



OPINION

OPINION: There's a hidden, but important lesson from the findings in the Tennessee pre-K study

Better data is needed before we jump to conclusions about the value of universal pre-K

by MEGHAN MCCORMICK and JOANN HSUEH

April 12, 2022



With better data, policymakers will better understand the quality of existing pre-K programs and how to strengthen the components that matter most for kids and their families. Credit: Jackie Mader for The Hechinger Report

The Hechinger Report is a national nonprofit newsroom that reports on one topic: education. Sign up for our [weekly newsletters](#) to get stories like this delivered directly to your inbox.

Research has shown both short and long-term benefits of high-quality pre-K. So it was surprising when a recent study found that children who attended Tennessee's state-run voluntary pre-K program actually performed slightly worse on sixth grade tests and behavioral measures than children who were wait-listed for the program.

This single study has renewed the debate about the value of universal pre-K and the need for continued investments in early learning.

Yet, as noted by researchers and advocates alike, there are many reasons why the study's findings aren't really so bleak — and they all highlight the need to collect better data so we can understand what really works.

First, the state-run program was studied over a decade ago, and it was not particularly strong — it would not meet basic indicators of quality if evaluated today.

Second, we lack systematic data on the wait-listed children — we do not know whether these children went on to attend a different pre-K program and, if they did, how high-quality those experiences were.

Third, researchers have yet to examine how the children's subsequent school experiences may have affected the results, a significant limitation given earlier work finding that the program's short-term impacts varied considerably depending on the quality of the children's elementary school teachers.

And fourth, we still don't know how children who participated in the program are faring in later adolescence or will fare in adulthood: Other studies of pre-K attendees have detected long-term effects on outcomes like educational attainment, employment and earnings, even after observing some short-term skill fade-out.

Related: Behind the findings of the Tennessee pre-K study that found negative effects for graduates

Only with more and better data will we be able to know where this pre-K program and others go right and where they go wrong. Better data on pre-K enrollment will help us make better comparisons.

We already know that the positive impacts of pre-K are largest when children in the comparison group have stayed at home. Many of the children who were wait-listed for Tennessee's program likely attended other high-quality pre-K programs, such as Head Start.

Overall, we also need better data on quality. Since 2010, there has been tremendous growth in our understanding and measurement of high-quality pre-K, and Tennessee has strengthened its program through marked investments in curricula and teacher professional development.

Only with more and better data will we be able to know where this pre-K program and others go right and where they go wrong.

Over the last decade, Tennessee has also encouraged the collection of classroom quality data via the Classroom Assessment Scoring System. The state is trying to determine where further improvement is needed. Other programs, such as Head Start and initiatives in Louisiana and New York City, have made similar investments in measurement tools to strengthen data on quality. Yet many pre-K systems are still relying on quality indicators that do not factor the influence of interactions with teachers or the use of evidence- and play-based curricula and rich instructional content.

With better data on classrooms, collected consistently across the full range of pre-K programs, policymakers will better understand the quality of existing programs and how to strengthen the components that matter most.

The measures of academic outcomes used in the Tennessee study represented a narrow band of children's skills. They did not capture competencies like problem-solving and executive functioning — admittedly more difficult to teach and assess — that high-quality pre-K programs have been shown to enhance. There is growing evidence that such skills are more likely to be sustained as children move through elementary school.

Related: OPINION: What might the future of universal pre-K look like? As researchers, we have some concerns

Most data systems for early learning are not easily linked to children's elementary school experiences and longer-term outcomes. Even in the latest Tennessee results, we don't know how children's experiences in elementary school and beyond relate to their pre-K experiences.

For example, the research team found that children assigned to the Tennessee pre-K program were substantially more likely to be referred to special education services starting in kindergarten. But given challenges in linking pre-K to later special education data, it is difficult to know whether this outcome was good or bad for the children. Did it help get them the services they needed, or was the referral to these services actually harmful for their learning and development?

By investing in data systems that connect early learning to K-12, policymakers will be able to better interpret study results.

Working families want high-quality care for their young children. And many states are interested in expanding their programs. Rather than curbing investments in pre-K, the Tennessee results raise important considerations about how these programs should be designed and demonstrate the importance of high-quality data for making smart policy decisions and investments that pay off for kids and families.

Meghan McCormick is a senior research associate and JoAnn Hsueh is the director of the Families & Children's Development policy area at MDR.

This story about education data was produced by The Hechinger Report, a nonprofit, independent news organization focused on inequality and innovation in education. Sign up for [Hechinger's newsletter](#).

Want to write your own Op-Ed?

We consider all submissions under 900 words.

[Read our guidelines here.](#)

Related articles

A state-funded pre-K program led to 'significantly negative effects' for kids in Tennessee

PROOF POINTS: In two places, researchers find problems with expansion of free pre-K

Behind the findings of the Tennessee pre-K study that found negative effects for graduates

The Hechinger Report provides in-depth, fact-based, unbiased reporting on education that is free to all readers. But that doesn't mean it's free to produce. Our work keeps educators and the public informed about pressing issues at schools and on campuses throughout the country. We tell the whole story, even when the details are inconvenient. Help us keep doing that.

