

Early Childhood Education Research Summaries of the Effects of Universal Kindergarten

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Initial Academic Gains Disappear Within A Few Years

1. “Research on preschool and full-day kindergarten shows that these programs have had meaningful short-term effects on disadvantaged students’ cognitive ability, grade-level retention and special-education placement. However, most research also indicates that the academic effects of early education programs disappear soon after children leave the programs.” ¹
2. The outcome of a study released in 2022 that lasted more than a decade studied 2,990 low-income children in Tennessee who applied to free, public prekindergarten programs. “Some were admitted by lottery, and the others were rejected, creating the closest thing you can get in the real world to a randomized, controlled trial — the gold standard in showing causality in science.

[Dale] Farran and her co-authors at Vanderbilt University followed both groups of children all the way through sixth grade. At the end of their first year, the kids who went to pre-K scored higher on school readiness — as expected.

But after third grade, they were doing worse than the control group. And at the end of sixth grade, they were doing even *worse*. They had lower test scores, were more likely to be in special education, and were more likely to get into trouble in school, including serious trouble like suspensions.” ²

3. After a careful six-year study of 35,000 children, Durham University reported that early education programs did not improve the development and skills of children entering primary school. ³
4. “The National Center for Education Statistics Early Childhood Longitudinal Study assessed 22,000 children at kindergarten entry and most recently reported on those students through the third grade. This research shows that by the end of third grade, the researchers no longer detect a difference between students who attended part-day or full-day kindergarten programs.” ⁴
5. Dr. Sebastian Suggate, a researcher at the University of Otago, uncovered quantitative evidence that “teaching children to read from age five is not likely to make that child any more successful at reading than a child who learns reading later, from age seven.” ⁵
6. According to Dr. Matthew Ladner’s 2007 study, the academic benefits of full-day kindergarten disappear by the 5th grade. ⁶

7. Two high-intervention, small-scale programs have showed lasting gains in some areas, Perry Preschool (1962) and Abecedarian (1972). However, when states have tried to scale these programs up, the long-term gains disappear. The gains from the small, “boutique” programs cannot be replicated on a large scale.⁷
8. Lisa Snell wrote in reference to early childhood education legislative proposals: “Michigan is considering investing hundreds of millions of taxpayer dollars each year in a program whose benefits disappear by 3rd grade to solve education problems that come after the 3rd grade.”⁸

Behavior and Academic Harms Resulting from Early Education

9. A child’s age in relation to the ages of his classmates may affect his chances of being diagnosed with and treated for ADHD. In November 2018, a Harvard Medical School study discussed how the 12-month span of ages in a grade may make it “possible that younger children within a grade cohort may be more likely to receive a diagnosis of ADHD than older children in the same grade because inattentive behavior that is developmentally determined may be attributed to ADHD rather than to younger age.”⁹ However, for children in states without a September 1 cutoff for kindergarten entry and for children who had not yet started school, there was no significant difference in rates of ADHD diagnosis.¹⁰
10. The New England Journal of Medicine published a study by Harvard Medical School in November 2018 which concluded that “in states with September 1 cutoffs for kindergarten entry, children born in August are significantly more likely to receive a diagnosis of and treatment for ADHD than children born in September.”¹¹
11. The RAND Corporation reported in 2006 that a study of almost 7,900 students found that “full-day kindergarten programs may actually be detrimental to mathematics and nonacademic readiness skills.”¹²
12. Dale Farran, a top early childhood education researcher, said, “ ‘I think children are not learning internal control. And if anything, they’re learning sort of an almost allergic reaction to the amount of external control that they’re having, that they’re having to experience in school.’

In other words, regularly reprimanding kids for doing normal kid stuff at 4 years old, even suspending them, could backfire down the road as children experience school as a place of unreasonable expectations.”¹³
13. Newly reported findings were recently released from the first well-controlled, long-term study that has ever been conducted of a state-wide publicly supported preschool program in the United States—the Tennessee Pre-K Program (Durkin et al., 2022). Peter Gray, Ph.D., writes that “the major findings of the study are that this expensive, carefully planned pre-K program caused, by 6th grade, reduced performance on all academic achievement tests, a sharp increase in learning disorders [14.6% of the children in the pre-K group, compared to 8.4% in the control group], and much more rule violation and behavioral offenses than occurred in the control group [27.3% of the pre-K group, compared to 18.5% of the controls].”¹⁴
14. According to Dr. David Elkind, professor of child development at Tufts University in New York, “Hurried children ... constitute many of the young people experiencing school failure, those involved in delinquency and drugs, and those who are committing suicide.”¹⁵

