

BACKGROUND

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Research Review: Universal Preschool May Do More Harm than Good

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Abstract

A growing body of empirical evidence suggests that universal preschool programs fail to improve a range of outcomes for participants. New studies of large-scale preschool programs in Quebec and Tennessee show that vastly expanding access to free or subsidized preschool may worsen behavioral and emotional outcomes. In the absence of compelling evidence that subsidized preschool provides an important public good, the subsidies should be reduced, not increased. Policymakers should recognize that expanding subsidies for preschool is unnecessary, provides no new benefits to low-income parents, and would create a new subsidy for middle-income and upper-income families, while adding to the tax burden for Americans.

Evidence continues to mount that government-funded preschool fails to fulfill the promises of its proponents. New studies of large-scale preschool programs in Quebec and Tennessee show that vastly expanding access to free or subsidized preschool may worsen behavioral and emotional outcomes. Even proponents of universal preschool admit that it does nothing to improve future academic performance.

As proponents of government preschool programs continue to appeal to findings from 50 years ago that have never been replicated, current, large-scale, rigorous evaluations of major programs at the federal level, in the states, and internationally make a strong case against such initiatives and deserve serious consideration from policymakers wont to further expand government intervention in the care of the youngest Americans.

KEY POINTS

- The Head Start Impact Study, a scientifically rigorous evaluation that tracked 5,000 three-year-old and four-year-old children through the end of third grade, found little to no impact on parenting practices or the cognitive, social-emotional, and health outcomes of participants.
- Baker et al. found that children exposed to the Quebec program were 4.6 percent more likely to be convicted of a crime and 17 percent more likely to commit a drug crime and their health and life satisfaction were worse.
- In a major review of the literature on early childhood education, Elango et al. draw very sanguine conclusions from rather mixed data.
- Proponents of universal government-subsidized preschool have to grapple with the fact that previous universal programs have failed and had negative social impacts on children.

This paper, in its entirety, can be found at <http://report.heritage.org/bg3106>

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Universal Preschool Proponents Appeal to a Handful of Dated, Unreliable Studies

Proponents of universal preschool tend to appeal to one of two studies that found benefits of preschool attendance: the Abecedarian Preschool Study and the Perry Preschool Project. The Perry Preschool Project began in 1962 in Ypsilanti, Michigan, and included just 123 children (58 in the treatment group), all from low-income households. Perry is a half-century old boutique program that provided around-the-clock, comprehensive preschool and care services to a few dozen “at-risk” children. The children, deemed at risk of “retarded intellectual functioning and eventual school failure,” received weekly home visits and structured classroom time, and their parents participated in group meetings with teachers.¹ The Perry Preschool Project followed program participants through age 40 and found that they were more likely to have completed high school, to be employed, and to earn more than non-participants. Perry participants were also less likely to have been arrested five or more times by age 40. As a result, Perry researchers claim a \$7.16 return on investment for every dollar expended.²

Advocates of expanding government-subsidized preschool typically appeal to the Perry Preschool Project for evidence about the benefits of early childhood education. As the Brookings Institution’s Russ Whitehurst cautions, “Perry was an intensive, expensive, multi-year, hothouse program carried out 50 years ago with less than 100 black children in Ypsilanti, Michigan. The mothers stayed at home and received home visitation. The control group children had no other preschool services available to them.” Whitehurst sums up the utility of extrapolating from Perry, noting that the findings “demonstrate the likely return on investment of widely deployed state pre-K programs for four-year-olds in

the 21st century to about the same degree that the svelte TV spokesperson providing a testimonial for Weight Watchers demonstrates the expected impact of joining a diet plan.”³

Similarly, the Abecedarian Program, which began in 1972 in Chapel Hill, North Carolina, had a sample of 111 (57 in the treatment group) majority African American children from low-income households. The program included individualized education services, transportation, and social and nutritional services, among other interventions. As with Perry, Abecedarian Program participants also had positive outcomes in adulthood, including a greater likelihood of attending college, lower rates of teen pregnancy, and an increased likelihood of working in a skilled job.⁴ And as with Perry, Abecedarian suffered from many of the same methodological shortcomings, including violation of random assignment rules,⁵ small sample size, lack of findings replication, and management of the evaluations by the program developers themselves.⁶

The limitations of Perry and Abecedarian—including the dated nature of the evaluations—should largely exclude their findings from considerations of the efficacy of subsidized preschool programs.