[Join us today.](#)

TAGGED: CHILD CARE DATA AND RESEARCH FUNDING OPINION PRE-K

Letters to the Editor

At The Hechinger Report, we publish thoughtful letters from readers that contribute to the ongoing discussion about the education topics we cover. Please read our [guidelines](#) for more information.

By submitting your name, you grant us permission to publish it with your letter. We will never publish your email. You must fill out all fields to submit a letter.

Your email address will not be published. Required fields are marked *

Letter *

Name *

Email *

Website

Save my name, email, and website in this browser for the next time I comment.

Notify me by email when the comment gets approved.

Post Letter

CORRECTIONS AND CONCERNS to MCCORMICK AND HSUEH, 2022

Dale C. Farran
Mark W. Lipsey
Vanderbilt University

Opinion: There's a Hidden But Important Lesson from the Findings in the Tennessee Pre-K Study

April 12, 2022 Meghan McCormick & JoAnn Hsueh <https://hechingerreport.org/opinion-theres-a-hidden-but-important-lesson-from-the-findings-in-the-tennessee-pre-k-study/>

April 12, 2022, McCormick and Hsueh published an essay in The Hechinger Report. It purported to be a response and reflection on our paper on the 6th grade outcomes of a randomized control trial of a statewide pre-k program: <http://dx.doi.org/10.1037/dev0001301>. The essay contains many factual errors that result either from a poor reading of the article or from a desire to misrepresent the results. We feel that it is important to correct the factual errors that involve our study and to address questionable overstatements that also permeate the paper. In the following, we provide the statements first from the essay that were factually incorrect followed by our corrections and second statements from the essay that are overgeneralizations and unsupported by evidence, followed by a response from us explaining the problems.

FACTUAL ERRORS

McCormick & Hsueh: “So it was surprising when a recent study found that children who attended Tennessee’s state-run voluntary pre-K program actually performed slightly worse on sixth-grade tests and behavioral measures than children who were wait-listed for the program.” ***(not wrong exactly but deliberately understated)***

Response: Isn’t it an important part of the context here that the TN study is the only RCT of a statewide pre-k with longitudinal follow-up as far as the 6th grade (and continuing)? And why “slightly worse?” The TN pre-k participants scored *significantly* worse on all three state achievement tests and, alarmingly, had significantly more expulsions and suspensions. This is not just “slightly” worse. And as of this date, wouldn’t the TN findings on achievement and school behavior seem less of a surprise if the essay had mentioned the other recent well-controlled studies such as the Boston lottery study that found no 3rd grade achievement effects (including a nonsignificant negative effect for math) and the recent randomized North Carolina pre-k study that found negative achievement and behavior effects as early as the end of the kindergarten year?

McCormick & Hsueh: “. . . it [TNVPK] was not particularly strong—it would not meet basic indicators of quality if evaluated today.” ***(factually incorrect)***

Response. No data are cited that show the TN program was “not particularly strong.” This is an assertion by McCormick and Hsueh without substance. ECERS scores from TN

classrooms are right in the middle of those for other state and city wide programs, certainly not weaker. Comparisons of the end-of-pre-k effects on commonly used pre-k outcome measures with those of other state programs show TN in the top tier in every instance (reported in Pion and Lipsey <https://doi.org/10.1177/23328584211041353>, information a careful reader would have seen in our Developmental Psych paper on 6th grade outcomes).

The essay cites the current NIEER standards as the “basic indicators of quality” that the TN program would not meet if evaluated today. Had the authors dug deeper they would have discovered a recent NIEER analysis that puts the TN program in the top third in the country because of teacher pay equity and health and retirement benefits. Nonetheless, as the authors must know, the NIEER standards have never been shown to relate to any child outcomes.

McCormick & Hsueh: “Second, we lack systematic data on the wait-listed children—we do not know whether these children went on to attend a different pre-K program and, if they did, how high-quality those experiences were.” [And later, on pg. 2] “We already know that the positive impacts of pre-K are largest when children in the comparison group have stayed at home. Many of the children who were wait-listed for Tennessee’s program likely attended other high-quality pre-K programs, such as Head Start.” (***factually incorrect***)

Response: A careful reader of our Developmental Psych paper on 6th grade outcomes might have noticed the following text under the heading “Counterfactual Conditions:”

While we do not have information on the alternative care arrangements for students in the RCT analytic sample who did not attend TN-VPK, we do have that information via parent interviews for the 306 nonattending children in the ISS sample described earlier. Overall, 63% received home-based care by a parent, relative, or other person; 13% attended Head Start; 16% were in private center-based childcare; 5% had some combination of Head Start and private childcare; and childcare for 3% was not reported. Characteristics of the programs and students contributing to the ISS were very similar to those in the RCT analytic sample (Lipsey et al., 2018). [A similar description was provided in our ECRQ paper on the 3rd grade outcomes.]

