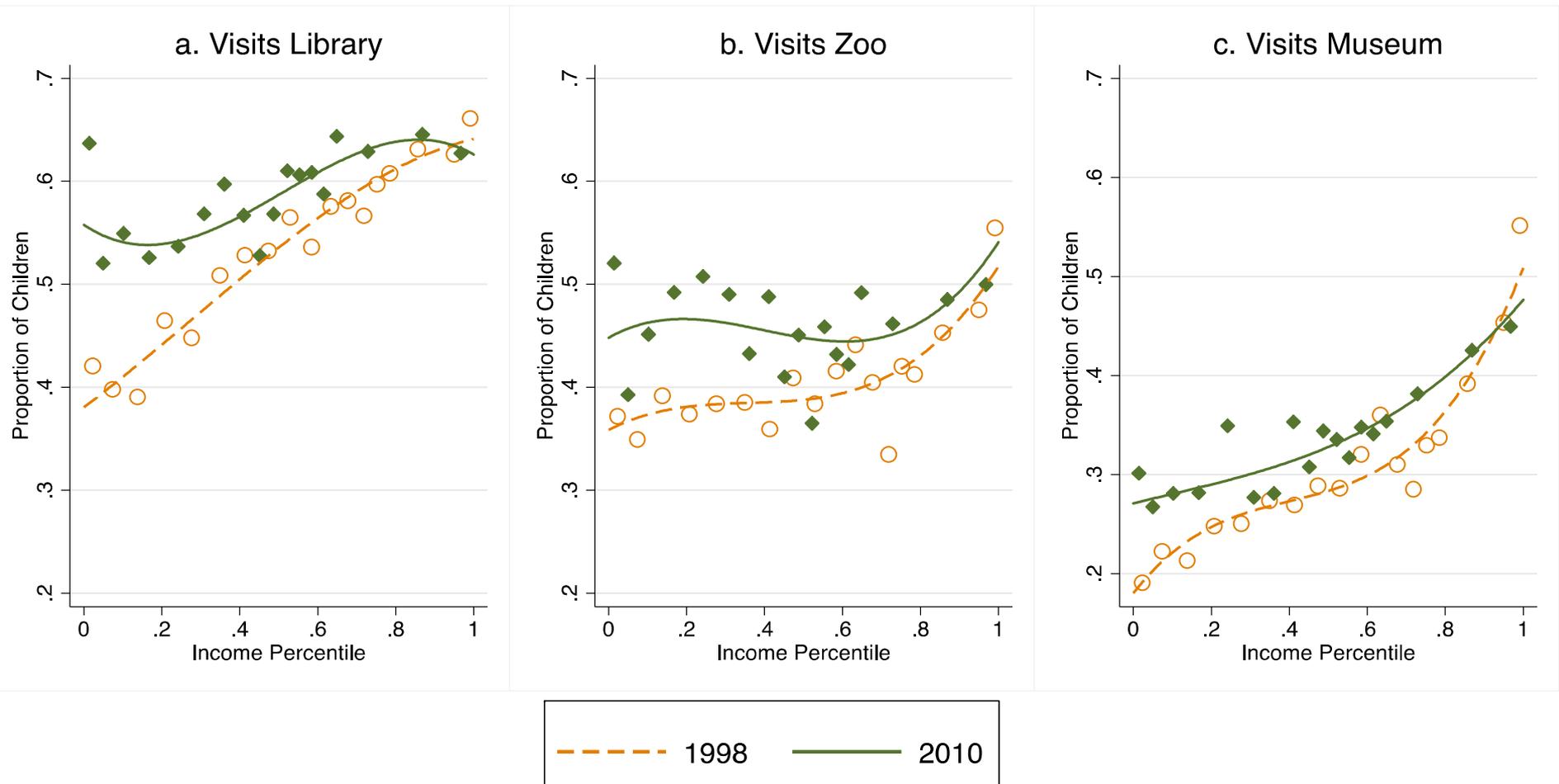
- Despite substantial investments in early childhood education: Overall rates of formal care use among incoming kindergarteners have been stable
- Expansion of public preschool programs has meant middle- and high-income children have moved from private to public settings; no changes among lowest income children
- Changing patterns in parental investments in young children and in early home environments seem more consistent with narrowing achievement gaps.

