

Parent Programs in Pre-K through Third Grade

Katherine Magnuson and Holly S. Schindler

Summary

Parents strongly influence their children's development, and prekindergarten and early elementary programs—especially those serving children at risk for low achievement because of their family backgrounds—often feature programming to support parents' role in their children's learning. Despite the prevalence of such programs, however, we have little good evidence of their effectiveness. In this article, Katherine Magnuson and Holly Schindler review more promising, fully developed parent “add-on” programs.

In their daily work, preschool and elementary school programs and teachers commonly use a variety of formal and informal activities to support, educate, and involve parents, such as having parents volunteer in the classroom or encouraging children to share classwork or other materials with their parents. Though such practices are widespread, the authors write, we have little rigorous evidence to show that they're associated with children's academic success.

“Add-on” parenting programs, in contrast, generally target a particular subset of parents, and they often have a highly specific and clearly developed programmatic approach. Such programs focus on helping parents improve either their children's early academic skills or their behavior and self-regulation. Among the types of parent support that Magnuson and Schindler review, add-on programs have shown the most promise to improve children's learning. But parents with many demands on their time may find it hard to sustain a commitment to these programs; technological solutions such as communication by text messaging may be one way to solve this problem.

A final way to involve parents is to give them information about the quality of their prekindergarten or elementary school choices, although such information may not be particularly useful to parents who live near a set of similarly high-performing or low-performing schools, or can't access programs because of limited enrollments or cost.

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Because young children spend so much of their time in their parents' care, parents are often described as children's first teachers. Parents' verbal interactions, responsiveness, and stimulation all help to develop their children's early skills and to prepare them to learn in formal settings. However, parents differ in the quantity and quality of their interactions with their children and the degree to which they provide enriching experiences, both of which are important in understanding socioeconomic gaps in children's academic achievement.¹ Thus early learning and educational settings—especially those serving children at risk for low achievement because of their family backgrounds—often feature programming to support parents' role in their children's learning.

Despite the prevalence of parent-related services, practices, and programmatic components in early learning and elementary school, we have little good evidence of their effectiveness. In this review, we discuss why preschools and elementary schools often target parents in their efforts to improve students' learning, and we critically review evaluations of several types of parenting programs for parents of prekindergarten through third-grade children. However, we don't examine more general efforts to involve parents in school activities, school decision-making, and leadership, and to build school-family partnerships.

Why Target Parents?

Parenting behaviors that are consistently warm, responsive, and cognitively stimulating promote children's cognitive and behavioral development, providing a strong foundation for learning in schools.² Volumes of research

link children's experiences with their caregivers—and in their home environments more generally—to their early language, literacy, math, social, and behavioral development. However, because many other factors might explain these associations, it's hard to claim that the links between the quality of parent-child interactions and children's early skills and behavior constitute a causal chain.³ But even if parenting practices and parent-child interactions aren't the only (or even the most) important factor in explaining children's early skills, parenting practices and parent-child interactions likely affect children's school readiness, academic success, and behavior.⁴ Convincing evidence comes from studies of twins that try to separate the effects of parenting from the effects of shared genetic factors, as well as from experimental studies showing that if you change the nature or frequency of a specific set of well-defined parenting behaviors, children will gain more of the targeted skills.⁵

Preschool and elementary school parent programs seek to enlist parents to support their children's growth and learning in a way that's congruent with the classroom's instructional content and methods. To achieve these goals, programs take many approaches. They often focus on teaching parents about how they can support their children's learning and on promoting a particular parenting behavior, such as reading books with their children. Nearly all programs strive to communicate effectively with parents, because to support learning, parents must first know which sets of their children's skills are developing, including what areas need more work. Parents also need general information about developmental opportunities and challenges. If parents know more about developmental goals, it's easier to help them embed

learning opportunities in daily routines and use positive parenting strategies. Parents might introduce a new behavior (such as shared book reading or using a quiet space at home), embed learning in daily activities (for example, identifying letters in print, counting, or encouraging independence in self-care), or develop a more general pattern of interactions (for example, holding longer and more complex conversations or praising positive behaviors more often).

Despite these common features, preschool through third-grade programs work with parents in many different ways. Often, they embed parent education, involvement, or support in their educational programs, but not as a neatly packaged component. Another approach is to offer a clearly defined parenting program that focuses on specific skills to support children's early academics or behavior. Yet another is to give parents information about the preschools and elementary schools among which they can choose.

