Summary of Current Pre-K Evaluation Evidence

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Overview

Introduce myself

Background on U.S. pre-k expansion

Summary of evidence regarding pre-k effects on children's academic outcomes

- Will not be reviewing evidence for effects on parents

Need for evaluation

Who am I

Ph.D. in Education from the University of California, Irvine

Associate Professor at Teachers College, Columbia University

Study the long-term effects of educational programs

Can educational programs have long-lasting impacts on children's lives?

Background on US pre-k expansion

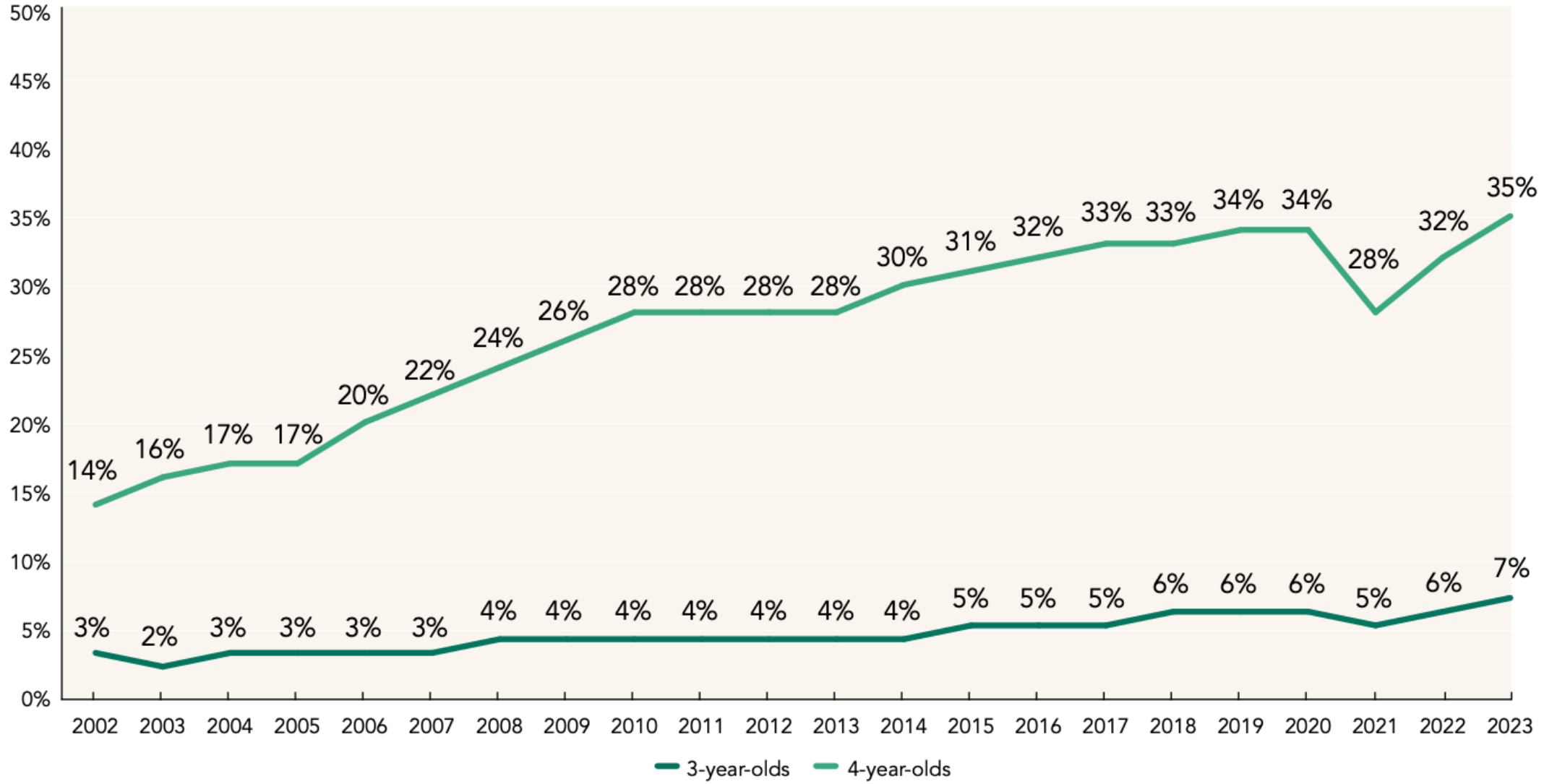
Demonstration programs from the mid-20th century suggest that high-quality, intensive, programs can have long-lasting benefits (see Elango et al., 2016)