Increases particularly pronounced among lowest-income children

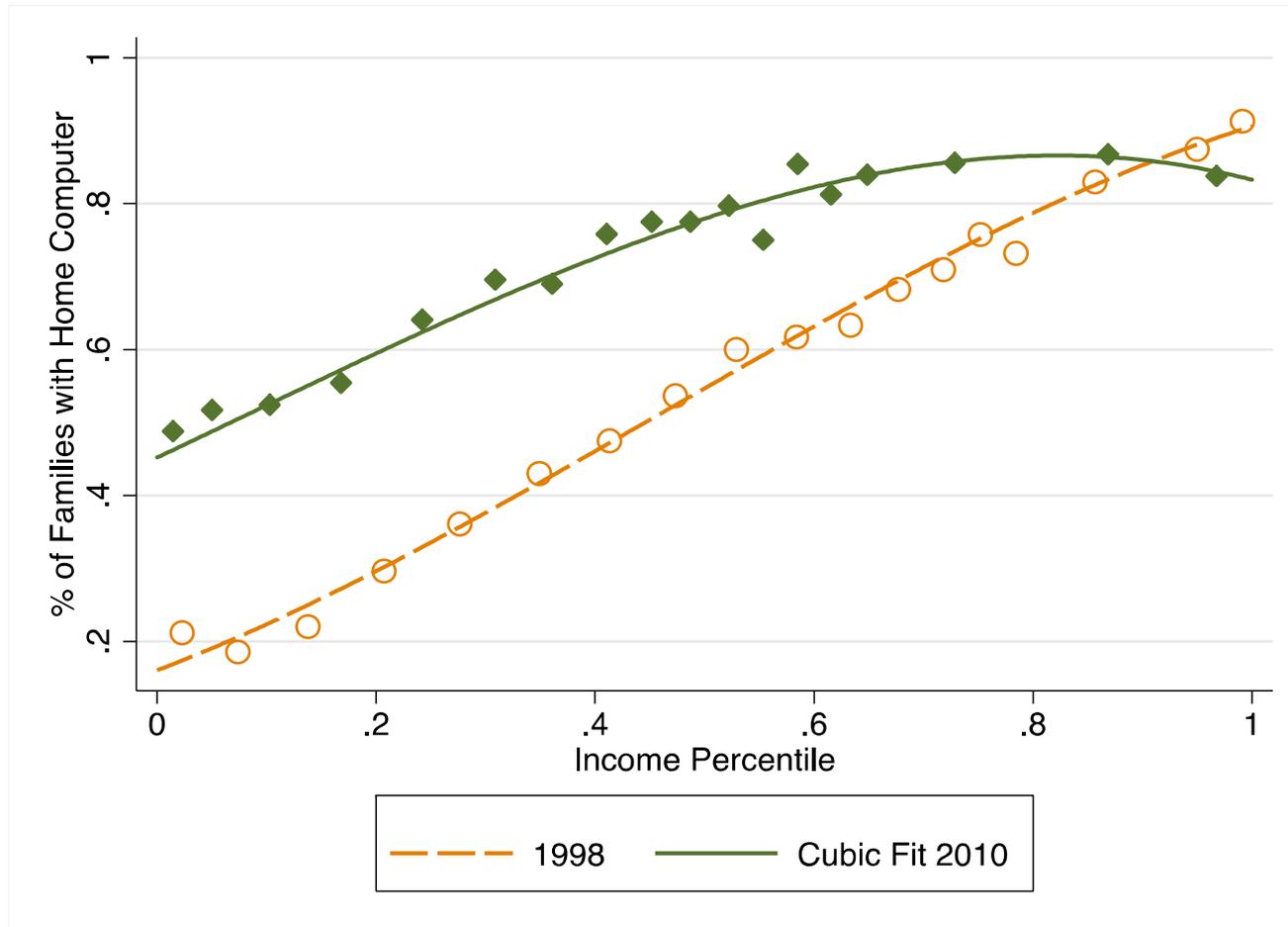
Reading books 3+ times a week