We'll discuss each of these approaches in this article. However, we won't cover several types of related evidence, because the studies available don't directly answer questions about the effectiveness of parent-directed interventions added to prekindergarten through third grade. First, we exclude stand-alone parent programs. Such programs may be designed to improve children's skills or behavior, but they aren't embedded or delivered in early learning programs or schools. Second, we don't discuss programs developed specifically for parents of children who have special needs or receive special education services. Third, we don't review programs designed specifically for one gender of parents, such as fathers; in any case, these are frequently also stand-alone

rather than school-based programs. Fourth, we don't review two-generation programs that try to build both children's and parents' human capital at the same time, in part because Lindsay Chase-Lansdale and Jeanne Brooks-Gunn reviewed them in the Spring 2014 issue of *Future of Children*, and in part because evaluations of such programs have yet to be completed.⁶ Finally, we don't review school transition programs, which typically include parenting outreach or involvement as part of a larger effort to improve children's transition to kindergarten.⁷

Do Parent Programs Make a Difference?

Teachers and schools often conduct a variety of formal and informal activities to support, educate, and involve parents. Formal practices include, for example, having parents volunteer in the classroom, one-time parent workshops, occasional teacher home visits, regular discussion sessions, and regular parent-teacher conferences. More informally, teachers may encourage children to share classwork or other materials with their parents, and they may tell parents what children are learning or how positive behavior is being supported in the classroom. Teachers may also send home educational materials to be used in the home, such as a book with suggestions about how parents can extend their children's reading to other learning opportunities.

Though working with parents in these settings is common, we have little rigorous evidence to show that children achieve more academic success when educational programs include practices intended to engage and support parents. It may be that it's not easy to estimate the added value these programs provide for children, given that it's hard to

isolate the impacts of parent activities from those of a broader program. Recently, two sets of reviewers looked systematically across many evaluation studies to compare early childhood programs with and without parenting activities. One review found that any services added to preschool programs (including not only parenting programs but also other forms of social service supports) were associated with significantly smaller effects on children's cognitive development than the effects of the preschool services alone.⁸ This finding raises questions about the effectiveness of such added services, although in general, all the programs had a positive impact on children's cognitive and academic outcomes. A second analysis across early childhood education programs looked only at the provision of parenting education programs that sought to directly improve parent-child interactions.⁹ This analysis found no differences in effects on short-term measures of children's cognitive or pre-academic skills between preschool programs that did and didn't provide programming and education for parents. But again, all the broader programs effectively boosted children's outcomes. No similar review has looked at elementary school-age children.

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These analyses provide a clear takeaway: adding any type of parent-related support, service, or practice won't necessarily yield a more effective early learning program as measured by children's academic outcomes. But such broad conclusions have limitations. First, the parenting components of early childhood programs are often ancillary services that may be insufficiently developed or poorly implemented, with little attention paid to identifying key goals or training staff to support those goals. Second, diversity of parenting activities also makes it difficult to interpret their combined effect on a broad set of outcomes, because goals and intent may be quite different from program to program.

Another approach to understanding the role of parenting practices is to study a population of children attending a particular educational program and see whether adding a parent component for some subset of these children improves their outcomes relative to business as usual. In the following sections, we examine the evidence for such add-on parenting programs, distinguishing between programs that focus primarily on children's early academic skills, such as language, literacy, numeracy, and basic concepts, and those that focus on behavior or self-regulation. These programs often have a highly specific and clearly developed programmatic approach compared to the parent-related practices or general support activities found in most pre-K-3 settings. Studies often focus on demonstration programs, which typically have their own funding sources and are implemented in settings with the staffing and commitment to deliver the programs as intended. Although relatively few studies offer empirical evidence for

such programs, these types of approaches have demonstrated the most promise to improve children's learning.

Add-On Programs: Language, Literacy, and Reading

Language and literacy skills have received considerable attention in early learning, and numerous parenting programs have focused on them. Because early language plays a pivotal role in acquiring later reading skills, some programs aim to foster parenting practices that promote children's early language. The key idea is that parents don't fully understand how to engage their children in rich language interactions that will promote early language skills. Specifically, these programs teach parents not only to talk more with their children, but also to use a wide and varied vocabulary, complex grammatical structures, and language for analytic purposes. They also encourage parents to ask their children questions and promote rich language interactions by embedding conversations in daily routines, and in some cases to specifically teach children about language (for example, by playing rhyming word games or identifying letters and sounds in words).

