

# Parenting Practices and Socioeconomic Gaps in Childhood Outcomes

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*Ariel Kalil and Rebecca Ryan*

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## Summary

In this article, developmental psychologists Ariel Kalil and Rebecca Ryan examine the relation between parenting practices and socioeconomic gaps in child outcomes. They document substantial differences between richer and poorer families, including growing gaps in parental engagement and time use. These gaps matter: the fact that children born to lower-income, less-educated parents are less likely to spend quality time with their parents only compounds their relative economic disadvantage.

Evidence suggests that disadvantaged parents want to do many of the same things that higher-income parents do, such as reading to their children and engaging them in educational experiences like trips to parks and museums. But they're nonetheless less likely to do those things. The authors consider a number of explanations for this discrepancy. One important contributing factor, Kalil and Ryan write, appears to be financial strain and family stress, both of which can impede parents' emotional and cognitive functioning in ways that make it harder for them to interact with young children in intellectually stimulating and emotionally nurturing ways.

The authors conclude with a discussion of the types of policies and programs that might narrow income-based parenting gaps. They find encouraging evidence that relatively low-cost, light-touch behavioral interventions could help parents overcome the cognitive biases that may prevent them from using certain beneficial parenting practices.

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Ariel Kalil is a professor in the Harris School of Public Policy at the University of Chicago, where she directs the Center for Human Potential and Public Policy and co-directs the Behavioral Insights and Parenting Lab. Rebecca Ryan is a Provost's Distinguished Associate Professor in the Department of Psychology at Georgetown University.

Richard Reeves of the Brookings Institution reviewed and critiqued a draft of this article.

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**S**ocioeconomic status is correlated across generations. In the United States, 43 percent of adults who were raised in the poorest fifth of the income distribution now have incomes in the poorest fifth, and 70 percent have incomes in the poorest half. Likewise, among adults raised in the richest fifth of the income distribution, 40 percent have incomes in the richest fifth and 53 percent have incomes in the richest half.<sup>1</sup> Many factors influence this intergenerational correlation, but evidence suggests that parenting practices play a crucial role. These include doing enriching activities with children, getting involved in their schoolwork, providing educational materials, and exhibiting warmth and patience. Parental behavior interpreted in this way probably accounts for around half of the variance in adult economic outcomes, and therefore contributes significantly to a country's intergenerational mobility.<sup>2</sup>

Across disciplines, dozens of studies have found differences in these types of behaviors across rich and poor parents and demonstrated how these differences matter to children's success as adults. Among other things, richer parents—both mothers and fathers—spend more time in educational activities with their children, produce more cognitively stimulating home learning environments, and are more likely to read and do math-related activities with their children.<sup>3</sup> Parents also differ by family background in their discipline strategies—those with lower incomes and less education are more likely to use harsh, physical discipline with children than their richer and more educated counterparts.<sup>4</sup>

In this article, we take as a given that the way parents behave with children influences the

way children develop. But we also recognize that the vast majority of empirical evidence supporting these theoretical mechanisms is correlational.<sup>5</sup> This correlational research consistently finds that average differences in parenting behavior predict the cognitive, academic, and behavioral outcomes that presage adult success.<sup>6</sup> Although it's not our purpose here to describe the plausibly causal links between parenting practices and child development outcomes, more recent studies relying on experimental and quasi-experimental methods do find evidence of such links. For example, recent research finds that the amount of time parents spend with their children has a direct and plausibly causal effect on the children's cognitive test scores.<sup>7</sup>

Here, we focus on specific parenting practices that have been linked empirically and theoretically to better child development, and we explore how those practices vary by socioeconomic status (SES). We review studies that characterize SES in terms of family income and also parental education. Specifically, we provide an overview of what scholars know about the differences in parenting behavior by SES that contribute to differences in children's outcomes by SES. We also examine the theoretical origins of these differences in parenting behavior. The origins are interrelated and wide-ranging: they include socioeconomic and demographic factors, such as financial constraints and parental work schedules; opportunities and constraints in the parents' environment, such as access to information and exposure to stress and violence; and "cultural" factors, such as norms, beliefs and expectations, habits, and values. We don't try to draw a bright line between so-called cultural factors and others; rather, we believe that many factors that are often thought of as

cultural are actually the result of other, more readily quantifiable contextual factors, such as stress, money, information, and parents' reactions to those things. This article reviews how contextual factors differ (or not) in meaningful ways between low- and high-SES parents, and whether and how those differences relate to parenting behavior.