Increases particularly pronounced among lowest-income children

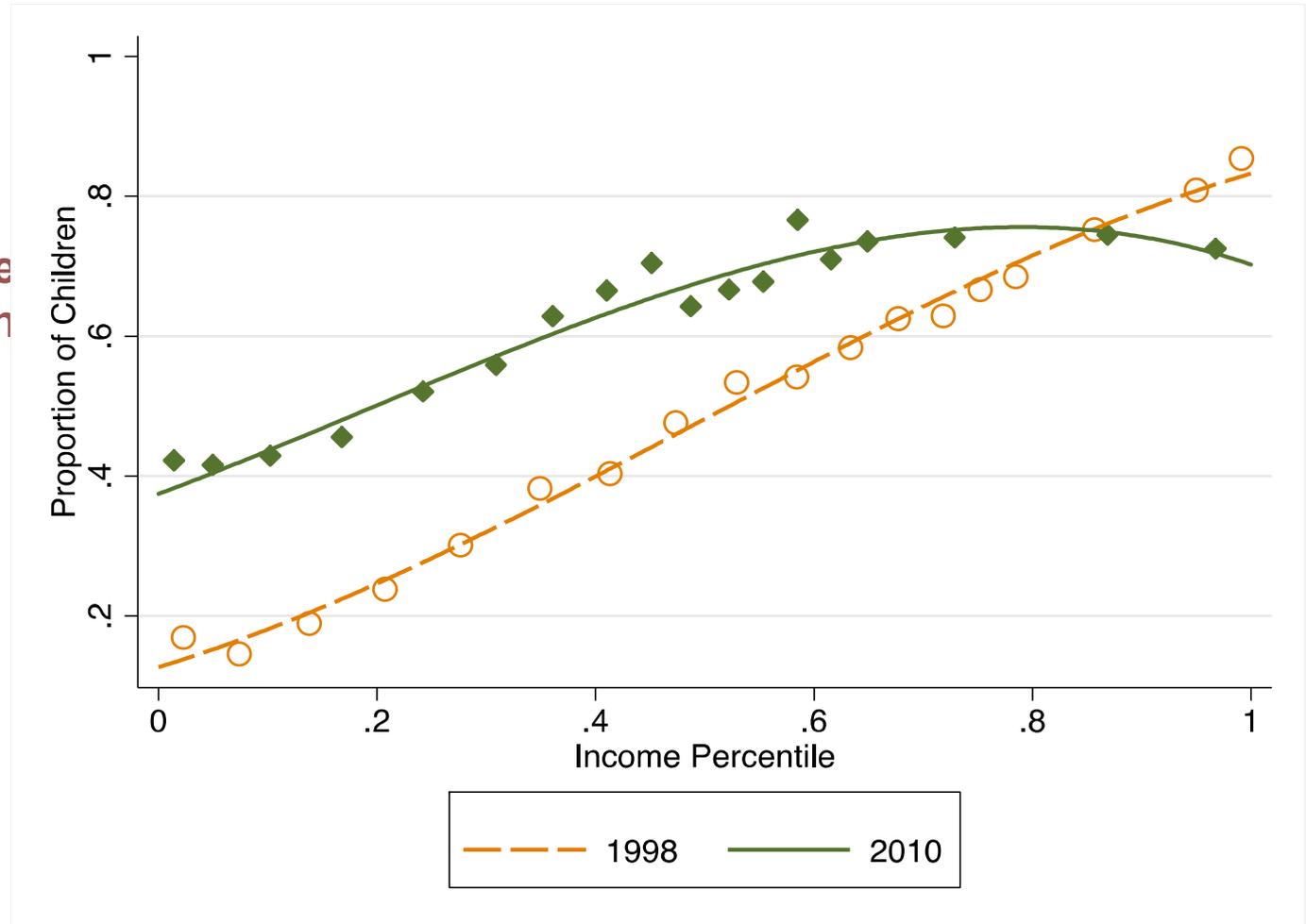


Striking increases in access to computers (as well as gap narrowing)