Current, Rigorous Empirical Evaluations of Preschool Tell a Different Story

In contrast to the Perry and Abecedarian studies, recent large-scale evaluations of the federal Head Start program and Tennessee’s Voluntary Pre-K Program should carry more weight for policymakers considering any expansion of subsidized preschool—whether at the federal or state level.

The Head Start Impact Study. In late 2012, the Department of Health and Human Services released the Head Start Impact Study, a scientifically rigorous evaluation that tracked 5,000 three-year-old

1. Darcy Olsen and Lisa Snell, “Assessing Proposals for Preschool and Kindergarten,” Reason Foundation, May 2006, <http://reason.org/files/b7abd1fc30bdf33cd824db3b102c4db0.pdf> (accessed December 18, 2015).
2. Lawrence J. Schweinhart, “Benefits, Costs, and Explanation of the High/Scope Perry Preschool Program,” paper presented at the 2003 Biennial Meeting of the Society for Research in Child Development, April 2003, http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED475597&ERICExtSearch_SearchType_0=no&accno=ED475597 (accessed December 18, 2015).
3. Grover “Russ” Whitehurst, “Obama Preschool Proposal: How Much Difference Would It Make in Student Achievement?” The Brookings Institution, June 19, 2013, <http://www.brookings.edu/research/papers/2013/06/19-obama-preschool-whitehurst> (accessed December 18, 2015).
4. Schweinhart, “Benefits, Costs, and Explanation of the High/Scope Perry Preschool Program.”
5. Grover “Russ” Whitehurst, “Does Preschool Work? It Depends on How Picky You Are,” The Brookings Institution, February 26, 2014, <http://www.brookings.edu/research/papers/2014/02/26-does-prek-work-whitehurst> (accessed December 18, 2015).
6. Ibid.

and four-year-old children through the end of third grade. The study found little to no impact on the parenting practices or the cognitive, social-emotional, and health outcomes of participants. Notably, on a few measures, access to Head Start had harmful effects on participating children.⁷ For both the three-year-old and four-year-old cohorts, access to Head Start had no statistically measurable effects on any measure of cognitive ability, including reading, language, and math.⁸ In other words, by the time they finished third grade, there was no difference between those children who attended Head Start and the control group of their peers who did not.

Vanderbilt Tennessee Voluntary Pre-K Study.

In 2015, a team of researchers from Vanderbilt University released an evaluation of Tennessee's Voluntary Pre-K (VPK) Program, a state-subsidized preschool program open to low-income children in the state. Some 18,000 children participate in the program, which was introduced in 1996. Proponents have long claimed Tennessee's VPK program is a model state-based preschool program, with standards aligned to the Obama Administration's Preschool for All initiative.⁹ Teachers must be licensed, the child-adult ratio is limited to 10:1, and a structured "age-appropriate" curriculum must be used in classrooms. The program is available first to children from low-income Tennessee families, and then, space permitting, to children with special needs and children with limited English proficiency, among other children deemed "at-risk." An earlier evaluation found that gains made by participating four-year-olds had faded by kindergarten. In a follow-up evaluation released in September 2015, Mark Lipsey, Dale Farrar, and Kerry Hofer reported that there were no sustained benefits for the same children through the end of third grade.¹⁰

The random assignment evaluation tracked more than 3,000 participants overall, contrasting them with a control group of students who applied for a slot in the program through the lottery process but did not receive one. A more intensive evaluation consisted of a subset of 1,076 children: 773 in the experiment group, randomly assigned to a VPK slot (that is, the program is oversubscribed and children were admitted through a lottery), and the control group of 303 children whose parents applied for, but were not offered seats in the VPK program. The randomization, however, was imperfect—a flaw that we discuss below and that should be addressed in future studies of the program.