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We conclude by discussing the efficacy of programs and policies designed to narrow SES-based differences in parenting behavior, and we suggest directions for promising policy and programmatic interventions based on this review. Although parental behavior matters far beyond the early childhood years, here we focus on early childhood, given the primacy of parental influence during this developmental stage and the speed of early childhood brain development, both of which provide the foundation for cognitive and emotional skills over the life course.<sup>8</sup>

### **Differences in Parenting Practices by Socioeconomic Status**

Dozens of studies across disciplines have demonstrated that richer and poorer parents interact with their children in different ways, and that these differences influence

children's development. Developmental psychology distinguishes these parenting behaviors along two key dimensions: the level of cognitive stimulation and the quality of emotional support. Cognitive stimulation includes enriching behaviors like reading and other literacy activities, doing arts and crafts, and discussing math concepts. Positive socioemotional interactions involve parental warmth and consistency and the absence of harsh discipline or physical punishment. On average, research shows, parents with more education and income engage in more cognitive stimulation with their young children, interact with greater warmth and consistency, and use harsh discipline less often than do parents with less education and income.

### **Differences in Cognitive Stimulation**

Among studies showing that higher-SES parents engage in more cognitively stimulating activities in terms of both quantity and quality than their lower-SES peers do, some of the strongest evidence comes from time diaries. The most replicated finding is that mothers and fathers with more education and income spend more time in educational activities with their children than do lower-SES parents.<sup>9</sup> The authors of this article, Ariel Kalil and Rebecca Ryan, along with colleague Michael Corey, have also shown that highly educated mothers and fathers are more efficient in their parental time investments—they tailor their activities to children's developmental stages.<sup>10</sup> With respect to total childcare time, the educational gradient is most apparent in households with the youngest children.<sup>11</sup> Together, these findings suggest that higher-SES parents aren't only investing more time in their children's development, but they may also have better assimilated the message

that parental investments in early childhood are key ingredients in children's long-run success.<sup>12</sup>

Studies that draw on stylized measures of the frequency with which parents engage in enriching activities tell a similar story. When asked how often per week or month they engage in reading, math, or other enriching activities at home, higher-SES parents are more likely to report reading to and doing math-related activities with their children; they're also more likely to provide the materials, such as books, puzzles, and games, with which to engage in those activities.<sup>13</sup> Over the past 30 years, in fact, high-SES parents have consistently engaged in a wide range of enriching activities in and outside the home—such as reading to children and taking them to the library or a museum—far more often than their lower-SES counterparts.<sup>14</sup>

One of the best-known SES-based differences in cognitive stimulation comes from research on language stimulation of young children. Higher-SES parents use greater language stimulation when interacting with children than do their lower-SES counterparts.<sup>15</sup> A famous example of this difference comes from a study by Betty Hart and Todd Risley, who intensively observed the language patterns of 42 families with young children.<sup>16</sup> They found that in professional families, children heard an average of 2,153 words per hour; in working-class families, the number was 1,251 words per hour; and in welfare-recipient families, it was only 616 words per hour. By age four, a child in a welfare-recipient family could have heard 32 million fewer words than a classmate in a professional family. More recent studies have clarified that the bulk of the difference in the number of words

heard by children in higher- versus lower-SES families comes from words spoken directly to the children, not words said when children are present, and that the language used in higher-SES homes is more diverse and responsive to children's speech than that in lower-SES homes.<sup>17</sup> This SES-based difference in linguistic environments could plausibly contribute to SES-based gaps in children's early language skills, especially given the robust evidence linking the quantity and quality of parents' speech to young children to children's early language development.<sup>18</sup>

### Differences in Emotional Support

As we've said, parents differ by SES not only in the quality and quantity of cognitive stimulation they offer children, but also in the level of emotional support they provide. Parental sensitivity—defined as the ability to perceive children's signals, interpret these signals correctly, and respond promptly and appropriately—has been theoretically and empirically linked with children's emotional and behavioral outcomes, including self-regulation, social functioning, and early cognitive skills.<sup>19</sup> Mothers living in poverty display less sensitivity during interactions with their babies than do their higher-SES counterparts, and in descriptive analyses these differences explain gaps in children's early language outcomes and behavior problems.<sup>20</sup>

More broadly, better-off parents tend to display more of what's called an *authoritative* (versus *authoritarian*) parenting style than lower-SES parents do. Authoritative parenting describes a broad style of interacting in which parents place high demands on children but also use high levels of warmth and responsiveness.