- Abecedarian
- Perry Preschool

In the 21st century, state pre-k programs have scaled up across the country

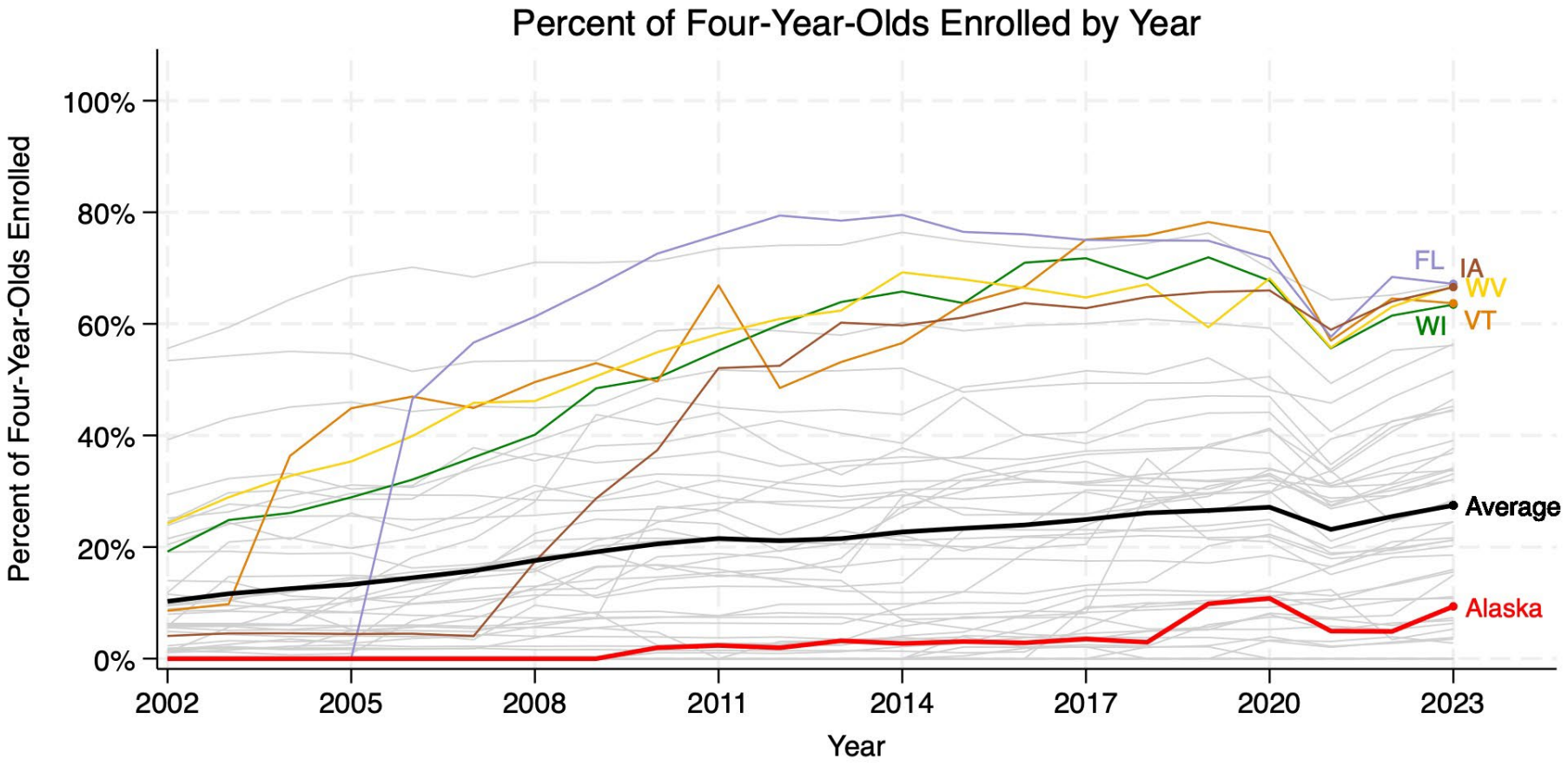
- The programs under the pre-k label differ widely in implementation factors, funding, curricula, services, and populations targeted