One focus of literacy programs has been to promote interactive or dialogic reading—regular book reading in which parents ask their children to think about and discuss aspects of the story and to interact with the text rather than passively listen. Reading to children promotes comprehension, while engaging them in conversation promotes children's ability to express themselves. This type of interactive book reading for preschool children is most effective when both parents and teachers do it, rather than just teachers alone. Individual attention from parents

during book reading may be an especially good way to engage children in reading.¹⁰

Several variations on parent-child dialogic reading programs have been evaluated.¹¹ For example, Raising a Reader, a classroom interactive reading program with a parenting component, included a series of five "family nights" in which parents were instructed in shared reading techniques and given time to practice the approach, as well as to share a meal with other families.¹² Compared to a Raising a Reader program that didn't have family nights, the parenting components were associated with small improvements in spoken language skills and print knowledge (for readers familiar with statistical analysis, the effect sizes ranged from 0.11 to 0.15), but not in more advanced skills like word reading. Because the improved outcomes came in areas that were directly involved in the intervention, the close alignment between the intervention activities and the pattern of results isn't unexpected. However, such programs are often designed with the hope of affecting a wider set of skills. These findings suggest that it may be quite hard to create programs that increase broader school success.

A comprehensive review of programs for early elementary school children who are learning to read found that on average, programs that explicitly promoted parents' role in supporting their children's reading acquisition from kindergarten to third grade had a moderately large effect on children's outcomes compared to children whose parents didn't have the opportunity to participate in such a program.¹³ Programs that trained parents to serve as tutors had the largest effect (weighted effect size of 1.15). Programs that focused on having children read to their parents demonstrated

moderate effects (weighted effect size of 0.52), while programs that aimed to increase parents' reading to their children had only small effects (weighted effect size of .18). These findings indicate that add-on literacy programs that encourage parents to support their children's literacy learning can successfully boost certain reading practices and children's skills.

Buoyed by the successes of language and reading interventions, developers have recently broadened the range of skills that parenting programs target. For example, the Research-Based Developmentally Informed Parent (REDI-P) curriculum includes a parent component to support children's classroom learning during the transition from Head Start to kindergarten, focusing on socioemotional and literacy skills.¹⁴ For literacy, REDI-P incorporates aspects of parenting interventions that have proven successful, such as interactive or dialogic parent-child reading and activities like letter identification and letter-sound skill practice. The curriculum embeds socioemotional content in stories and activities, encouraging parents to use targeted praise, help children identify emotions, and support self-control strategies. Parents receive the intervention during 10 home visits in the spring of the Head Start year and six in the fall after their children enter kindergarten.

The results from an experimental evaluation at the end of kindergarten are promising.¹⁵ REDI-P had small to medium impacts on teachers' reports of children's academic performance (effect size of 0.25) and an assessment of literacy skills (effect size of 0.28), but not on vocabulary or reading fluency. Teachers rated the REDI-P children as more self-directed and more socially competent (medium effect sizes

of 0.28–0.29) than the comparison-group children, although they were no less aggressive. Possible explanations for the program's positive impacts include its relative intensity, the use of coaching, the intervention's timing, and its synchrony with the school curriculum. Further research will tell whether the program's effects persist, and whether such a program can feasibly be scaled up.¹⁶

Technology may be able to reach more parents with less effort and cost.

Technological Approaches to Improve Parenting Programs

One problem with more intensive programs is that they may achieve greater effectiveness at the cost of a wider reach because parents—especially disadvantaged parents—can't sustain the intensive demands on their time and interest. Technology may be able to reach more parents with less effort and cost. And some technology-based approaches overcome other barriers to improving parenting practices. These approaches assume that changing parenting behavior is complicated, not only (or even primarily) because parents lack information about how to promote their child's learning, but also because of other, behavioral factors. Specifically, factors that may inhibit parents from increasing the number of stimulating parent-child interactions include their perceptions of the task's complexity, lack of attention, and difficulty delaying gratification and disrupting established routines.

One literacy-based program used text messages on mobile phones to break down parenting support for children into small, easy-to-achieve steps and to provide continuous encouragement and reinforcement.¹⁷ The text messages, based on the prekindergarten curriculum, told parents in a widely accessible but nonintrusive way how to embed learning activities in their children's daily lives. A rigorous evaluation found that the program improved children's targeted home-learning activities, parents' involvement in their children's schooling, and some dimensions of children's literacy skills like letter sounds, but it didn't affect other advanced literacy skills like name writing. These promising results suggest we need further research on text message-based approaches to working with parents, and that a simple and achievable set of suggested activities for parents may be important.