The authors analyzed the VPK program's impact on children's math skills, emergent literacy, and language skills, as well as the program's impact on non-cognitive measures, such as behavior. "By the end of kindergarten, the control children had caught up to the TN-VPK children and there were no longer significant differences between them on any achievement measures. The same result was obtained at the end of first grade using both composite achievement measures." And notably, by second grade, "the groups began to diverge with the TN-VPK children scoring lower than the control children on most of the measures. The differences were significant on both achievement composite measures and on the math subtests." "Pre-K was generally thought to be better than Head Start, but that doesn't seem to be the case in Tennessee," stated University of California, Berkeley professor David L. Kirp in *The New York Times*.¹¹

The findings of the TN-VPK program were not limited to academic outcomes. As Lipsey et al. explain:

7. Michael Puma et al., "Third Grade Follow-up to the Head Start Impact Study Final Report," U.S. Department of Health and Human Services, Administration for Children and Families (Washington: Office of Planning, Research and Evaluation, October 2012), Exhibit 4.2 and Exhibit 4.1, p. 77, http://www.acf.hhs.gov/sites/default/files/opre/head_start_report.pdf (accessed December 18, 2015).
8. Lindsey Burke and David B. Muhlhausen, "Head Start Impact Evaluation Report Finally Released," Heritage Foundation *Issue Brief* No. 3823, January 10, 2013, <http://www.heritage.org/research/reports/2013/01/head-start-impact-evaluation-report-finally-released>.
9. M. Nadeem, "Is President Obama's Universal Pre-K Initiative Effective?" *Education News*, November 22, 2013, <http://www.educationnews.org/education-policy-and-politics/is-president-obamas-universal-pre-k-vision-effective/> (accessed December 18, 2015).
10. Mark W. Lipsey, Dale C. Farran, and Kerry G. Hofer, "A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children's Skills and Behaviors Through Third Grade," Vanderbilt University, September 2015, http://peabody.vanderbilt.edu/research/pri/VPKthrough3rd_final_withcover.pdf (accessed December 18, 2015).
11. David L. Kirp, "Does Pre-K Make Any Difference?" *The New York Times*, October 3, 2015, http://www.nytimes.com/2015/10/04/opinion/sunday/does-pre-k-make-any-difference.html?_r=1 (accessed December 18, 2015).

In terms of behavioral effects, in the spring the first grade teachers reversed the fall kindergarten teacher ratings. First grade teachers rated the TN-VPK children as less well prepared for school, having poorer work skills in the classrooms, and feeling more negative about school. It is notable that these ratings preceded the downward achievement trend we found for VPK children in second and third grades.¹²

Quebec's Negative Non-cognitive Results

The province of Quebec introduced universal low-cost day care for children through age four beginning in 1997. The program has had a large impact: privately funded child care arrangements have almost disappeared, and Quebec has the highest rate of subsidized child care in Canada, at 58 percent in 2011.¹³ The program caused a 14.5 percent increase in the share of mothers of young children working outside the home.¹⁴ The Quebec experience offers more guidance for the potential introduction of universal child care than small, targeted programs, because it implicitly includes indirect effects on non-participants and any general equilibrium effects due to the drastic shift in the way child care was funded and conducted.

Regrettably, new research has found that children who became eligible for the program in Quebec were more anxious as children and have committed more crimes as teenagers. The availability of day care clearly worsened children's non-cognitive "soft" skills.

Michael Baker, Jonathan Gruber, and Kevin Milligan found that children exposed to the program were 4.6 percent more likely to be convicted of a crime and 17 percent more likely to commit a drug crime. Their health and life satisfaction were worse.