FIGURE 1: PERCENTAGE OF U.S. POPULATION ENROLLED IN PRESCHOOL REACHED AN ALL TIME HIGH



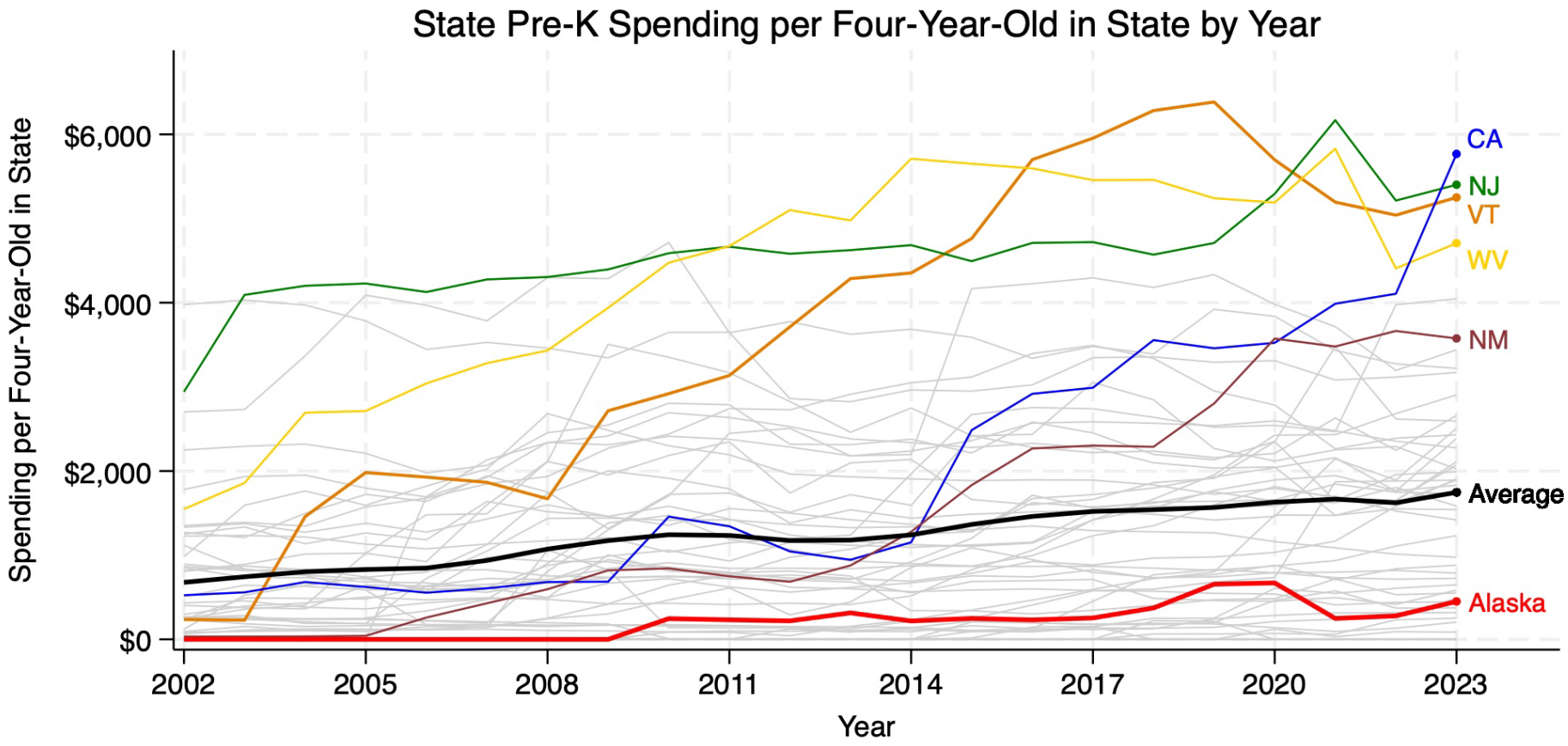
From the recent NIEER yearbook (Friedman-Krauss et al., 2024)

Steady rise in the % of 4-year-olds enrolled in state-funded pre-k



Note: Percent of Four-Year-Olds Enrolled was calculated by dividing the total number of four-year-olds enrolled by the population of four-year-olds in the state. Colors highlight states with largest ranges in enrollment percentage across all years, as well as Alaska, and the average across all states (n=50 for each year).

20 year increase in the amount of money spent per 4-year-old in the state



Note: Per four-year-old in state expenditure was calculated by dividing total spending by total number of four-year-olds in the state population for a given year, then multiplying by the proportion of children enrolled who were four years old. Colors highlight states with largest ranges in per four-year-old expenditures across all years, as well as Alaska, and the average across all states (n=50 for each year).

Evaluating the effect of pre-k on child outcomes is difficult

Researchers struggle to generate apples-to-apples comparisons between children who do and do not attend pre-k