Authoritarian parenting, by contrast, is characterized by strict limits on children and little warmth or dialogue, and punishment tends to be harsh.<sup>21</sup> Studies have found that parents—both mothers and fathers—with more education are more likely to use an authoritative style than less-educated parents, who are likelier to use either an authoritarian style or a *permissive* style (characterized by “low demands coupled with high levels of warmth and responsiveness”), a pattern we see within racial and ethnic groups and in cross-country comparisons.<sup>22</sup> Supporting these broad differences in style, studies have also shown that lower-income parents use more directives and prohibitions in speech with children than their middle-income counterparts do.<sup>23</sup> Finally, in a large national sample, researchers saw a significant negative correlation between punitive behavior (such as yelling and hitting) and income.<sup>24</sup>

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Discipline strategies are a central component of socioemotional interaction between parents and children and a key facet of the difference between authoritative and authoritarian parenting. Corporal

punishment, which includes spanking, hitting with objects, and other actions that intentionally cause physical pain, is associated with an authoritarian parenting style, whereas nonphysical discipline strategies such as time-outs and explanations for desirable behaviors are associated with an authoritative style.<sup>25</sup> Research shows that lower-SES parents spank and use other forms of physical discipline more often than higher-SES parents do, whereas higher-SES families are more likely to use discipline strategies that include reasoning and promote child autonomy.<sup>26</sup> Studies show links between corporal punishment, such as spanking, and a host of adverse cognitive and socioemotional child outcomes.<sup>27</sup> Perhaps it's not surprising, then, that in descriptive analyses these disciplinary differences explain a meaningful proportion of SES-based differences in children's outcomes, particularly socioemotional ones.<sup>28</sup>

## Summary

Decades of research have demonstrated that lower- and higher-SES parents differ not just in the ways they raise their children, but also in precisely the behaviors that predict children's cognitive and socioemotional skills. Given the well-documented links between these parenting behaviors and children's skills, it's reasonable to hypothesize that SES-based differences in parenting behaviors contribute to the intergenerational transmission of economic status. In the next section, we review research on some possible origins of these parenting differences, and assess the evidence in support of each mechanism. Understanding how these parenting gaps arise is essential to determining an effective policy and program response that could narrow them.

## Mechanisms Underlying SES-Based Gaps in Parenting Practices

The wide-ranging scholarship on SES-based differences in parenting practices offers many potential origins for these differences. Different fields (such as economics, sociology, psychology, and neuroscience) stress different potential mechanisms. Below, we distinguish five of these mechanisms and present evidence that each one might plausibly help explain SES-based parenting gaps. In doing so, we aim to illuminate promising targets for policy and programmatic intervention to narrow SES-based gaps in parenting.

### Financial Constraints

The most obvious reason higher-SES parents might use different parenting practices than their lower-SES counterparts is that they simply have more money to buy the materials and experiences that enhance child wellbeing. This mechanism may sound tautological—surely parents who have more money to spend on their children do so. Yet some parents may choose to spend discretionary income on their own leisure and consumption rather than on their children.<sup>29</sup> With respect to cognitive stimulation, child-related expenditures include materials to enhance time with children—such as books, toys, and games—as well as costly experiences such as dance, music, and sports lessons; tutoring; and museum visits and artistic performances. Differences in spending on these types of enrichment goods could directly affect children's development by enhancing the quantity and quality of their cognitive stimulation, but could also affect parents' ability to invest time in enhancing their children's development.

The best evidence on differences in money spent on children across the socioeconomic distribution comes from two studies by Emory University sociologist Sabino Kornrich, using data from the Consumer Expenditure Survey. (This survey, conducted by the Bureau of Labor Statistics, provides data on the expenditures, income, and demographic characteristics of US consumers.) Kornrich and his colleague Frank Furstenberg found not only that parents at the top of the income distribution spend more on children's enrichment than lower-income parents do, but also that the difference in real dollars has increased substantially since the 1970s.<sup>30</sup> This spending gap has grown despite the fact that parents at all income levels are devoting an increasing share of their income to children, and that the lowest-income parents spend the largest share. Kornrich extended the analysis by examining income-based inequality in parental spending on young children specifically over the period from 1972 to 2010.<sup>31</sup> He found increased spending among parents at the top of the income distribution but little change among those at the bottom. Much of the increase derived from additional spending on childcare. But spending on enrichment goods (such as books, toys, games, and fees for activities) also grew substantially among higher-income families during this time, and grew not at all among lower-income families.

