Poverty and parenting young children

Three panelists spoke on the topic of poverty and parenting young children. Ariel Kalil provided an overview of gaps by family income in child development outcomes, arguing that parenting is a major factor in this gap, and describing some "low-cost, light-touch" interventions that hold promise for strengthening the parenting skills of the disadvantaged. Lawrence Berger presented findings from a study looking at whether increasing income through the Earned Income Tax Credit reduces the incidence of child maltreatment among low-income unmarried families. The study found that increased income was associated with decreases in child neglect and child protective services involvement for this group, particularly for single-mother families. Helena Duch presented evidence from two programs for low-income families designed to promote school readiness through parental engagement, concluding that higher engagement is associated with improvements in some school-readiness measures, and that some simple interventions show potential for increasing the level of parental engagement. This set of articles summarizes their presentations.

The role of parenting in the intergenerational transmission of poverty

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This article presents a brief overview of gaps by family income in some important child development outcomes. I argue that a big part of the mechanism in linking poverty to child development outcomes works through differences by family background in parenting, and I review efforts to narrow gaps in how parents interact with their children by family income. Finally, I describe my current research project, which draws on behavioral economics for insight into how parents make decisions about investing time with their children, how that process might differ by family background, and what promise those findings might hold for intervention efforts.

Achievement gaps by family background

A child's birth circumstances have a large effect on his or her chances in life. Children of parents with high income and more education tend to have higher academic achievement and attainment than do children of parents with lower income and less education. Children who grow up in more advantaged families also have fewer behavior problems, are less likely to become teen parents, and are more likely to attend and to graduate from college. The advantages continue as children become adults; they are more likely than those who grew up poor to have jobs, their earnings are higher, their participation in welfare programs is lower, and they are healthier and live longer.

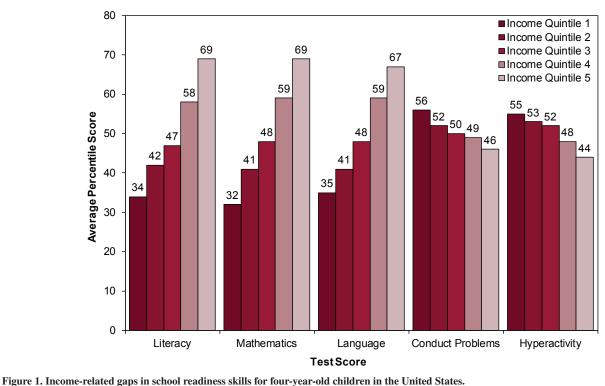
Figure 1 shows income-related gaps in cognitive and noncognitive school readiness skills for 4-year-old children

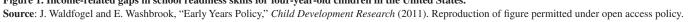
in the United States. There are large income-related gaps in all three cognitive measures (literacy, mathematics, and language test score); those in the higher income quintiles have higher scores compared to those in lower income quintiles. Although not as pronounced, gaps in behavioral dimensions of school readiness are also present, with incidence of conduct problems and hyperactivity decreasing as income rises. These gaps appear early, well before the start of formal schooling.¹ They also persist through children's schooling years, and grow over time.²

Policy efforts intended to close these cognitive and noncognitive gaps have focused mainly on improving schools. While this school-based strategy may be more politically feasible than one that aims to change how parents choose to raise their children, it does not take into account evidence about the inequalities that already exist when children enter school, and does not address the lack of family resources, including parenting skills, that are necessary for effective early childhood development. Although highquality school-based early childhood education for lowincome children can play a role in closing skills gaps by income, it is not a sufficient solution. There has been much recent work showing that early education and care programs work to improve children's life circumstances and are cost effective.³ It is important to note, however, that these findings are based on small-scale model programs. More research must be done to determine whether these programs can be scaled up to serve all the children who would be eligible for them.

The parenting gap

Inequality begins at home; it develops from the many differences in the ways that all parents, both advantaged and disadvantaged, interact with their children. Compared





to parents with lower income and less education, parents with higher income and more education talk more to their children, are more emotionally engaged, ask their children more questions, have a less punitive approach to discipline, and use more varied vocabulary. In order to be effective, policies aimed at improving children's cognitive and noncognitive skills and closing the gap between children from low- and high-income families must recognize the importance of the family, the mechanisms through which families foster children's skills, and the stress under which many families operate.