Another program gave families tablet devices that were preloaded with electronic books to increase the reach and effectiveness of a parent literacy intervention.¹⁸ Staff members checked in with parents about setting reading goals, and the parents got text messages with reminders, information about progress meeting their goals, and positive encouragement and praise. After six weeks, parents in the intervention group were reading to their children for about 25 minutes a week, compared to less than 10 minutes a week for control-group parents. The next step will be to test whether this increase in reading is sustained over time and whether it improves children's literacy skills.

Add-On Programs: Early Math Skills

In general, developers of parent programs haven't devoted much attention to math. That's unfortunate; numeracy and math skills are foundations for later learning, and

parents can support the growth of these skills. Certain parenting practices, such as direct math instruction, explaining numerical concepts, or practicing math facts—as well as informal activities involving numbers, such as measuring ingredients while cooking or counting tokens in a board game—are strongly linked to children's mathematical learning.¹⁹

According to a survey of schools in 2001–02, the most common parent “partnership” activities related to math achievement involved communicating with parents—for example, explaining the curriculum and testing. Parent-directed efforts to improve student math achievement or specific math skills were less common. The survey's creators noted that most teachers aren't trained to work with parents to practice math or extend math learning.²⁰ Given that so few efforts focus on math, it's not surprising that we have almost no empirical evidence on the effectiveness of parent-based math programs in early learning. One small-scale, experimental pilot study involving parents of children in Head Start suggests that parent-based math interventions may have some promise.²¹ The parent training sessions were well attended, and an evaluation showed that the program significantly improved children's math skills.

More evidence that parent-based math interventions can be effective comes from a program called Bedtime Learning Together, in which parents used a math application on a tablet.²² The application presented short text passages related to mathematical topics, followed by mathematical questions for parents and children to answer together. When parents used the tablet an average of once a week over the course of a year, their first-grade children's math skills improved

compared to children whose parents used a reading application. Interestingly, however, these improvements were detected only for children whose parents said they were anxious about math; children of parents who weren't anxious about math saw no benefit. Researchers need to determine whether this type of intervention can be feasibly and effectively embedded in schools in such a way that it reaches and engages the parents of children who might benefit from it substantially.

Finally, another project is examining the effectiveness of a parenting program that targets both reading and math skills. Getting Ready for School, which was developed in Eastern Europe and has been adapted for the United States, promotes parents' engagement in literacy and math learning activities before children enter formal schooling.²³ The program involves a nine-unit activity curriculum with materials and guides, as well as two-hour parent workshops that include online videos showing how to engage children in learning activities. The results of a small pilot study suggested that the intervention might improve some aspects of children's early learning, especially early numeracy and math skills (it had less effect on language and literacy). A larger evaluation, currently under way, should tell us more about the program's potential.

Add-On Programs: Socioemotional and Behavior Skills

The broad concept of school readiness includes children's socioemotional skills. Disparities in these skills by income or socioeconomic status are far smaller than disparities in academic skills.²⁴ Nevertheless, socioemotional skills and behavior are

important for school success.²⁵ When asked to identify factors associated with a difficult transition to formal schooling, kindergarten teachers point to weak academic skills, problems with social skills, trouble following directions, and difficulty with independent and group work.²⁶ These responses highlight the breadth of socioemotional and behavioral skills that children need in the classroom, including prosocial skills, independence, self-regulation, and attention.

Children's behavior is most likely to improve when caregivers and teachers have consistent expectations and responses both at home and at school.

Because parenting practices are strongly associated with children's early behaviors and socioemotional skills, efforts to improve children's classroom behavior often include parents. Harsh, inconsistent, and coercive caregiver-child relationships early in life are associated with higher levels of externalizing behavior (commonly known as acting out) and low levels of self-regulation.²⁷ Moreover, evidence suggests that children's behavior is most likely to improve when caregivers and teachers have consistent expectations for and responses to children's behavior both at home and at school.

Many parenting programs that target children's behavior were originally designed for children whose aggressive, defiant, oppositional, or impulsive behaviors were significant enough to warrant clinical

intervention. These include the Incredible Years program, in which parents with children in early childhood education participate in 12 weeks of parent groups that use video vignettes as a platform to discuss parent skills (for example, behavior management) and practice alternative responses. Incredible Years has been shown to be effective in improving the behavior of young children with significant behavior problems.²⁸

Increasingly, however, attention has shifted toward heightening the social and emotional skills of all children, not just those with high levels of problem behaviors. Improving early behavior skills in the general population may prevent the emergence of behavior problems, which in turn may reduce the risk of academic problems, such as dropping out or having low levels of engagement, down the road.²⁹ Some programs for children at risk for social and emotional problems have adopted a prevention framework that targets parents in an effort to reduce risk factors and increase protective factors, such as school engagement and community connections.