These studies, combined with other research that finds differences in the presence of books, toys, and games in lower- and higher-income families' homes, suggest that unequal spending on children undoubtedly explains some of the SES-based differences in parenting practices.<sup>32</sup> Still, in a recent study of parent-child reading time in low-income Chicago families, almost no parents

reported that they failed to read to their children because they lacked the appropriate books.<sup>33</sup> Parents can also do many activities with children that are enriching but not necessarily costly—such as talking to them, telling stories, and playing games. Thus, although differences in children’s experiences by SES surely arise in part from differences in parents’ ability to pay for enrichment, financial constraints don’t entirely explain the gap.

### Time Constraints

Another possible reason that lower-SES parents engage in fewer cognitively stimulating activities with children, and spend less time with them in general, is that these parents simply have less time to spare. Research on work hours and schedules shows that lower-SES parents are likelier than higher-SES parents to work unpredictable and nonstandard hours.<sup>34</sup> All else being equal, it’s hard for parents to engage in developmentally stimulating activities with children when they’re working during prime “investment” time (that is, weekends and evenings). Several quantitative studies show that the SES-based gaps in time investment remain large even when accounting for other family differences, such as employment hours, but few researchers have explored how the timing or regularity of work hours might explain SES-based differences in parents’ time investment.<sup>35</sup> That said, high-SES parents (especially mothers) tend to work *more* hours than lower-SES parents and have less discretionary time—but still spend more time with their children.<sup>36</sup> This stems from fact that higher-SES parents (especially mothers) spend more of their childcare time primarily engaged in activities, while lower-SES mothers tend to spend childcare time

being accessible to their children but largely engaged in housework or leisure activities.<sup>37</sup> Of course, it’s challenging to separate time availability from family structure: low-income parents are far likelier to be single parents, with less economic and social support to lighten the competing demands of household tasks than married mothers. (For more about single parents and other aspects of family structure, see Melanie Wasserman’s article in this issue.<sup>38</sup>) Nonetheless, in a cross-national comparison study, highly educated mothers in many developed countries spent more time than less-educated mothers in primary child investment activities—even in Norway, where universal family policies are designed to equalize resources across parents.<sup>39</sup> The authors interpreted their findings as suggesting that the differences between more- and less-educated mothers in time spent with children more likely reflect different beliefs about parenting rather than time constraints.

In sum, it isn’t clear how much of the SES-based difference in time investment in children stems from differences in time available versus parents’ decisions to allocate available time to their children. These decisions may be shaped by information, values, and preferences—topics we turn to next.

### Information, Values, and Preferences about Parenting and Child Development

Given that lower-SES parents may invest less time in children not just because they have less time to spend but rather because they spend the time they have differently, it’s reasonable to hypothesize that SES-based differences in this area stem in part from differences in information on, values about, or preferences for spending time doing

enriching activities with children. We could extend this hypothesis to cover emotionally supportive behaviors as well: perhaps lower-SES parents have less information about how warm, sensitive parent-child interactions can benefit children's socioemotional development—or perhaps they have weaker preferences for such interactions. To be sure, information, values, and preferences are different concepts: information *generally* refers to parents' knowledge of child development and the activities that promote it; *values* reflect parents' goals for their children and their ideal traits; and *preferences* refer to taste factors that may influence parental behavior, such as level of happiness, degree of satisfaction, or utility.<sup>40</sup>

To understand how these factors drive SES-based differences in parental behavior, we need strong evidence that information, values, and preferences differ by SES. But most recent evidence suggests that US parents at all income levels believe it's important for children to develop skills that will prepare them for success in school and life; they also share similar ideas about the values they wish to instill in their children. For example, one group of researchers examined data from the 1998 and 2010 Early Childhood Longitudinal Study (ECLS—a national study by the National Center for Education Statistics that examines child development, school readiness, and early school experiences). Their goal was to estimate the share of parents who rated various early childhood kindergarten readiness skills—such as counting to 20, knowing the letters of the alphabet, and sitting still—as “very important” or “essential.” The researchers found an increase between 1998 and 2010 in the proportion of parents in the lowest fifth of the SES distribution who rated these skills as

important.<sup>41</sup> Moreover, for each of the skills, the proportion of parents who said the skill was important was greater in the lowest fifth of SES than in the highest fifth. It's unlikely, then, that the large differences by SES in the actual skills of children entering kindergarten arise because disadvantaged parents lack information about the importance of those skills.