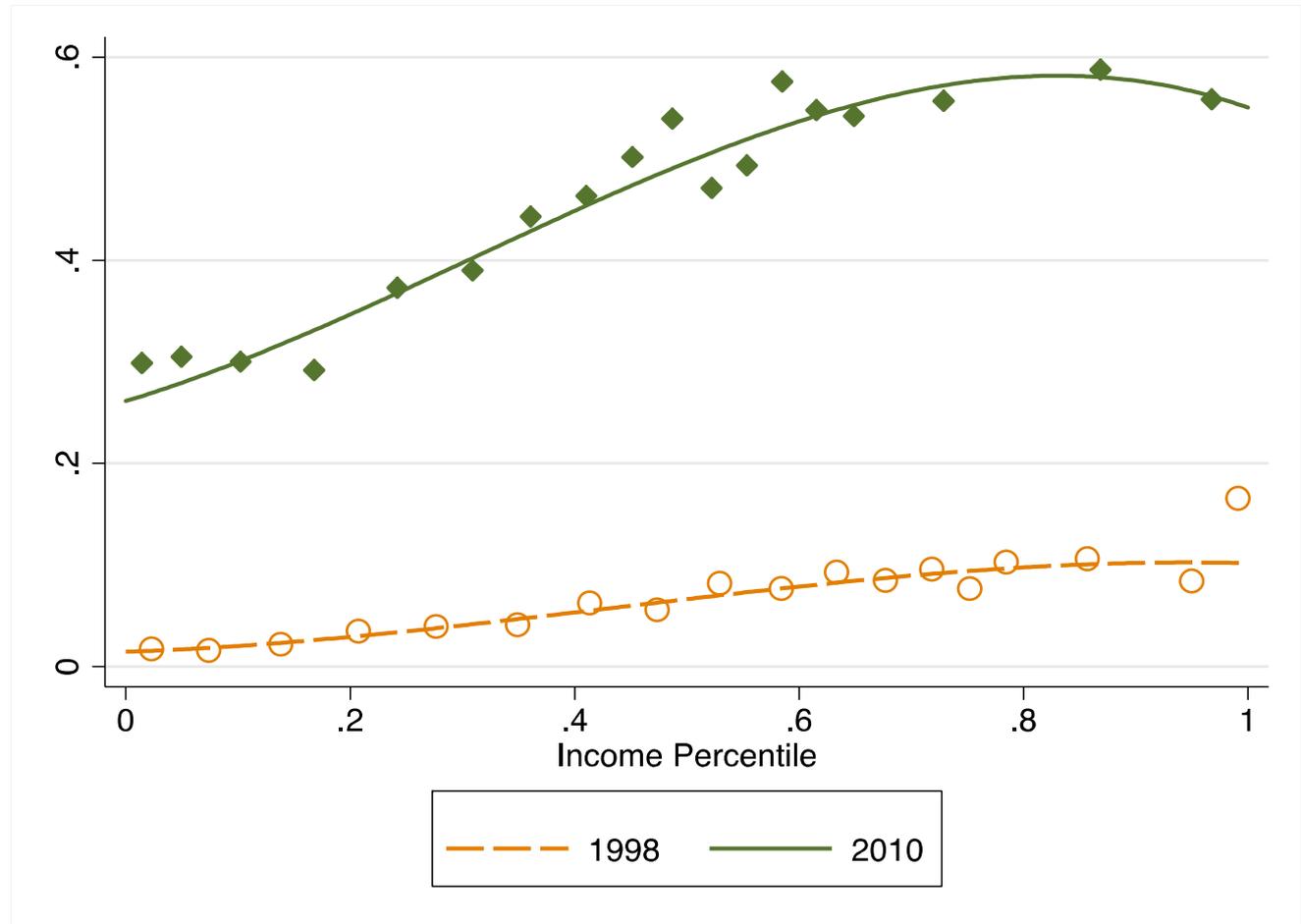
Narrowing gaps in “educational” computer use