In one such program, ParentCorps, classroom teachers and other school staff deliver a series of 13 group-based parenting classes, using video vignettes to support positive parenting skills.³⁰ ParentCorps aims to create more opportunities for parents and teachers to interact, thereby increasing parents' engagement in their children's education. An evaluation among prekindergarten children enrolled in a large urban school district found that ParentCorps had medium-size effects on effective parenting practices and on teachers' ratings of child behavior problems, although neither parent involvement nor children's more general school readiness were affected. A

second experimental evaluation found that ParentCorps had small positive impacts on kindergarten achievement scores and teacher-rated academic performance.³¹ Unfortunately, although it had promising results, the program had trouble reaching parents. Only 42 percent of parents who were eligible for the program enrolled in it, and, on average, enrolled parents attended less than half of the sessions.

Like ParentCorps, Families and Schools Together (FAST) provides group-based parenting programs (eight sessions in all), held at school.³² Unlike other programs, FAST focuses on building parent-school-community connections and social relationships. Four randomized controlled trials of FAST have been conducted with diverse, low-income populations.³³ The evaluations found high enrollment and retention rates; moreover, each of the studies produced some evidence that FAST improved parent involvement, children's social skills, and children's behavior. However, the results weren't consistent from trial to trial. In some studies, for example, FAST affected social skills; in others, only aggressive behaviors were improved. In some cases, teachers' reports of behavior problems fell significantly; in others, only parents' reports of behavior problems dropped. A large, new, randomized controlled trial is under way that will examine FAST's effectiveness across a large set of outcomes expected to measure the program's theory of change, including parent social support and parent-school engagement.

Like children's early achievement, behavior and socioemotional development have many dimensions. Thus key questions for program developers are which child behaviors to target and which parenting strategies to

emphasize. We also need more research to determine which approaches are likely to work for all children and which are most successful for children who demonstrate high levels of problem behavior. As more evaluations test underlying theories of change and causal mechanisms, we'll learn more about how to design programs to reduce behavior problems and to promote social and emotional competence. One area that could use more attention is how to improve parents' own self-regulation and mental health as a pathway to improving parent-child interactions, and ultimately, their children's behavior. Finally, as is the case for programs that target children's academic skills, enrolling parents and keeping them engaged remains challenging. Although technology has yet to be used as a platform for delivery of programs targeting socioemotional skills, no doubt such programs will be developed and studied in the near future.

Parenting Supports: School Information

A final way to support parents is to give them information about schools and preschool programs. Many school systems now give parents a range of choices about which preschool programs and schools (local public schools, private schools, charter schools, and magnet schools) their children could attend. When researchers have studied efforts to help parents of older children make decisions by giving them clear information about the set of schools their children could attend, they've found that parents who receive well-packaged information choose higher-performing schools.³⁴ However, they do so only if they live near a school with higher scores. Not surprisingly, information doesn't help

parents when they live near a set of similarly low-performing (or high-performing) schools. For parents of preschool and younger children, states' *quality rating and improvement systems* seek to serve a similar purpose by giving parents clear, easy-to-access information about the quality of early care and learning programs. We don't yet understand how this information affects parents' enrollment decisions, but these systems may be an important way to help parents.³⁵

Effective programs train their staff in how to work with parents; they also target specific skills or behaviors and focus on parenting practices that are clearly linked to the targeted skills.

Conclusions

Given the fundamental role that parenting and home environments play in young children's development, it's clear why prekindergarten and early elementary programs want to work with parents to improve children's academic outcomes. Nevertheless, only a handful of such efforts have been shown to improve children's school learning and adjustment. Looking across the effective parenting programs in prekindergarten through third grade, we see some shared features. First, effective programs train their staff in how to engage and work with parents. Second, they target specific skills or behaviors and focus on

parenting practices that are clearly linked to the targeted skills. Some programs also give parents the materials, such as books, that they need to implement the recommended parenting strategies.