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Another key aspect of the parental belief system is *terminal values* for children—the characteristics parents believe they must instill in children to prepare them for life.<sup>42</sup> The concept of values is often invoked in discussions of “cultural beliefs” as they relate to parenting: researchers have posited for decades that the difference in terminal values among parents at different points in the income or education distribution is one source of the intergenerational persistence of social class.<sup>43</sup> Historically, high-SES parents have valued “independent thinking” and “self-direction” more than low-SES parents do, whereas low-SES parents have put more value on “obedience” and “conformity.” Theoretically, differences in parental values help account for the reproduction of social class partly because of the myriad ways these differences influence how parents



prepare their children for their academic and professional futures. But our recent research with our colleagues Caitlin Hines and Kathleen Ziol-Guest shows that rich and poor parents' ideas about the characteristics needed for children to succeed in life (such as working hard, being helpful, and thinking for oneself) have converged substantially in the past three decades. In fact, in 2016 we found no significant differences in parents' espoused values by education or income.<sup>44</sup> Using a nationally representative survey, another study similarly found no differences by parental education in contemporary parenting standards: parents of all social backgrounds strongly endorsed time-intensive, child-centered parenting as the optimal parenting style (what sociologist Annette Lareau labeled "concerted cultivation"), whereas parents of all social backgrounds showed little support for a less intensive, adult-centered parenting style (which Lareau labeled "natural growth").<sup>45</sup>

Even though all parents have similar aspirations for their children's development and readiness for school, lower-SES parents might expect a lower return from their investments in their children. But researchers have shown that low-income parents do expect a positive return from the time they spend in educational activities with their children; in one study done in Colombia, among very low-income households, parents' beliefs predicted investment in young children.<sup>46</sup> Furthermore, a survey of parents of school-aged children in England found no SES-based difference in expected returns to time or money invested in children. But some research suggests that although all parents expect high returns on their investment in child development, lower-SES parents expect relatively lower returns than their higher-SES peers do.<sup>47</sup>

Income may also shape the extent to which parents view the time they allocate to their children as direct utility versus investment utility. Economists have long thought that highly educated parents, more so than less-educated parents, view time with children as an "investment behavior," a means to increase children's future human capital.<sup>48</sup> This framework may help explain why highly educated parents spend more time in childcare than less-educated parents who work the same hours and have as many children. But the same theories suggest that highly educated parents might spend relatively more time with their children because they derive more enjoyment from the activity. Using data from the 2010–13 American Time Use Survey Well-Being Module (a national study conducted by the Bureau of Labor Statistics that links self-reported wellbeing information to individuals' activities and time-use patterns), Kalil and colleagues examined mothers' reports of how they feel during childcare and in other activities, seeking empirical evidence pertaining to economic theories of time allocation.<sup>49</sup> For all mothers, spending time in childcare was associated with higher positive feelings than was spending time in other activities. This finding offers no support for the hypothesis that highly educated mothers enjoy childcare more than their less-educated counterparts do.

In sum, research provides only mixed evidence that information, values, or preferences drive differences in parenting behavior across the socioeconomic distribution. Compared to higher-SES parents, lower-SES parents may have less nuanced ideas about how to promote child development and may underestimate the benefits of time spent promoting child development. But high- and low-SES parents

alike understand the importance and value of enriching behavior with children, such as reading, and they appear to enjoy this time in equal measure.

### Family and Environmental Stress

Sociologist Glen Elder developed the family stress model to explain how economic loss influenced parent and child wellbeing during the Great Depression.<sup>50</sup> According to this perspective, low-income families face significant economic pressure as they struggle to pay bills and purchase important goods and services, and this economic pressure, coupled with other stressful events more prevalent in the lives of low-income families, causes poor parents to suffer psychological distress that can disrupt parent-child interactions.<sup>51</sup> Although the model was developed to explain the impact of economic loss on family wellbeing, it has since been applied to the way chronic economic strain, and poverty in particular, can undermine parenting quality.<sup>52</sup>