Computer usage
for reading/math
learning

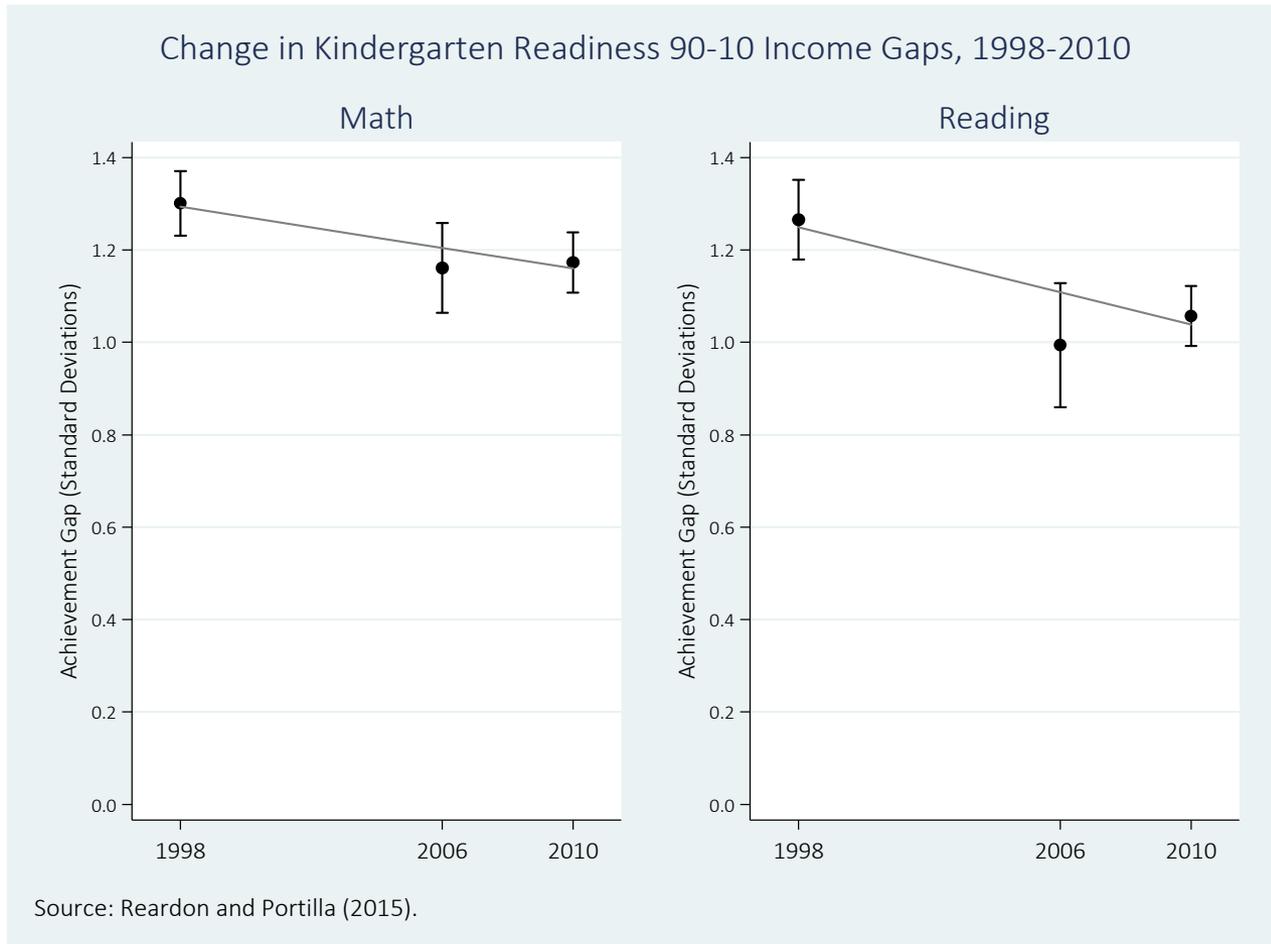


Some exceptions: *Broadening gaps in internet access*

Internet Access



So... How much of the narrowing school entry gaps are explained by these changes over time?