These programs show promise, but their benefits also tend to be limited to the content domains and skills targeted. Although that's not surprising, it suggests that parenting programs are unlikely to have sweeping impacts across many domains of children's academics and behavior. It may be unrealistic to expect a program to improve numerous and diverse aspects of parenting repertoires and behaviors. A significant challenge, then, is to determine which dimensions of parenting practices—and related children's skills and behaviors—in what combinations can be changed most effectively by school-based parenting programs. Moreover, when we think about which skills to focus on, we need to attend to how these short-term changes in parenting and children's skills may affect children's later learning. It may be easy to improve a particular aspect of parenting and children's related skills, but if these don't do much to promote school success in the long run, we may not be making the best use of resources. Unfortunately, few studies of parent programs have long-run follow-ups, so it's uncertain to what extent the programs' impacts persist or are linked to improvement in other skills later in children's lives.

Several more issues loom large for designers of parent programs. One important consideration is the trade-off between sustaining parents' participation and the program's convenience and time demands. Some evidence suggests that shorter, less intensive programs may not be as effective as longer, more intensive programs. But getting parents to show up and keep coming to

longer-lasting programs may be a problem, especially for parents who have many demands on their time. Prevention services may have an especially hard time enrolling and retaining parents, given that their children haven't yet demonstrated low skills or problem behaviors. A related, persistent concern is whether there's a cultural match among program leaders, content, and the families they seek to support. Program design would benefit from greater attention to why parents don't participate. Indeed, problems with parent participation constitute one reason that the use of technology holds promise as a platform for delivery. Technological solutions might reduce the costs, complexity, and inconvenience of either participating in the program or implementing a new parenting strategy. But we need considerably more work to understand how and under what conditions technology can be used to effectively engage parents in supporting their children's learning.

To date, no empirical evidence indicates that incorporating a smattering of parent-related activities into an early learning or elementary school program, even in a systematic way, can improve children's academic and socioemotional skills or classroom behaviors. However, some well-developed and carefully implemented parenting programs can be effective in improving these outcomes, and educators should consider these approaches. We caution, however, that delivering a program so that it reaches parents effectively seems to be important. For parent add-on programs, we think it's best to target families that are likely to benefit from particular types of interventions rather than to implement universal programs. One exception to this argument might be text

message-based parenting programs, though we need more research on the effectiveness of this low-cost mode of parent-based intervention.

In closing, we should also acknowledge that schools and teachers may undertake parent-related activities and seek parent involvement for many reasons that aren't primarily about improving student's academic learning and skills, and that many parent-related practices and partnerships

serve other important goals, such as building community and cultivating leadership. Indeed, just because we lack rigorous evidence that general parent education and involvement can boost children's academic skills or improve behavior doesn't suggest that these efforts shouldn't be an essential part of early learning. It does suggest, however, that such practices aren't likely to be an effective way to improve all children's school success.