Research has substantiated many of the hypothetical links in the family stress model—at least in observational studies. In low-income families, parents and children alike experience more daily stress than their higher-income peers do, and low-income parents report higher levels of parenting stress and depression.<sup>53</sup> Specifically, poor mothers of infants are two and a half times more likely to report being depressed than nonpoor mothers. These studies only establish correlations among poverty, stress, and parents' wellbeing. But more causal evidence comes from one study's finding that decreases in income among parents, particularly those who are already at low income levels, predicted increases in mothers' depressive symptoms and their

probability of being diagnosed with clinical depression.<sup>54</sup>

According to the family stress model, this psychological distress spills over into all family relationships. As couples struggle to make ends meet, and as their depression, anxiety, and parenting stress increase, their interactions with each other and with their children become more hostile and conflicted.<sup>55</sup> Evidence of these associations includes a study using data from the Panel Study of Income Dynamics (a household survey of family income, employment, health, and wellbeing that follows its subjects over time). Kalil and her colleague Patrick Wightman found that parental job loss, particularly that of the father, was associated with increases in marital conflict and interpersonal violence; this finding is replicated in other studies.<sup>56</sup> In turn, parents' psychological distress and conflict with one another are linked with parenting practices that are on average more punitive, harsh, inconsistent, and detached, as well as less nurturing, stimulating, and responsive to children's needs.<sup>57</sup> Associations that link economic strain to psychological stress to disrupted parenting have been documented consistently in studies of early child development.<sup>58</sup>

In recent years, the family stress model's focus on environmental conditions and parents' mental health has broadened to include our understanding of how stress affects neurobiological and cognitive functioning. Specifically, studies show that in the context of scarcity, including a lack of money, parents are more likely to make decisions that emphasize short-term rather than long-term gains.<sup>59</sup> This greatly diminishes the possibilities for purposeful, goal-directed parenting. Taken together with

the scholarship on the family stress model, these growing areas of research suggest that financial strain can alter parents' emotional and cognitive functioning in ways that undermine their ability to be cognitively stimulating and emotionally sensitive with young children.

### Cognitive Biases and Decision-Making

It seems that disadvantaged parents want to do many of the same things that better-off parents do, especially activities associated with more positive child outcomes like reading aloud and going on educational outings. However, they're less likely to actually do those things. That is, we see a wider gap in disadvantaged families between what parents aspire to do and what they do in practice. Researchers in behavioral science and behavioral economics have described a set of cognitive biases that may give rise to this gap between knowing and doing.

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Like many other decisions, parenting decisions are complex. This fact constrains parents' capacity to make optimal decisions, simply because human judgment can't readily master the complexity of parenting. Thus parents are prone to relying on heuristics (cognitive shortcuts) to simplify their decisions and make them "computationally cheap."<sup>60</sup> Lower- and higher-SES parents may use different heuristics in making

decisions, for a variety of reasons—such as differences in stress, in the composition of their social networks, or in parents' own upbringing or experiences. Or they may experience the same heuristic differently, which might also result in different patterns of decision-making. Here we describe two potentially important characteristics that make parenting especially susceptible to cognitive biases and to differential adaptations to biases by parental SES.

*Present bias.* For many parenting decisions, the payoff doesn't materialize until years into the future. Deciding to spend money and time on schooling, extracurricular activities, health-promoting behaviors, and other activities meant to improve child outcomes is much like making financial investments with uncertain returns. Research suggests that people systematically put too much weight on present outcomes as opposed to future outcomes, which often leads to suboptimal choices.<sup>61</sup> Present bias can mean that parents prioritize spending their time on activities that provide immediate gratification rather than investing that time in their children. For example, even if parents believe in the value of reading, have books at home, and understand the connection between parents' reading aloud and children's skill development, they may be less likely to read to their children routinely because the temptation to do something else in the moment overcomes the commitment to invest time in an activity whose payoff lies in a distant and uncertain future. Scholars have reached no consensus on what causes differences in time preference. Many early sociology studies provide observational evidence that time preference is culturally acquired.<sup>62</sup> Economists Gary Becker and Casey Mulligan proposed in 1997 that the more financial resources people have to

imagine the future, the less future value they're willing to give up for present value (that is, they are more patient, or future-focused). Empirical evidence supports this hypothesis.<sup>63</sup> More recently, Priyanka Joshi and Nathanael Fast claimed that power makes people feel more connected to their futures, which in turn results in less present bias (that is, more patience). To the extent that income can be perceived as power, this could help explain why low-income individuals experience present bias.<sup>64</sup>

*Automaticity bias.* Parenting often requires quick, on-the-spot decisions. When a child runs toward a busy street, a parent must react, not contemplate. When a child screams in the checkout lane because a parent has turned down a request for candy, the parent seldom has time to reflect on what to do. The need to act quickly results in *automaticity*, meaning a response with minimal cognitive processing. Automaticity is a useful heuristic that reduces cognitive load. An automatic response can be beneficial if it's efficacious, but costly when it's not. Because automatic responses can be likened to habits, and habits are hard to break, ineffective automatic responses can lead to ineffective parenting.