Jane Waldfogel and Elizabeth Washbrook conclude that the single most important factor in explaining the poorer cognitive performance of low-income children relative to middle-income children is not income itself, but parenting style, in particular maternal sensitivity and responsiveness. They find that parenting style accounts for 19 percent of the gap in mathematics, 21 percent of the gap in literacy, and 33 percent of the gap in language.⁴ They identify the home learning environment as the second most important factor in explaining income-related gaps in school readiness, accounting for between 16 percent and 21 percent of the cognitive gap.⁵ Together, these two dimensions of parenting account for a substantial portion of the income-based gap in children's developmental outcomes.

Prior efforts to close the parenting gap

Prior research on the importance of parenting for children's developmental outcomes suggests that gaps in children's

skills could be narrowed if less-advantaged parents adopted the parenting practices of their more-advantaged peers. However, large-scale parenting interventions to date have yielded at best modest effect sizes, and often have no longterm effect on children's cognitive skills.⁶ There are a number of challenges inherent in fostering parenting and children's skills. First, some of the gaps are not obviously or readily filled by policy; as a society, we have long held the idea that parents should be able to raise their children as they wish. It is much easier to specify desired components for a model preschool program than to dictate specifically how parents should be interacting with their children. Second, most of the programs to date that we consider exemplary have been expensive. Third, many programs that are effective on a small scale may be less effective when scaled up. The final challenge is low take-up and attrition; for the most part, there seems to be a mismatch between what programs are offering and the programs parents seem to want to participate in.

While it may be tempting to conclude from past research that these challenges are too daunting and that policy interventions cannot be expected to change parenting behavior, there do appear to be lessons from behavioral science that can help policymakers understand how to motivate parents to follow the practices that parenting interventions are intended to encourage. Essentially, there are a series of behavioral bottlenecks that stand in the way of parents' aspirations for their children's development and complicate the day-to-day choices parents make in hopes of achieving those desired outcomes. For a variety of reasons, these bottlenecks may present a particular challenge for lowincome parents.

One approach to closing the parenting gap: The Parents and Children Together project

A new study that I am leading illustrates the promise that inexpensive interventions hold for moving the needle on this very important issue of parent-child engagement. The Parents and Children Together (PACT) study tests "low-cost, light-touch" interventions designed to increase the amount of time that parents spend reading to their children. All parents in the study received a tablet containing a digital, recordable, story book reading application that they could use to read to their children. In addition, parents in the treatment group set weekly goals, and received daily text message reminders, weekly visual feedback on goal attainment, and social recognition when goals were met.

Over the six-week study period, parents in the treatment group spent an average of 160 minutes reading to their children, while those in the control group read for an average of 66 minutes.⁷ This 94-minute difference is statistically significant and substantial. Those in the treatment group read an average of three or four times per week to their children each week, whereas those in the control group read only once a week or not at all to their children. Follow-up work has found that this effect persists for at least three months after the end of the treatment.

Using a standard survey assessment, all parents in the sample were characterized as "patient" or "impatient." The behavioral nudges had a much stronger effect on those identified as impatient (treatment group parents read 130 minutes longer over the study period) than those categorized as patient (treatment group parents read 19 minutes longer). This is not surprising, since the intervention was designed to remind parents of their goals and to provide a framework for them to follow through on their aspirations. "Patient" parents already understood the connections among their aspirations, behaviors, and long-term outcomes; they were thus already reading more minutes than the "impatient" parents, and did not have as much to gain from the intervention.

Policy implications

Many interventions that aim to change parental behavior have had little success, but the Parents and Children Together project shows that a low-cost approach of goal setting and reminders can motivate parents to follow through on their good intentions towards their children. These cost-effective behavioral tools offer a promising way to help parents engage with their children more often and more effectively. ³E. I. Knudsen, J. J. Heckman, J. L. Cameron, and J. P. Shonkoff, "Economic, Neurobiological and Behavioral Perspectives on Building America's Future Workforce," NBER Working Paper No. 12298, National Bureau of Economic Research, June 2006.

⁴J. Waldfogel and E. 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*, eds. T. M. Smeeding, R. Erikson, and M. Jäntii (New York: Russell Sage Foundation, 2011).

⁵The home learning environment measure takes into account the amount of educational materials such as books or toys that are in the home; parent time spent using those materials with children, and time spent taking children to other environments such as libraries.