Explaining narrowing gaps based on early experiences

READING	90/10 Inc Gap 1998	90/10 Inc Gap 2010	Δ in Gap
Raw gaps	1.233	1.051	-0.182***
Demographics	0.493	0.290	-0.203***
Demographics+ child care	0.409	0.254	-0.155**
Demographics+ computer composite	0.426	0.257	-0.169***
Demographics + home literacy composite + library + #of books in home	0.419	0.251	-0.168***
Demographics + all	0.298	0.194	-0.104*

Take-aways:

- While still large, achievement gaps have narrowed in recent years.
- Children's early life experiences also have changed substantially over a relatively short period
- More than half of the 90/10 “gap narrowing” is explained by changes in child care practices, home reading environment, and computer access
- [Surprisingly] Accounting for child care changes explains a substantial portion of the achievement gap narrowing.
 - This is not driven by changing enrollment patterns.
 - Rather, we observe changes in the *association* between public preschool participation and child outcomes

Q3: [**VERY BRIEFLY**] Can efforts to improve early childhood program quality through accountability narrow achievement gaps?

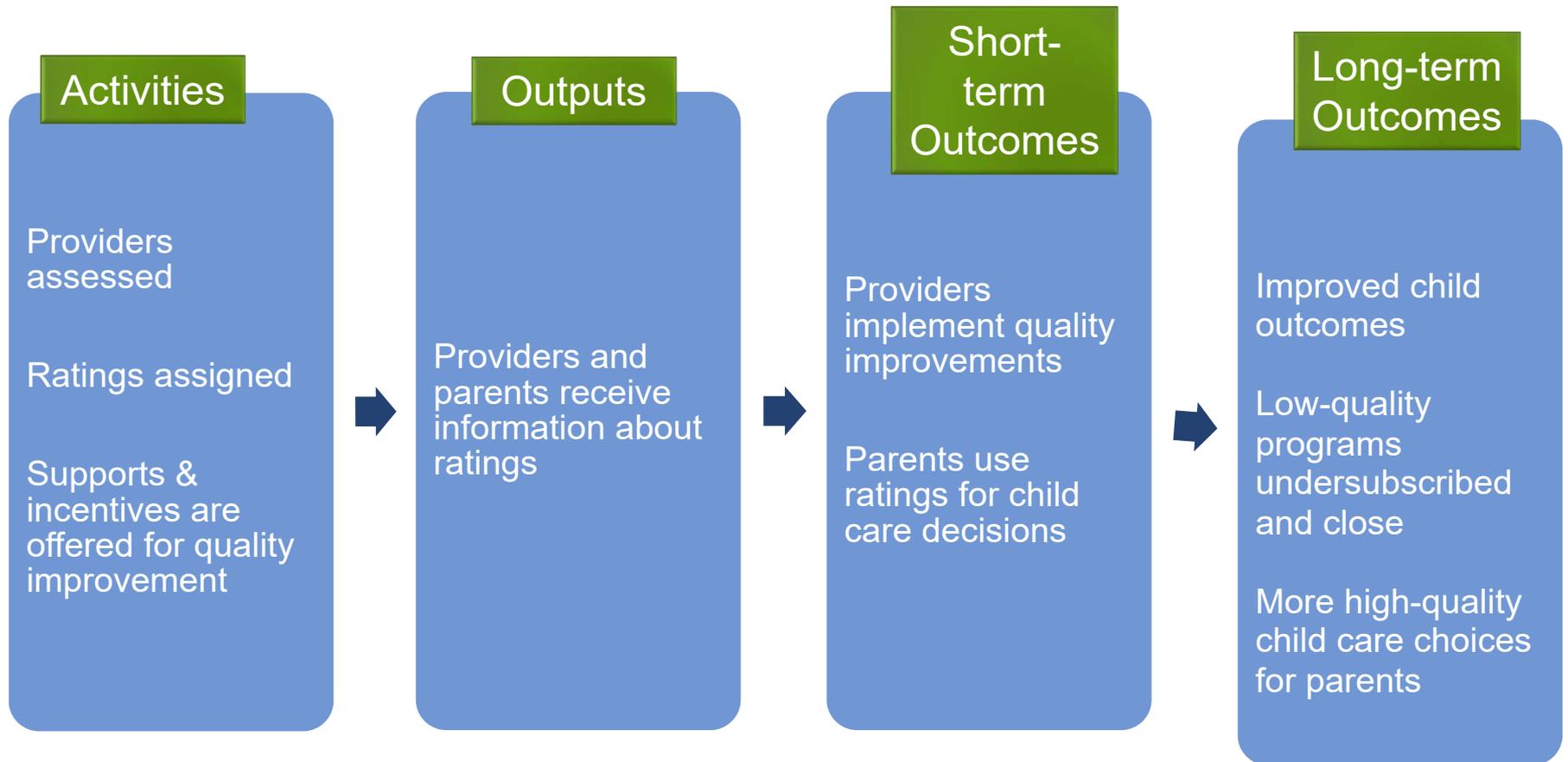
Quality is increasingly central in early childhood education policy