15. Dr. David Elkind has stated that the summary of the research strongly suggests that when children receive academic instruction too early (generally before age six or seven), they are put at risk for no apparent gain. Dr. Elkind further stated, "If we do not wake up to the potential danger of these harmful practices, we may do serious damage to a large segment of the next generation." ¹⁶

Boys Are Harmed More Than Girls From Early Formal Education

16. Leonard Sax, M.D., Ph.D., wrote in his book *Boys Adrift*, that physiologically boys' brains and girls' brains develop differently. For instance, the parts of the brain most involved in integrating information (i.e., sight, touch, taste, smell, hearing) develop in girls at a rate roughly two years ahead of boys. ¹⁷
17. An Educational Horizons article explains that this more rapid development of the left hemisphere of the brain in girls enables them to learn to read and write earlier than boys. "Its primary responsibility is auditory processing and verbal expression, such as listening, speaking, and writing." However, the right hemisphere, which develops sooner in boys, "has the primary responsibility for visual-spatial and visual-motor activities, such as [are used in] sports, architecture, sculpture, painting, and carpentry." ¹⁸
18. In a study of 1st- through 6th-graders it was noted that 70% of readers with visual, perceptual, or refractive problems were boys. ¹⁹
19. Many studies suggest that the decreased self-esteem experienced by boys has resulted in much of their antisocial and delinquent behavior. This can be traced to the failures in their early school experiences due to their comparatively slower development. ²⁰
20. Replicated research has consistently demonstrated that on the average girls develop formal academic skills at an earlier age than boys. ²¹
21. Stanley Krippner's research showed that boys make up 90% of disabled readers. This is supported by Bickel & Maynard in their 2004 paper on "No Child Left Behind." ²²

Lifelong Vision Handicap Caused by Early Childhood Education

22. Dr. Henry Hilgartner, in a 1963 paper to the Texas Medical Society, noted that children's eyes, up to about the age of 8 or 9, are more plastic than older eyes, and the outer covering of the eye (sclera) can be distorted by undue strain. Until a youngster's eyes have developed more, they should not read much. This also means that brighter children could have a greater risk if they are in a regular reading program before they are 8 years old. ²³
23. Multiple studies over a period of 100 years, beginning in the late 1800s, demonstrate that close eye work can result in astigmatism and myopia, especially close eye work by young children. ²⁴
24. According to the American Optometric Association, myopia generally first occurs in school-age children, and "individuals who spend considerable time reading, working at a computer, or doing other intense close visual work may be more likely to develop myopia.... Constant visual stress may lead to a permanent reduction in distance vision over time.... Because the eye continues to grow during childhood, [nearsightedness] typically progresses until about age 20." ²⁵

25. Studies in Japan and Alaska strongly indicate that the introduction of compulsory education, with the attendant close work required of young children, has resulted in significant increases of cases of myopia in those societies.²⁶
26. Educator John Dewey, Ph.D., was aware that children's eyes develop first to look at larger objects and at a distance. In 1898 he reported that when children have to focus on close work or small objects over extended periods of time, unnecessary stress and strain would develop. According to Dewey, children should not be required to engage in this type of work until about 8 years of age.²⁷
27. Dr. Chen Tzay-jinn, director-general of the Health Promotion Bureau under the Department of Health in Taiwan, observed, "The growth of nearsightedness among young children is thought to result from learning to read very young and using computers very young."²⁸
28. "Myopia may simply develop as a result of excessive near work...."²⁹
29. Lin Lung-kuang, ophthalmology professor at National Taiwan University, said, "Myopia cannot be cured. We have to prevent children from becoming nearsighted. Don't let them use their vision too early."³⁰

The Benefits of Play

30. Dale Farran, a top early childhood education researcher, said " 'Whoever thought that you could provide a 4-year-old from an impoverished family with 5 1/2 hours a day, nine months a year of preschool, and close the achievement gap, and send them to college at a higher rate?' she asks. 'I mean, why? Why do we put so much pressure on our pre-K programs?' We might actually get better results, she says, from simply letting little children play."³¹

The Power of Parental Influence in Childhood Character Development

31. Dr. Raymond Moore said: "What the child needs most to grow well is a warm one-to-one relationship with a parent (or parent figure) who is always there to comfort and guide him. During the first crucial eight years, home should be the child's only nest and parents the teachers of their children."³²
32. "Beginning in the mid-1980's, many American schools and school districts decided that the first priority of early elementary education should not be socialization but rather should be literacy and numeracy... Just when kids need parents more than ever to teach them the whole package of what it means to be a good person in this particular culture, the authority of parents to do that job has been undermined."³³
33. "Many parents have come to assume that good grades and test scores are the best measures of achievement and the most reliable key to future happiness. But they are mistaken. If you want your child to be healthy *and* wealthy *and* wise, then your first priority should not be measures of cognitive achievement, such as high grades or test scores, but measures of Conscientiousness, such as honesty, integrity, and self-control."³⁴
34. "You don't teach virtue by preaching virtue. You teach virtue by requiring virtuous behavior, so that virtuous behavior becomes a habit."³⁵