⁶F. F. Furstenberg, "The Challenges of Finding Causal Links between Family Educational Practices and Schooling Outcomes," in *Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances*, eds. G. J. Duncan and R. J. Murnane (New York: Russell Sage Foundation, 2011).

⁷S. E. Mayer, A. Kalil, P. Oreopoulos, S. Gallegos, "Using Behavioral Insights to Increase Parental Engagement: The Parents and Children Together (PACT) Intervention," NBER Working Paper No. 21602, National Bureau of Economic Research (October 2015).

¹J. Waldfogel and E. Washbrook, "Early Years Policy," *Child Development Research* (2011).

²M. J. Bailey and S. M. Dynarski, "Gains and Gaps: Changing Inequality in U.S. College Entry and Completion," NBER Working Paper No. 17633, National Bureau of Economic Research, December 2011.

Does increased income reduce child maltreatment?

Lawrence M. Berger

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Child maltreatment and child protective services (CPS) involvement are relatively common experiences; about 4.5 percent of children in the United States (6 million) are the subject of calls to CPS each year, and about 1 percent of all children have confirmed instances of child maltreatment annually. Over the course of childhood, about 13 percent of all children, and 21 percent of African American children, will have a confirmed child maltreatment report. Maltreatment is also an expensive public health problem; the federal government spends about \$8 billion annually on the child protective services system, and the annual cost of new incidents in the United States is estimated to be between \$1.25 billion and \$5.5 billion.¹ Child maltreatment is correlated with a variety of adverse outcomes throughout the life course, including intergenerational transmission of both child maltreatment and overall disadvantage. In this article, I describe a study that used evidence from the Earned Income Tax Credit (EITC) to assess whether increasing income for low-income families reduces the incidence of child maltreatment.²

Child maltreatment and income

There is an extensive literature linking child maltreatment to low-income status. However, most prior studies had data or methodological limitations, and there is thus little evidence to indicate whether low-income status is a causal factor in child maltreatment. Child maltreatment studies often do not use population-based samples, making it difficult to generalize beyond a select group. From past work, we also have a limited understanding of the potential mechanisms that could explain a causal link. Higher income may mechanically lower a family's likelihood of maltreatment, particularly child neglect, by increasing the resources available to provide for all of a child's needs. Increased income could also result in better maternal and child health and decreased parental stress and depression, thus reducing parental behaviors that could lead to neglect or abuse.

There is a question about bias in these data; are low-income children just more likely to be picked up by the system, but not more likely to actually experience maltreatment? Based on current evidence, it appears that while this might happen to some extent, bias does not explain the majority of the connection between income and child maltreatment. Finally, there is a question about selection; are families that are lowincome at higher risk of child maltreatment because of other factors that are driving both characteristics?

The best evidence to date on the relationship between child maltreatment and income comes from two studies. First, David Fein and Wang Lee, using data from Delaware's randomized welfare reform experiment, found that assignment to a less generous, Temporary Assistance for Needy Families or TANF-like welfare program was associated with lower income and increased CPS involvement, particularly for child neglect, relative to assignment to the more generous Aid to Families with Dependent Children or AFDClike program.3 More recently, Maria Cancian, Mi-Youn Yang, and Kristen Slack, using data from a randomized control trial, found that an increase in the amount of child support received by welfare recipients led to reduced CPS involvement.⁴ While these results are suggestive, they do not definitively establish a causal relationship between income and child maltreatment.

The Earned Income Tax Credit

The EITC is a refundable federal tax credit designed for lowwage workers. The amount of the credit is based on earnings, and varies by marital status and number of children. In 2012, the amount of the credit ranged from just under \$500 to nearly \$6,000.5 In addition to the federal credit, 24 states provide a supplement, usually calculated as some proportion of the federal amount. The EITC is a major component of the U.S. safety net; the gradual phase-in and phase-out structure provides a work incentive that lifts many families out of poverty. A growing literature links the EITC to health and well-being, with the largest effects found for singlemother and larger families (who also receive the largest benefits from the EITC). The study described in this article, conducted by myself, Sarah Font, Kristen Slack, and Jane Waldfogel, extends this body of research by using data from the Fragile Families and Child Well-Being Study to estimate causal effects of income on child maltreatment among unmarried families. We made use of variation between states and over time in the generosity of the total federal and state EITC potentially available to a family to examine whether differences in family income that resulted only from differences in EITC policy affected families' incidence of child maltreatment.