- Many children attend poor to mediocre programs, and income-based quality gaps are large (Valentino, 2015)
- Even in highly-regulated programs, low-income communities tend to have worse teacher-child interactions (Bassok & Galdo, 2015)
- Variation in program quality is among the most common candidate explanations for challenges to scalability (Yoshikawa et al, 2013)

Accountability comes to early childhood...

- **Race to the Top Early Learning Challenge**
 - 1 billion dollars to 20 states starting in 2011
 - “design and implement a tiered quality rating and improvement system that is based on consistent and demanding statewide program standards and that establishes meaningful program ratings”
- **Between 1997 and 2015, 40 states adopted Quality Rating & Improvement Systems (QRIS)**

From QRIS to Improved Quality & Outcomes



Are QRIS likely to meaningfully improve preschool quality?

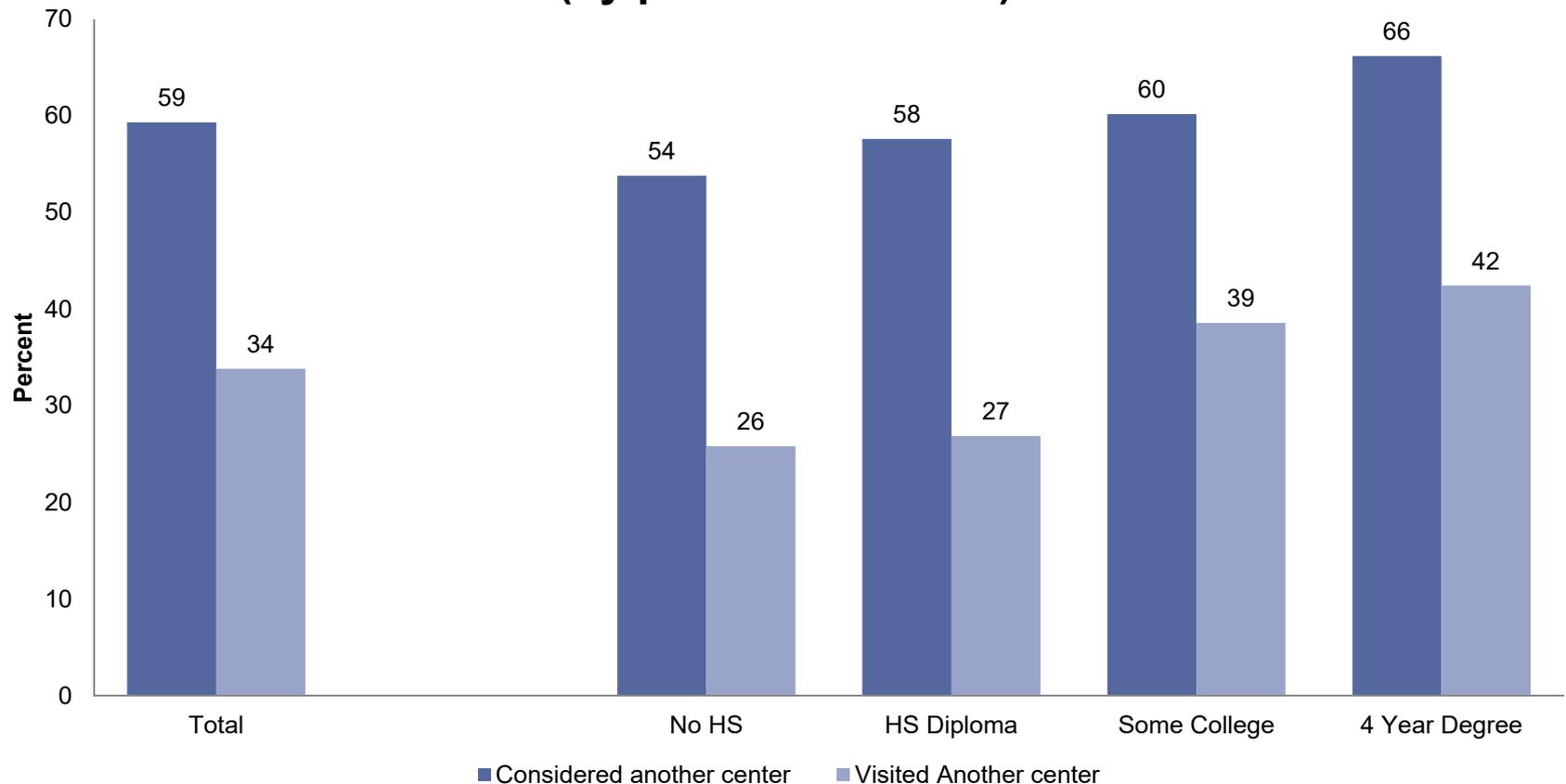
- Very limited evidence
 - Many QRIS are still new
 - Lack of data
 - Low (voluntary) participation rates
- Not yet clear:
 - (1) if QRIS are accurately capturing quality
 - (2) if low-income parents are responsive to quality information
 - (3) if programs are responding to the incentives

Evidence for information gap

- Most parents rate their child care center highly and do little comparison shopping.
- Seventy-four percent of parents rate their child's early childhood program "perfect" or "excellent" (Raikes, Torquati, Wang & Shjegstad, 2012)
- In our recent survey of ~ 1000 parents of children public preschool in Louisiana showed:
