

Starting Early: The Benefits of Attending Early Childhood Education Programs at Age 3



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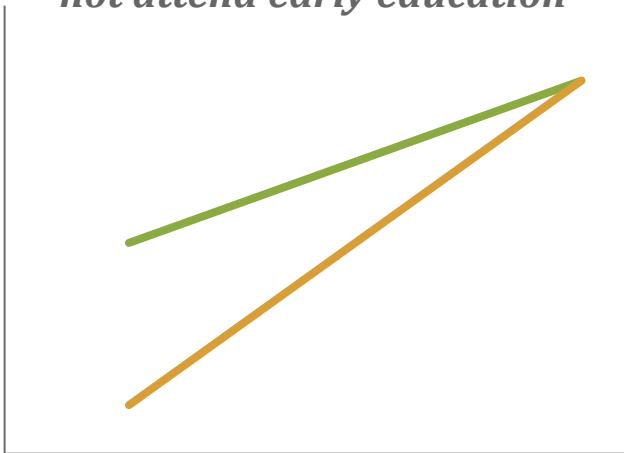
The benefits of early childhood education

- Children benefit academically
 - Landmark programs: Perry and Abecedarian
 - Contemporary programs: Tulsa, Tennessee, Boston
- Inconclusive evidence for children's social behavior and executive function skills
- Whether immediate benefits persist is also inconclusive
 - Models of skill-building
 - Convergence: program impacts tend to diminish in the year or two after program completion

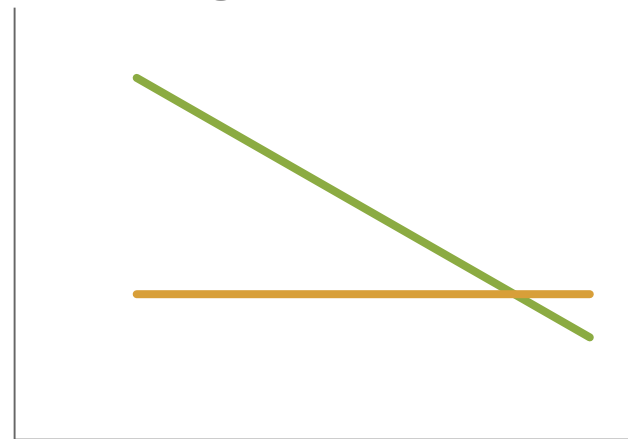
Convergence in the benefits of early childhood education

- Convergence can result from either:

Catch-up by children who did not attend early education



Fade-out among early education graduates



Jeanne Brooks-Gunn



To expect effects [of early childhood education programs] to be sustained... at their initial high levels, in the absence of continued high quality schooling... is to believe in magic