Baker et al.'s study is based on a large representative sample of Canadian children, both before and after the institution of universal low-cost day care in Quebec. This is important and correct. If they had

studied only participants, their results would have been contaminated with selection bias. However, since the program only increased day care enrollment by 14 percent of eligible children, the effects on the children who actually participate may be much larger. The effects could be occurring through any (or all) of three channels:

1. Worse care for children who would have been cared for by a family member if day care were not subsidized;
2. Worse care for children who would have gone to a less-regulated, non-subsidized day care; and
3. Spillover impacts on children who are not participating.

It is instructive to compare Quebec's program with Tennessee's. In Quebec, all children through age four are eligible; in Tennessee only three-year-olds and four-year-olds are eligible. In Quebec, the program cost parents \$7.30 (Canadian) per day;¹⁵ the Tennessee program is completely free at the point of delivery. The majority of Quebec's subsidized day cares are home-based; the Tennessee program does not include in-home care. Quebec's day care workers are unionized; Tennessee's are not.

Different child care arrangements have different results, and no two programs are the same. Subsidized day care in the Quebec style may be better, on average, than some alternatives, but probably less beneficial to most children than being watched by their grandmothers, for example. How the Quebec program compares to other child care programs is an empirical question.

Critiques of Large-Scale Studies

In a major review of the literature on early childhood education, Sneha Elango, Jorge Luis García, James J. Heckman, and Andrés Hojman draw very sanguine conclusions from rather mixed data.

12. Lipsey et al., "A Randomized Control Trial of a Statewide Voluntary Prekindergarten."

13. Maire Sinha, "Child Care in Canada," Statistics Canada, *Spotlight on Canadians: Results from the General Social Survey*, Publication 89-652-X, October 30, 2014, <http://www.statcan.gc.ca/pub/89-652-x/89-652-x2014005-eng.htm> (accessed December 14, 2015).

14. Michael Baker, Jonathan Gruber, and Kevin Milligan, "Universal Childcare, Maternal Labor Supply, and Family Well-Being," National Bureau of Economic Research *Working Paper* No. 11832, December 2005, <http://www.nber.org/papers/w11832.pdf> (accessed December 14, 2015).

15. In 2015, the daily fee moved to a sliding scale based on parental income. See Finance Quebec, "Daily Daycare Costs," April 15, 2015, http://www.budget.finances.gouv.qc.ca/Budget/outils/garde_en.asp (accessed December 14, 2015).

Although Elango et al.'s review is extensive, it is not universally careful: it badly misreports the results of Baker et al.'s 2015 paper on Quebec, claiming that the latter found "evidence of decreased criminal activity."¹⁶ The misunderstanding is especially surprising given that Baker et al. note in their abstract that "cohorts with increased child care access subsequently had worse health, lower life satisfaction, and higher crime rates later in life."

Setting aside that lacuna, Elango et al.'s key findings are that

1. Even high-quality demonstration programs affect only non-cognitive skills; long-term cognitive skills appear to be unaffected.
2. Child care performs best among disadvantaged households, including those who experience poverty or the absence of a parent.

The first finding implies that programs targeted to children under age five belong in the category of care rather than education.

The second implies that universality is overrated: for most families, home care or privately purchased child care provide better outcomes than what governments have offered. Furthermore, giving middle-class families child care subsidies is an expensive market distortion with no justification.

Elango et al. are very critical of the Head Start Impact Study (HSIS), a large-scale randomized experiment that is "notorious because of its transparent and rigorous design" and found that the benefits of Head Start "disappear by first grade."¹⁷ The authors are critical of the HSIS because it covers a wide variety of Head Start centers, some much better than others.¹⁸ But that heterogeneity is a feature, not a bug. Widespread government programs are

always diverse, and evaluations should take that mixed quality into account.