Effects of higher EITC on child maltreatment

We examined three outcome measures: child abuse, child neglect, and CPS involvement. The first two measures were behaviorally approximated using mothers' responses to questions related to the frequency of physical violence and emotional aggression (for child abuse) and about parental actions or inactions that placed a child at risk of harm (for child neglect), the third was mothers' self-reports of whether they had been investigated by CPS.

Using an instrumental variable approach, we found that an increase in EITC income is associated with reductions in behaviorally approximated child neglect and CPS involvement (but not behaviorally approximated child abuse), particularly among low-income single-mother families in which the mother was not cohabiting with a romantic partner. The results for single-mother families suggest statistically significant small to moderate decreases in behaviorally approximated neglect of 3 to 4 percent for a \$1,000 increase in income, and modestly large decreases in reported CPS involvement of 8 to 10 percent for the same income increase. These results are generally robust to different sample definitions and alternative outcome measures.

Policy implications

In addition to being disproportionately low-income, families at risk of maltreatment are likely to be characterized by a variety of other risk factors, including domestic violence, substance abuse, and mental health. These other factors are difficult to ameliorate, and treatment, if available, is often prolonged and expensive, and take-up and compliance are low. If there is indeed a causal link between income and maltreatment, then economic support may be an additional tool for preventing child maltreatment. It may be easier, faster, and more efficient to increase income than to provide and deliver longer-term services to address other issues, particularly if those services are of questionable efficacy. Additional research should seek a more complete understanding of whether the links between income and child maltreatment are indeed causal, and the extent to which economic support policies could reduce child maltreatment and CPS involvement.

¹X. Fang, D. S. Brown, C. S. Florence, and J. A. Mercy, "The Economic Burden of Child Maltreatment in the United States and Implications for Prevention," *Child Abuse & Neglect* 36, No. 2 (2012): 156–165.

²The study is described at greater length in L. M. Berger, S. A. Font, K. S. Slack, and J. Waldfogel, "Income and Child Maltreatment in Unmarried Families: Evidence from the Earned Income Tax Credit," *Review of Economics of the Household* (2016): 1–28. doi:10.1007/s11150-016-9346-9

³D. J. Fein and W. S. Lee, "The Impacts of Welfare Reform on Child Maltreatment in Delaware," *Children and Youth Services Review* 25, No. 1–2 (2003): 83–111.

⁴M. Cancian, M.-Y. Yang, and K. S. Slack, "The Effect of Additional Child Support Income on the Risk of Child Maltreatment," *Social Service Review* 87, No. 3 (September 2013): 417–437.

⁵Center on Budget and Policy Priorities, Analysis of the Census Bureau's March 2012 Current Population Survey, Washington, DC: 2013.

Promoting school readiness through parental engagement

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Poverty tends to be associated with myriad risk factors, including single parenthood, low maternal education, residential mobility, substance abuse, and lack of social support. The effect of these risk factors on child cognitive outcomes may be mitigated by positive parenting behaviors, suggesting that parenting is a key area for social policy around school readiness.¹ While preschool programs can certainly have a large effect on school readiness, programs that target parents as well as teachers have the potential to achieve better school readiness outcomes than either type of intervention alone. Few current programs focus on the home and school environments with equal emphasis. This article presents evidence from two programs for low-income families that are designed to promote school readiness through parental engagement.

The Getting Ready for School program

There are a set of cognitive, social, and emotional skills that are necessary for children to enter school ready to learn. These school-readiness skills create the foundation for academic success, physical and mental health, and general well-being. As Ariel Kalil pointed out in her article, socioeconomic disadvantage often leads to large gaps in the development of school-readiness skills. Kimberly Noble and I are the principal investigators of an evaluation of the Getting Ready for School program, which aims to promote three factors of school readiness: literacy, math, and self-regulation (executive functioning and emotional regulation), and to help close these gaps.

In this article, I will focus on the parent component, which evolved over the course of program development. In the first year of the program, parents were given a book of skillbuilding activities that they could easily do with children. There was also a series of accompanying workshops for parents who wanted to learn more about how to implement the activities. While this intervention was successful to some extent, parent uptake was low. In the second year of the program, many new items were added to give parents alternative ways to engage with the program. In selecting additional elements, we looked for those that would be scalable and easy for any preschool center to implement.