 - 80 percent indicated their child's setting was their "top choice"
 - 66 percent did not visit another center
 - 40 percent did not *consider* another option

Parental education and the search for care...

**Comparison Shopping for Child Care in Louisiana,
(by parent education)**



New evidence that QRIS ratings cause changes in center quality and enrollment

- New quasi-experiment leverages exogenous variation in quality ratings for all child care centers in North Carolina to explore **the impact of ratings on subsequent program enrollment and quality.** (*Bassok, Dee, Latham, 2016*)
- Centers that *just* missed the cut-off for a higher STAR rating improved their subsequent “observed quality” scores roughly 0.4 SD higher than those not facing the incentive
- Similarly, centers that just miss the cut-off also see drops in enrollment in subsequent years, which is consistent with parents “voting with their feet.”

Wrap up:

- Scaled-up preschool initiatives are unlikely to have the desired benefits without an explicit focus on quality
 - While “access” is still an issue, “access to high quality” is most relevant.
- Accountability initiatives in early childhood have expanded rapidly, particularly since 2011.
- QRIS have **potential** to improve program quality and reduce inequality. However:
 - Defining and measuring true “quality” is complicated
 - Design and funding issues are central to support “I” in QRIS
 - Limited evidence to date on programs’ responses to incentives, or families responses to information.

Thank you