So if 63% of the control children were in kin care and only 13% attended Head Start, why do these authors imply that something more like the reverse of these proportions is implicated in the negative TN findings? And why do they characterize Head Start as high quality? The data from the Head Start Impact Study do not show sustained effects through 3rd grade on any of the outcome measures used, not so very different from the TN findings.

McCormick & Hsueh: “Third, researchers have yet to examine how the children’s subsequent school experiences may have affected the results, a significant limitation given earlier work finding that the program’s short-term impacts varied considerably depending on the quality of the children’s elementary school teachers.” (***factually incorrect***)

Response: A careful reader of our Developmental Psych paper on 6th grade outcomes might have noticed the following text and citation in the review of what we had found through the 3rd grade:

There were no significant effects on the quality of the schools the students subsequently attended or their exposure to higher quality teachers in those schools (Pearman et al., 2020). However, positive TN-VPK effects were found on the third grade state achievement tests for the small proportion (12%) of children who attended higher quality schools and were exposed to higher quality teachers.

So, contrary to the claim in the essay, our team has produced a full report on the subsequent school experiences of the children in our sample (<https://doi.org/10.1080/19345747.2020.1749740>). And, while we did find some positive effects for those few children with especially high quality later school experiences, as we're sure the MDRC authors are aware, there is no research showing that the lack of a "sustaining environment" under any definition produces negative effects.

McCormick & Hsueh: "Even in the latest Tennessee results, we don't know how children's experiences in elementary school and beyond relate to their pre-K experiences. **(factually incorrect)**

Response. Our entire recent paper is on 6th grade outcomes and their relation to pre-k experience. That is the point of a longitudinal RCT as the authors certainly know.

OTHER CONCERNS

McCormick & Hsueh: "Research has shown both short- and long-term benefits of high-quality pre-K." **(overgeneralization not supported by data)**

Response: Rigorous research has not, in fact, shown long term benefits for state pre-k programs, the context for this commentary. Indeed, that is pointed out in the Brookings paper to which the first link in the essay leads. A more balanced opening line might be more appropriate for what purports to be a scholarly commentary.

McCormick & Hsueh: "First, the state-run program was studied over a decade ago." **(inconsistent argument)**

Response: Please. The opening line of the essay touts long-term pre-k effects and links to the earlier Gray-Lobe et al. Boston lottery study of pre-k 20 years ago. Later in the paper the authors cite Abecedarian and Perry for their long-term effects, programs that were begun 50-60 years ago. Any longitudinal study of necessity is looking at earlier conditions. Plus, no actual evidence is cited by McCormick and Hsueh showing that statewide programs more recently than 10 years ago are different in any way that would make a difference.

McCormick & Hsueh: “And fourth, we still don’t know how children who participated in the program are faring in later adolescence or will fare in adulthood: Other studies of pre-K attendees have detected long-term effects on outcomes like educational attainment, employment, and earnings, even after observing some short-term skill fade-out.” **(accurate but irrelevant as we do not have those data yet though our study continues, as could have been noted)**

Response: Now it is OK to cite 20 and 50 year old studies?!? Rigorous research on the long-term effects of scaled-up pre-k programs similar to the state programs currently in place is virtually nonexistent, so the claim here is about other kinds of programs and is thus rather misleading in this context. We will continue to follow our sample through high school, but prior long-term studies of rather different programs don’t provide much basis for speculating about what we might find.

McCormick & Hsueh: “. . . Tennessee has strengthened its program through marked investments in curricula and teacher professional development.” **(misstatement)**

Response: The implication here is that the TN program is now changed in a consequential enough way to produce different effects than those found in our study. However, no evidence is cited for that claim, especially given the relatively strong quality indicators described above for the version of the program we studied.

McCormick & Hsueh: “Tennessee has also encouraged the collection of classroom quality data via the Classroom Assessment Scoring System.” **(irrelevant given lack of validity for CLASS)**

Response: We know that these authors know that various articles, e.g., by Peg Burchinal with whom these authors work, as well as meta-analyses by others have not shown CLASS to be predictive of children’s outcomes in any area, achievement, EF, or social-emotional.

McCormick & Hsueh: “Only with more and better data...” [And later] “By investing in data systems that connect early learning to K-12, policymakers will be able to better interpret study results.” **(vague overgeneralization)**

Response: Be specific. These two authors are scientists at a premier research firm, MDRC. What better data do they want, from what kinds of designs? Of course, we need better data systems. But the gift MDRC can give to states is to help them understand how to create more rigorous evaluations of their programs. For example, in many states there will be oversubscribed classrooms as we had in TN. States can choose who gets a seat by a lottery draw. Then, the important thing is that states give those who won a seat and those who did not a state education ID number so that they can be tracked. This is the sort of specific information MDRC authors should be providing.

McCormick & Hsueh: Working families want high-quality care for their young children. **(accurate but irrelevant)**

Response: State pre-k is not designed for working families unless their work ends midafternoon and they are off during the summer. Working families do indeed want high quality care. The not so hidden lesson from the TN pre-k study is that policymakers may be well advised to take a skeptical perspective on the conventional wisdom about the benefits of school-based state pre-k programs for both children and parents.