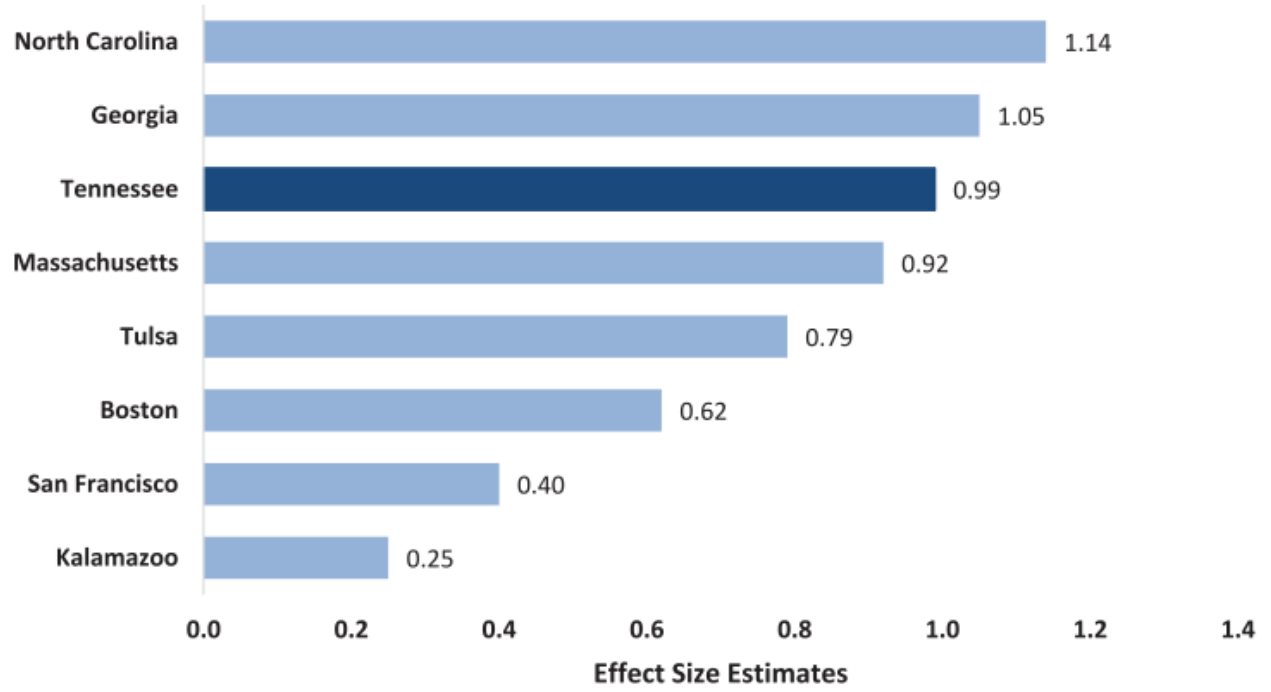
Rely heavily on “quasi-experimental” methods, with few randomized studies providing “gold-standard” evidence

On-going, rigorous, evaluation efforts have been largely confined to several states/cities

- Boston, MA
- Tennessee
- North Carolina
- Tulsa, OK

Compelling evidence for benefits to academic skills at kindergarten entry

Evidence across evaluations converge on the finding that modern pre-k programs can benefit key academic skills



Effects from regression-discontinuity studies on short-term literacy skills

Figure taken from :

Pion, G. M., & Lipsey, M. W. (2021). Impact of the Tennessee Voluntary Prekindergarten Program on children's literacy, language, and mathematics skills: Results from a regression-discontinuity design. *AERA Open*, *7*, 23328584211041353.

Mixed evidence for longer-term effects

When children are followed into elementary school, pre-k effects are often not sustained (see review on longer-term effects in Burchinal et al., 2024)

- During elementary school, children in comparison group may “catch-up” in academic skills to children who attended pre-k (e.g., Lipsey et al., 2018)

Some evidence for longer-term effects on adult outcomes (e.g., Gray-Lobe et al., 2021)

- Mechanism is unclear

Research area is still developing and uncertain

Compelling evidence that children from disadvantaged communities benefit most

Pre-K programs are often found to have compensatory effects, whereby effects are largest for children from the most disadvantaged communities (e.g., Watts et al., 2023; Weiland & Yoshikawa, 2013)

Effects of programs may be larger for kids who are otherwise unlikely to get high-quality, structured, learning environments (Kline & Walters, 2016)

Debate over the role that post-preschool environments play

Urgent need for ongoing evaluation evidence

Very hard to generalize findings from one setting to another

- Programs and communities differ widely across the settings that have reported rigorous evaluation evidence

Scaling up provides a prime opportunity for rigorous evaluation

If you want to know how pre-k investments will benefit children in Alaska, direct evaluation is the best way to answer that question

- Lottery studies have major advantages and can leverage existing data capacity
- Alaska could play an important role in building our evidence base

Conclusion

- Pre-k findings are difficult to generalize from one setting to another
- Weight of the evidence suggests pre-k can provide important benefits to academic skills at kindergarten entry
- Evidence regarding longer-term effects is mixed and inconclusive
- Children from the most disadvantaged communities tend to benefit most
- Evaluation is crucial

Thank you

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- Thanks to Casey Moran for excellent RA help

- References on the last slide

References

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