One item added to the parent component in the second year was a weekly letter from the teacher to the parents listing three things that were being worked on with their child during that week, and identifying specific items from the activity book they could do at home that would support the classroom work. We also created a website that included all activities in the book in video format, to make it easier for low-literacy parents and visual learners to participate. Since most families did not have easy computer access, the website was available on tablets that parents could check out and take home as needed. Finally, we added "getting ready for school parties" held at pick-up times, which provided activities for parents and children to do together, and offered participation incentives such as prize raffles and food.

Parent participation did improve after these changes; in the second year, parent participation in at least one activity increased from 54 to 68 percent, and the average family participation rate over all activities increased from 13 to 20 percent. Even with this improvement, participation continued to be uneven across activities, and some families were consistently more likely to participate than others. We found no differences between the three groups by language, ethnicity, education, income-to-needs ratio, or father presence. However, those with relatively high participation rates (over 25 percent) were more likely to be full-time workers, and less likely to receive food stamps.

How important is parent participation?

Preliminary data indicate that higher parental participation is indeed associated with better child outcomes, specifically picture vocabulary, phonological awareness, social competence, and emergent reading and writing skills.² However, parent participation was not found to be associated with measures of math or child self-regulation skills. Note that these results reflect only one year of follow-up; further results with longer follow-up and a larger sample size are forthcoming. Even with these preliminary results, it is encouraging to see that participation does matter, but discouraging that participation rates remained fairly low. It is also unclear with these data what parents are doing outside the program to promote school readiness, since that was not tracked.

Increasing participation and engagement

Working with Lisa Gennetian, and building on our early results, we used principles of behavioral economics to target two primary behaviors: parent attendance at Get Ready for School kickoff sessions, and the amount of time spent on Get Ready for School activities outside the classroom. We looked for simple interventions that would make it easier for families to participate. For the kickoff sessions, half of the parents received paper invitations in an envelope with personalized handwritten information; these invitations were followed by a text message reminder. To improve parent follow-through with activities outside the classroom, families in half of the classrooms received a tracking sheet and stickers that they could use to record activities. Text message reminders were also used for this purpose, and recognition was given to the best-performing classroom. Early results for these simple and inexpensive additional steps show both higher attendance at kickoff sessions and more time spent on activities outside the classroom.

A different approach

While it is promising to see positive results from relatively simple and low-cost interventions, there may still be a place for more intensive and expensive programs aimed at promoting parenting skills. These programs could be targeted, rather than universal, and part of a multi-tiered approach that offers additional services to families who need them. An example of such an intervention is the CARING preschool program, a 12-week parent-child intervention aimed at improving children's social-emotional outcomes through helping parents learn how to support creative expressive play at home. CARING uses trained facilitators with a mental health background, and is considerably more expensive to run than the Getting Ready for School program. The CARING intervention is being evaluated with a randomized control study in two Head Start sites in New York City. Preliminary outcomes show significant but small positive effects on a number of outcomes including maternal sensitivity and cognitive stimulation of the child during play.

Next steps

Research on promoting school readiness through parental engagement is ongoing, and a number of questions remain. Even with all the behavioral strategies we are using in the Getting Ready for School program, we still have relatively low parent participation. We have conducted focus groups and done qualitative work, and are still seeking creative strategies to better reach the low participators. Our intervention is very balanced between math, literacy, and self-regulation, but we found the largest effect on literacy; it would be useful to learn more about parent-child interactions at home so that we are better able to tailor the program to achieve comparable gains in the other two areas. A survey of families in our study revealed that 77 percent accessed Facebook on a daily basis, suggesting that more work could be done to explore the role that social media could play in parental engagement. Finally, more work could be done to explore whether and how community-level multitiered interventions, using universally applied low-cost interventions (such as Getting Ready for School), could

be combined with targeted intensive interventions (such as CARING) to effectively engage parents in vulnerable populations.

²Picture vocabulary and phonological awareness were assessed with tests; social competence and emergent reading and writing scores were based on teacher reports.

¹N. J. Cabrera, J. Fagan, V. Wight, and C. Schadler, "Influence of Mother, Father, and Child Risk on Parenting and Children's Cognitive and Social Behaviors," *Child Development* 82, No. 6 (November/December 2011): 1985–2005.