Automaticity comes from learning, repetition, and practice. The automatic behaviors parents adopt are likely to depend on their own experiences. Behaviors repeatedly observed or experienced as a child can easily become default behaviors in adulthood. An adult whose parents always spanked him when he misbehaved as a child is more likely to “automatically” spank his own children in response to bad behavior, giving little thought to alternative kinds of discipline. We don't have a lot of evidence about how people learn to be parents, but what we do have (usually from small surveys) suggests that parenting

behaviors are primarily learned from one's own parents, relatives, and friends.<sup>65</sup>

Automaticity reduces cognitive demands, leads to rapid responses, and is useful for many parenting situations. But it can also create barriers to eliminating adverse parent behaviors (such as yelling at or hitting a child, or forgoing toothbrushing). Higher- and lower-SES parents may have the same goals for their children; they may even have the same information about how to achieve those goals. But parenting behaviors are correlated across generations. Thus, higher- and lower-SES parents may have different parenting habits because of the differences in their own upbringings in different socioeconomic circumstances.<sup>66</sup> In this way, automaticity bias can help reinforce SES-based differences in the cognitive stimulation and emotional support provided by parents.

## Summary

The evidence reviewed above suggests that neither time constraints nor differences in parental preferences or beliefs likely explain much of the variation in parenting behavior by SES. Differences in how much money is available to high- and low-SES parents undoubtedly affect differences in parents' material investments in their children, but money isn't likely to explain the differences in how parents spend time with children. We do see consistent evidence that lower- and higher-SES parents interact with and invest in children differently because low-SES parents undergo more daily and often “toxic” stress than higher-income parents do. That type of stress increases parents' depression and anxiety and can undermine their cognitive ability to focus on long-term goals rather than short-term ones. Recent research has also found that the economic context

of parenting itself, whatever its impact on mental health, is associated with cognitive biases in parents that may encourage them to focus on present versus future gains and to rely on habits rather than conscious problem-solving when making parenting decisions.

## **Policies and Programs to Narrow the Gap**

What types of policies and programs would most effectively narrow SES-based parenting gaps? Below, we review research about programs that aim to improve parenting behavior by targeting precisely the mechanisms discussed above. Wherever possible, we review evidence from randomized controlled trials or from *quasi-experimental* studies (which compare treatment groups and control groups formed by means other than random assignment, such as a policy change). Otherwise, we review the correlational evidence about the differences in the mechanism by SES or the correlational links between each mechanism and parenting behavior.

### **Money to Spend on Children**

If a main reason that low- and high-SES parents raise children differently is that low-SES parents have less money, the policy solution would be to provide conditional or unconditional cash transfers to low-income parents. It's difficult to estimate the causal effect of this on parenting behavior because income increases are seldom random. But research on how low-income parents spend their Earned Income Tax Credit (EITC) refunds offers some insight into behavior changes caused by giving parents money. The EITC is a tax credit that serves to offset payroll taxes and supplement the wages of low-income workers. Studies that compare spending patterns across the year for EITC

recipients compared to nonrecipients find that EITC recipients are likely spend their check on durable goods like cars or home appliances, or to pay off debts, and not on child-related expenditures per se.<sup>67</sup> However, a recent study found that receiving the EITC during the spring of a child's senior year in high school boosted the likelihood that low-income students would enroll in college, suggesting that the additional money may sometimes go to education.<sup>68</sup> Taken together, this research suggests that providing more money isn't likely to alter the time or money spent by parents on daily child enrichment activities, but it might increase parental investment in larger expenditures like college enrollment.

Another source of information on how a sudden change in income might affect families comes from a study on the effect of a windfall from casino earnings on members of an American Indian tribe.<sup>69</sup> For children who'd never been poor, an increase in parental income had no effect on high school graduation or educational attainment. But for children in poor families, the additional parental income increased schooling by nearly one year and increased the chance of graduating from high school by 30 percent. More importantly, the windfall was associated with a 5 percent increase in mothers' and fathers' supervision of children and a 4 percent increase in positive mother-child interactions, according to children. These findings indicate that income itself can enhance parenting behavior and, as a result, child outcomes. But note that the income increase in the study was significant—as much as 100 percent for poor families, far more than that likely to be implemented by US public policies. So it's unclear whether lessons from the study could guide real-world applications.