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- ¹ Lisa Snell, "Don't Expect Long-term Gain from Early Education Money," *Michigan Education Report* (Aug. 15, 2007) Para. 3. Available at <https://www.mackinac.org/8835>.
- ² Anya Kamenetz, "A top researcher says it's time to rethink our entire approach to preschool," *NPR*, (February 10, 2022). Available at <https://www.npr.org/2022/02/10/1079406041/researcher-says-rethink-prek-preschool-prekindergarten>.
- ³ "Government's Early Years Education Measures Yet to Make an Impact," *Durham University News* (Aug. 28, 2007). Available at <http://www.dur.ac.uk/news/newsitem/?itemno=5685>.
- ⁴ Lisa Snell, "Don't Expect Long-term Gain from Early Education Money," *Michigan Education Report* (Aug. 15, 2007) Para. 4. Available at <https://www.mackinac.org/8835>.
- ⁵ Sebastian Suggate, Ph.D., "Research finds no advantage in learning to read from age five," University of Otago, New Zealand, (Dec. 21, 2009): Para. 1. Available at <https://www.otago.ac.nz/news/news/otago006408.html>
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- ⁷ Lindsay M. Burke & Rachel Sheffield, "Universal Preschool's Empty Promises," *The Heritage Foundation, Backgrounder No. 2773* (March 12, 2013) pp. 3-4. Available at http://thf_media.s3.amazonaws.com/2013/pdf/bg2773.pdf.
- ⁸ Lisa Snell, "Don't Expect Long-term Gain from Early Education Money," *Michigan Education Report* (Aug. 15, 2007) Para. 14. Available at <https://www.mackinac.org/8835>.
- ⁹ Timothy J. Layton, Ph.D. et al., "Attention Deficit-Hyperactivity Disorder and Month of School Enrollment," *The New England Journal of Medicine*, vol. 379, no. 22, (November 29, 2018): p. 2123.
- ¹⁰ Timothy J. Layton, Ph.D. et al., "Attention Deficit-Hyperactivity Disorder and Month of School Enrollment," *The New England Journal of Medicine*, vol. 379, no. 22, (November 29, 2018): p. 2128.
- ¹¹ Timothy J. Layton, Ph.D. et al., "Attention Deficit-Hyperactivity Disorder and Month of School Enrollment," *The New England Journal of Medicine*, vol. 379, no. 22, (November 29, 2018): p. 2129.
- ¹² Lisa Snell, "Don't Expect Long-term Gain from Early Education Money," *Michigan Education Report* (Aug. 15, 2007) Para. 11. Available at <https://www.mackinac.org/8835>.
- ¹³ Anya Kamenetz, "A top researcher says it's time to rethink our entire approach to preschool," *NPR*, (February 10, 2022). Available at <https://www.npr.org/2022/02/10/1079406041/researcher-says-rethink-prek-preschool-prekindergarten>.
- ¹⁴ Peter Gray, "Research Reveals Long-Term Harm of State Pre-K Program," *Psychology Today*, (January 31, 2022). Available at https://www.psychologytoday.com/us/blog/freedom-learn/202201/research-reveals-long-term-harm-state-pre-k-program?fbclid=IwAR1T8pofgwlQ3Wq3MiE4RH-QIAqGt_szi-Wg-fzCiWXASTHM0SySKfgNgv4
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- ¹⁶ David Elkind, Ph.D., *Miseducation: Preschoolers at Risk* (1987) pp. 3-4.
- ¹⁷ Leonard Sax, M.D., Ph.D., *Boys Adrift* (New York, Basic Books, 2007) p. 17.
- ¹⁸ Betsy Gunzelmann & Diane Connell, "The New Gender Gap: Social, Psychological, Neuro-biological and Educational Perspectives," *Education Horizons* (2006) p. 5.
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- ²⁸ Dr. Chen Tzay-jinn received his master's degree in public health from Harvard University and graduated from the National Taiwan University's School of Medicine. He lives and works in Taiwan. Since his position as director-general of the Health Promotion Bureau, he has served as head of the central region Department of Health and the director-general of the Center for Disease Control.
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- ³² Raymond S. Moore, Ph.D., *Better Late Than Early* (1975) p. 3.
- ³³ Leonard Sax, M.D., Ph.D., *The Collapse of Parenting* (New York, Basic Books, 2016) pp. 17-18.
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