ENDNOTES

1. Ariel Kalil, Rebecca Ryan, and Michael Corey, "Diverging Destinies: Maternal Education and the Developmental Gradient in Time with Children," *Demography* 49 (2012), 1361–83, doi: 10.1007/s13524-012-0129-5; Jane Waldfogel and Elizabeth Washbrook, "Income-Related Gaps in School Readiness in the United States and the United Kingdom," in *Persistence, Privilege, and Parenting: The Comparative Study of Intergenerational Mobility*, ed. Timothy Smeeding, Robert Erikson, and Markus Jantti (New York: Russell Sage Foundation, 2011), 175–208.
2. Susan H. Landry et al., "Does Early Responsive Parenting Have a Special Importance for Children's Development or is Consistency across Early Childhood Necessary?" *Developmental Psychology* 37 (2001): 387–403, doi: 10.1037/0012-1649.37.3.387; Suzanne E. Mol et al., "Added Value of Dialogic Parent-Child Book Readings: A Meta-Analysis," *Early Education and Development* 19 (2008): 7–26, doi: 10.1080/10409280701838603; Geetha Ramani and Robert Siegler, "How Informal Learning Activities Can Promote Children's Numerical Knowledge," in *Oxford Handbook of Mathematical Cognition*, ed. Roi Kadosh and Ann Dowker (Oxford: Oxford University Press, 2014); Zehava Oz Weizman and Catherine E. Snow, "Lexical Output as Related to Children's Vocabulary Acquisition: Effects of Sophisticated Exposure and Support for Meaning," *Developmental Psychology* 37 (2001): 265–79, doi: 10.1037/0012-1649.37.2.265.
3. Jeanne Brooks-Gunn and Lisa Markman-Pithers, "The Contribution of Parenting to Ethnic and Racial Gaps in School Readiness," *Future of Children* 15, no. 1 (2005): 139–68; W. Andrew Collins et al., "Contemporary Research on Parenting—the Case for Nature and Nurture," *American Psychologist* 55 (2000): 218–32, doi: 10.1037/0003-066X.55.2.218.
4. Brooks-Gunn and Markman-Pithers, "Contribution of Parenting."
5. For twin studies, see Bonamy R. Oliver, "Unpacking Externalizing Problems: Negative Parenting Associations for Conduct Problems and Irritability," *British Journal of Psychiatry Open* 1 (2015): 42–47, doi: 10.1192/bjpo.bp.115.000125; and Elliot M. Tucker-Drob and K. Paige Harden, "Early Childhood Cognitive Development and Parental Cognitive Stimulation: Evidence for Reciprocal Gene-Environment Transactions," *Developmental Science* 15 (2012): 250–59, doi: 10.1111/j.1467-7687.2011.01121.x. For experimental studies, see Irwin Sandler et al., "Long-Term Effects of Parenting-Focused Preventive Interventions to Promote Resilience of Children and Adolescents," *Child Development Perspectives* 9 (2015): 164–71, doi: 10.1111/cdep.12126; and Monique Sénéchal and Laura Young, "The Effect of Family Literacy Interventions on Children's Acquisition of Reading from Kindergarten to Grade 3: A Meta-Analytic Review," *Review of Educational Research* 78 (2008): 880–907, doi: 10.3102/0034654308320319.
6. P. Lindsay Chase-Lansdale and Jeanne Brooks-Gunn. "Two-Generation Programs in the Twenty-First Century," *Future of Children* 24, no. 1 (2014): 13–39.
7. Sharon L. Kagan and Michelle J. Neuman, "Lessons from Three Decades of Transition Research," *Elementary School Journal* (1998): 365–79, doi: 10.1086/461902.
8. Gregory Camilli et al., "Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development," *Teachers College Record* 112 (2010): 579–620.
9. Todd Grindal et al., "The Added Impact of Parenting Education in Early Childhood Education Programs: A Meta-Analysis," Abt Associates, Cambridge, MA, 2016.
10. Christopher J. Lonigan and Grover J. Whitehurst, "Relative Efficacy of Parent and Teacher Involvement in a Shared-Reading Intervention for Preschool Children from Low-Income Backgrounds," *Early Childhood Research Quarterly* 13 (1998): 263–290, doi: 10.1016/S0885-2006(99)80038-6.
11. Sénéchal and Young, "Family Literacy."

12. Jason L. Anthony et al., "Experimental Evaluation of the Value Added by Raising a Reader and Supplemental Parent Training in Shared Reading," *Early Education and Development* 25 (2014): 493–514, doi: 10.1080/10409289.2013.812484.
13. Sénéchal and Young, "Family Literacy."
14. Karen Bierman et al., "Helping Head Start Parents Promote Their Children's Kindergarten Adjustment: The REDI Parent Program," *Child Development* 86 (2015): 1877–91, doi: 10.1111/cdev.12448.
15. Ibid.
16. Findings from school transition studies conducted years ago suggest the difficulty of implementing and evaluating these programs, let alone identifying the value of the parenting practices embedded in them. Kagan and Neuman, "Lessons," provides a critical review of evaluations of transitions programs.
17. Benjamin N. York and Susanna Loeb, "One Step at a Time: The Effects of an Early Literacy Text Messaging Program for Parents of Preschoolers," NBER Working Paper no. 20659 (Cambridge, MA: National Bureau of Economic Research, November 2014).
18. Susan E. Mayer et al. "Using Behavioral Insights to Increase Parental Engagement: The Parents and Children Together (PACT) Intervention," NBER Working Paper No. 21602 (Cambridge, MA: National Bureau of Economic Research, October 2015).
19. Ramani and Siegler, "Numerical Knowledge."
20. Steven B. Sheldon, Joyce L. Epstein, and Claudia L. Galindo, "Not Just Numbers: Creating a Partnership Climate to Improve Math Proficiency in Schools," *Leadership and Policy in Schools* 9 (2010): 27–48, doi: 10.1080/15700760802702548.
21. Prentice Starkey and Alice Klein, "Fostering Parental Support for Children's Mathematical Development: An Intervention with Head Start Families," *Early Education and Development* 11 (2000): 659–80, doi: 10.1207/s15566935eed1105_7.
22. Talia Berkowitz et al., "Math at Home Adds up to Achievement in School," *Science* 350, no. 6257 (2015): 196–98, doi: 10.1126/science.aac7427.
23. Kimberly G. Noble et al., "'Getting Ready for School': A Preliminary Evaluation of a Parent-Focused School-Readiness Program," *Child Development Research* 2012 (2012): 259598, doi: 10.1155/2012/259598.
24. Greg J. Duncan and Katherine Magnuson, "The Nature and Impact of Early Achievement Skills, Attention Skills, and Behavior Problems," in *Social Inequality and Educational Disadvantage*, ed. Greg J. Duncan and Richard Murnane (New York: Russell Sage Foundation, 2011).
25. Jack P. Shonkoff and Deborah A. Phillips, *From Neurons to Neighborhoods: The Science of Early Childhood Development* (Washington, DC: National Academy Press, 2000).
26. Sara E. Rimm-Kaufman, Robert C. Pianta, and Martha J. Cox, "Teachers' Judgments of Problems in the Transition to Kindergarten," *Early Childhood Research Quarterly* 15 (2000): 147–66, doi: 10.1016/S0885-2006(00)00049-1.
27. Travis Hirschi, *Causes of Delinquency* (Berkeley: University of California Press, 1969); Patrick H. Tolan, Kenneth Dodge, and Michael Rutter, "Tracking the Multiple Pathways of Parent and Family Influence on Disruptive Behavior Disorders," in *Disruptive Behavior Disorders*, ed. Patrick H. Tolan and Bennett L. Leventhal (New York: Springer, 2013): 161–91, doi: 10.1007/978-1-4614-7557-6_7.