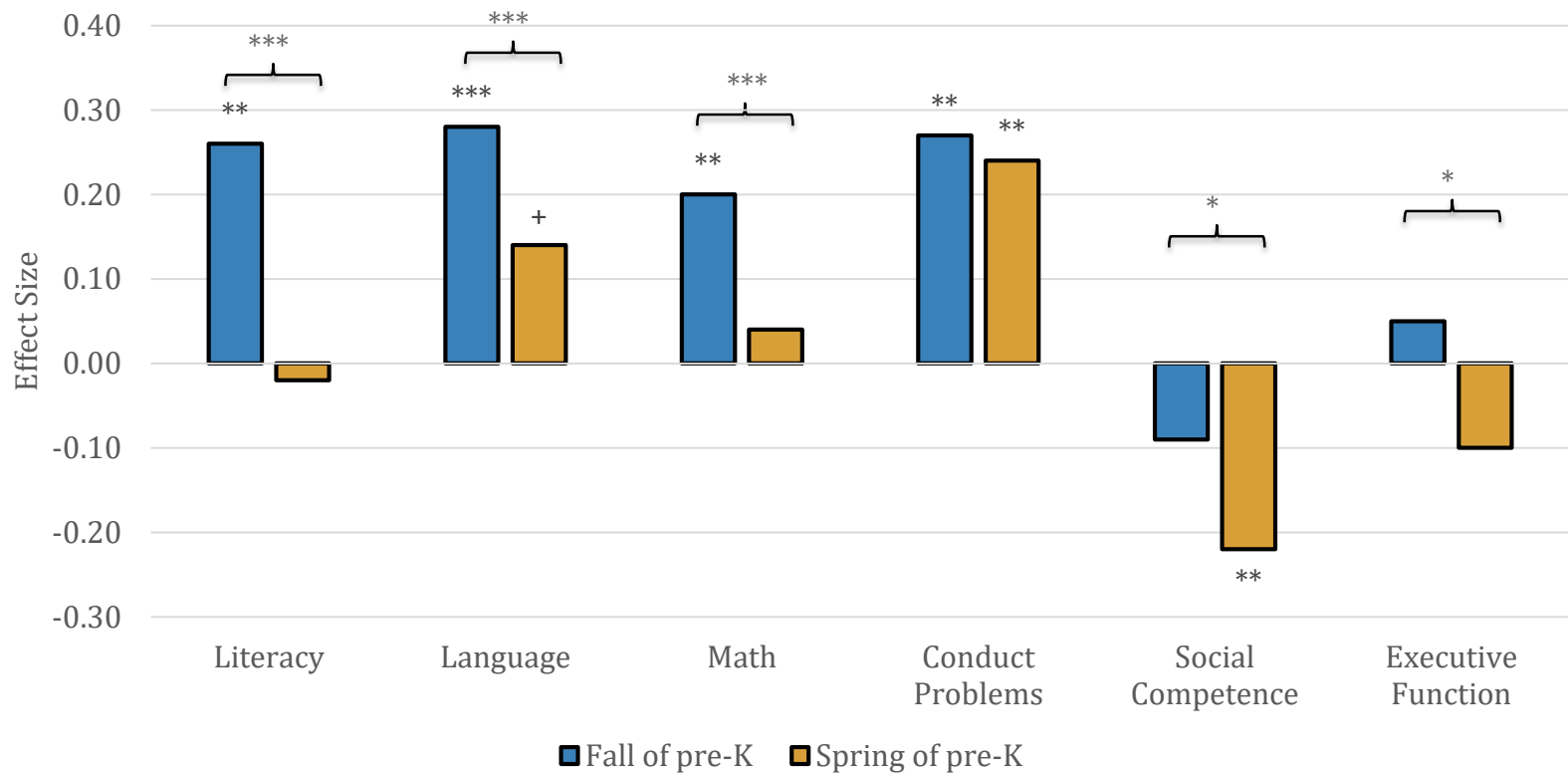
Research questions

1. Do children who attended ECE at the age of 3 demonstrate stronger school readiness skills at the *start* of the following school year as compared with children without prior ECE experience as 3-year-olds?
2. To what extent do benefits of ECE participation at age 3 persist through the *end* of the following school year, and is there evidence for convergence?
3. To what extent is convergence attributed to catch-up among children who did not participate in ECE at age 3 as compared with fadeout among those who did?
4. What share of this convergence is attributed classroom-wide factors at age 4?

Methods and context

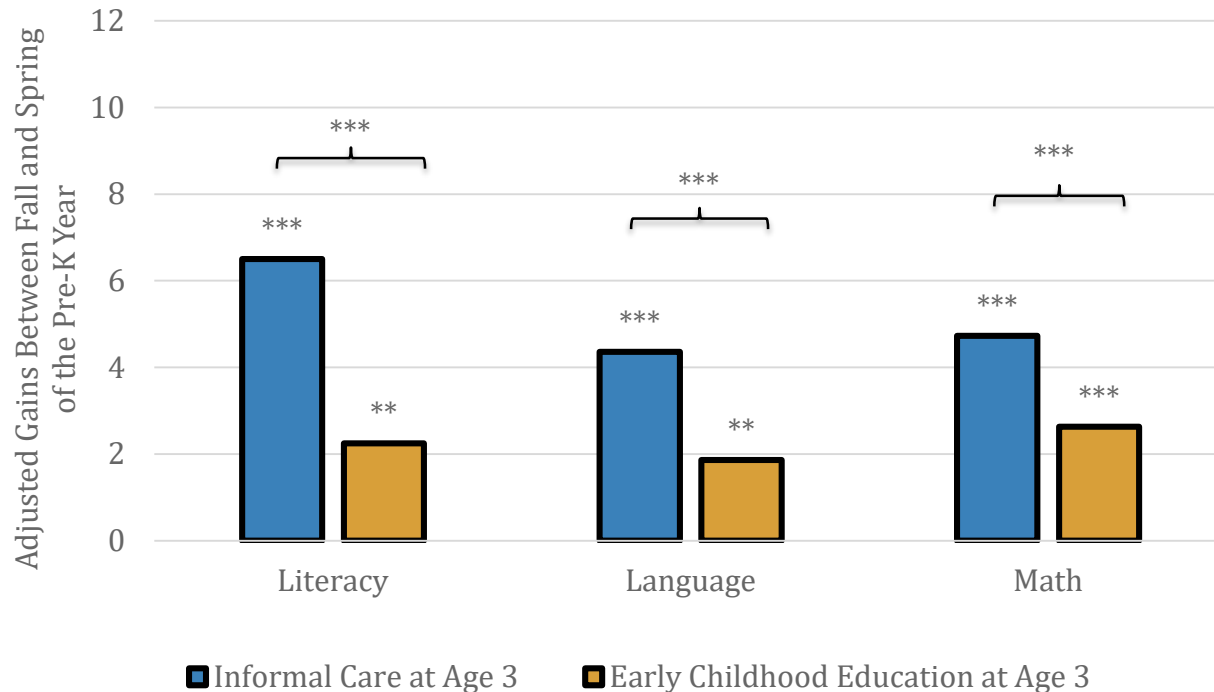
- Urban county: 186,000 students in public schools
- Roughly 1,500 children were sampled in pre-K
 - 204 children attended an early childhood program at age 3
- Children's school readiness was assessed at pre-K *entry* and *exit*
 - Academic achievement: Woodcock Johnson
 - Executive function: Pencil Tap, Backward Digit Span, and the Head-Toes-Knees-Shoulder Task
 - Social behavior: Teacher-Child Rating Scale
- Regression models that control for a full set of child and family factors

Benefits of early childhood education participation at age 3



Notes. *** $p < .001$. ** $p < .01$. * $p < .05$. + $p < .10$

Catchup or fadeout?



Notes. *** $p < .001$. ** $p < .01$. * $p < .05$.

➔ **25%**

Of convergence was attributed to classroom-wide factors

Conclusions

- Findings highlight the benefits (i.e., achievement) and potential drawbacks (i.e., social-behavior) of early childhood programs serving low-income children
- Findings also lend support to the sustaining environments hypothesis: Investments in early childhood education are necessary but not sufficient
- Convergence, at least in the short-term, can be partially mitigated and teachers and classrooms play an important role in this effort

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Any questions?

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