Elango et al. argue that HSIS is "contaminated" by the fact that families in the control group often purchase child care on their own or attend other subsidized child care centers. From the perspective of policymakers, however, the control group ought to represent the full range of options absent a new policy.

The paper that Elango et al. call "the best available study" is a clever long-term study by Pedro Carneiro and Rita Ginja, which covers a variety of implementations of Head Start and has "control contamination," although Elango et al. make no criticism of it. Carneiro and Ginja do find some promising evidence that the expansion of Head Start eligibility in poor counties led to lower levels of obesity and better mental health during adolescence. However, the study uses a low standard of statistical significance (90 percent) and finds statistically significant gains in only three of 12 measures at age 12–13, in two of eight measures at age 16–17, and two of six measures at age 20–21.¹⁹ The study puzzlingly finds that increased eligibility does not increase girls' enrollment at all, so all the estimates are for boys.

Elango et al., happy with the results, mention none of these caveats.

Since they disagree with the results of Lipsey et al.'s study of Tennessee's pre-K program, Elango et al. only mention its drawbacks. For example, they note that "[grade] repetition is the only outcome measured for the entire sample" in Lipsey et al.²⁰ Nowhere do they admit that the "intensive substudy sample" of 1,076 children²¹ measures a variety of outcomes, including both detailed test performance and teachers' evaluations.

Elango et al. do note one serious shortcoming of the data: the Vanderbilt team was unable to obtain

16. Sneha Elango, Jorge Luis García, James J. Heckman, and Andrés Hojman, "Early Childhood Education," National Bureau of Economic Research *Working Paper* No. 21766, p. 64, <http://www.nber.org/papers/w21766.pdf> (accessed December 14, 2015).

17. Pedro Carneiro and Rita Ginja, "Long-Term Impacts of Compensatory Preschool on Health and Behavior: Evidence from Head Start," *American Economic Journal*, Vol. 6, No. 4 (November 2014), pp. 135–136, <https://www.aeaweb.org/articles.php?doi=10.1257/pol.6.4.135> (accessed December 18, 2015).

18. Elango et al., "Early Childhood Education," p. 48.

19. Carneiro and Ginja, "Long-Term Impacts of Compensatory Preschool on Health and Behavior: Evidence from Head Start," Tables 6–8. Note that these significance levels are already adjusted for the fact that many indicators are being tested, so the reader should not further discount them. The evidence thus shows narrow gains, not holistic improvement.

20. Elango et al., "Early Childhood Education," p. 57.

21. Lipsey et al., "A Randomized Control Trial of a Statewide Voluntary Prekindergarten," p. 16.

affirmative consent from many parents, mostly because they did not have adequate communications in the first year of the sample. If the sample of participants was from poorer, less educated households than the control group, the study's results would be in doubt. However, the opposite is true: the control group is very similar to the treatment group. Where small differences exist, such as in the mother's level of education, the control group is at a slight disadvantage. It is certainly true that the Tennessee randomization had flaws and that scrutiny of the evidence calls for greater caution. But the flaws do not appear to have compromised the experiment.

Conclusion

Proponents of universal government-subsidized preschool have to grapple with the fact that previous universal programs have failed and had negative social impacts on children. Evaluations of large-scale programs, such as those in Quebec and Tennessee, are a better indicator of the potential costs and benefits of universal child care than small, targeted programs are.

Government subsidies for child care introduce a large distortion into the market and must be fund-

ed by higher tax rates. Particularly in the absence of compelling evidence that subsidized preschool provides an important public good, the subsidies should be reduced, not increased.

Additional federal subsidies for early childhood education would produce negative effects, such as crowding out private providers from the preschool market, which would ultimately limit options for families. Policymakers should recognize that expanding subsidies for preschool is unnecessary, provides no new benefits to low-income parents, and would create a new subsidy for middle-income and upper-income families, while adding to the tax burden for Americans. A growing body of empirical evidence also suggests that such policies fail to improve a range of outcomes for preschool's young participants.

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