28. Carolyn Webster-Stratton, "The Long-Term Effects of a Videotape Modeling Parent-Training Program: Comparison of Immediate and 1-Year Follow-Up Results," *Behavior Therapy* 13, (1982): 702–14, doi: 10.1016/S0005-7894(82)80026-9; Carolyn Webster-Stratton and Mary Hammond, "Treating Children with Early-Onset Conduct Problems: A Comparison of Child and Parent Training Interventions," *Journal of Consulting and Clinical Psychology* 65 (1997): 93–109, doi: 10.1037/0022-006X.65.1.93.
29. Kristen L. Bub, Kathleen McCartney, and John B. Willett, "Behavior Problem Trajectories and First-Grade Cognitive Ability and Achievement Skills: A Latent Growth Curve Analysis," *Journal of Educational Psychology* 99 (2007): 653–70, doi: 10.1037/0022-0663.99.3.653; Duncan and Magnuson, "Nature and Impact"; C. Cybele Raver, "Emotions Matter: Making the Case for the Role of Young Children's Emotional Development for Early School Readiness," *Social Policy Report* 16, no. 3 (2002): 3–24.
30. Laurie Brotman et al., "Promoting Effective Parenting Practices and Preventing Child Behavior Problems in School among Ethnically Diverse Families from Underserved, Urban Communities," *Child Development*, 82 (2011): 258–76, doi: 10.1111/j.1467-8624.2010.01554.x.
31. Laurie Miller Brotman et al., "Cluster (School) RCT of ParentCorps: Impact on Kindergarten Academic Achievement," *Pediatrics* 131 (2013): 1521–29, doi: 10.1542/peds.2012-2632.
32. Thomas R. Kratochwill et al., "Families and Schools Together: An Experimental Study of Multi-Family Support Groups for Children at Risk," *Journal of School Psychology* 47 (2009): 245–65, doi: 10.1016/j.jsp.2009.03.001.
33. Thomas R. Kratochwill et al., "Families and Schools Together: An Experimental Analysis of a Parent-Mediated Multi-Family Group Program for American Indian Children," *Journal of School Psychology* 42 (2004): 359–83, doi: 10.1016/j.jsp.2004.08.001; Kratochwill et al., "Multi-Family Support Groups"; Lynn McDonald et al., "After-School Multifamily Groups: A Randomized Controlled Trial Involving Low-Income, Urban, Latino Children," *Children and Schools* 28 (2006): 25–34, doi: 10.1093/cs/28.1.25.
34. Justine S. Hastings and Jeffrey M. Weinstein, "Information, School Choice, and Academic Achievement: Evidence from Two Experiments," *Quarterly Journal of Economics* 123 (2008): 1373–414, doi: 10.1162/qjec.2008.123.4.1373.
35. Stacie G. Goffin and W. Steven Barnett, "Assessing QRIS as a Change Agent," *Early Childhood Research Quarterly* 30 (2015): 179–82, doi: 10.1016/j.ecres