A new intervention might clarify the potential impact on parenting behavior of smaller but still meaningful income increases. A group of prominent researchers recently launched *Baby's First Years*, an experimental program that randomly assigns either an unconditional cash transfer of \$4,000 per year or a nominal \$20 per month to low-income families. Over the next few years, the study will explore the effects of these income boosts not only on infant development but also on parents' mental health, parenting stress, and parenting practices. *Baby's First Years* seeks to answer two questions: Can extra money alone enhance parenting practices? And if so, does it do so by improving parents' mental health and reducing parenting stress?<sup>70</sup>

### Time to Spend with Children

Another policy approach that might alter parents' behavior would be to increase the amount or nature of the time available to low-income parents to spend with their children. But education-based differences in parental time investments persist even when policies provide generous family supports in attempts to equalize opportunity for child development.<sup>71</sup> Still, given that stress disrupts parents' mental health, focus, and attention, policies that improve the stability and predictability of low-income parents' work schedules could make a meaningful difference in parenting behavior and children's development. Studies to assess the impact of such approaches are still in their infancy, but one multicomponent investigation—the Shift Project, conducted jointly at the University of California, Berkeley, and the University of California, San Francisco—holds promise. The project is using an innovative method of data collection to survey thousands of retail

workers at large firms about scheduling practices and wellbeing, and thus providing much new evidence.<sup>72</sup>

### Information, Values, and Preferences

Another possible strategy involves designing interventions to affect parents' information about, values around, or preferences for investments in children. Impacting these mechanisms is one of the goals of home visiting programs, which are by far the most common policy approach to narrowing parenting gaps between higher- and lower-SES parents. These programs typically target the mother-infant relationship, aiming to enhance child development by modeling or directly instructing parents about caring for infants, toddlers, and preschool-aged children. This approach assumes that parents who know the importance of certain parenting behaviors, and learn how to engage in them, will do so more often. The number of families served by home visiting programs proliferated with the passage of the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV), part of the Affordable Care Act in 2010; MIECHV has been authorized through fiscal year 2022.<sup>73</sup>

Three of the most commonly adopted (and rigorously evaluated) home visiting models are the Nurse-Family Partnership, the Early Head Start home visiting program, and Healthy Families America.<sup>74</sup> Although each of these programs has demonstrated positive effects on some parenting outcomes, the effects vary across sites, even within the programs. For example, multiple evaluations of Healthy Families America have demonstrated modest effects on mothers' ability to interact in sensitive or stimulating ways with children, but only at some sites.<sup>75</sup> Another home visiting program, the

Home Instruction Program for Preschool Youngsters (HIPPY), which specifically targeted parents' reading and educational activities with preschool-aged children, showed robust effects on children's school performance in the first cohort, but not in later ones.<sup>76</sup> Even when programs (or sites of programs) were found to enhance parenting practices, the effects were relatively modest and often faded over time.<sup>77</sup>

The most recent evidence on home visiting comes from a national evaluation of the four most commonly used MIECHV-funded programs: the three described above, and the Parents as Teachers program. Like the evaluations of individual programs before it, the Mother and Infant Home Visiting Program Evaluation, or MIHOPE, found that home visiting programs can increase the quality of cognitive stimulation in the home and reduce the frequency with which parents use harsh or aggressive disciplinary approaches. But as in the previous studies, these effects were modest in size.<sup>78</sup> In fact, only about one-third of the parenting outcomes that MIHOPE examined showed effects that were statistically significant.

Why does home visiting tend to yield only modest benefits? One reason may be that such programs typically have trouble recruiting and retaining families.<sup>79</sup> Programs often recruit fewer than their target number of families and then provide far fewer home visits than they expect to. On average, families in MIHOPE participated for only eight months, even though some programs were designed to last years, and 17 percent of program mothers didn't receive a single home visit. Perhaps because of the hectic schedules and nonstandard hours faced by many low-income families, and because the cognitive biases described above may make

parents less likely to participate in home visiting, it's just too difficult to deliver the programs as intended.<sup>80</sup>

The second reason for home visiting's modest benefits may be that the chief mechanism these programs use to enhance parenting practices—providing information and instruction—isn't the mechanism that differentiates the behavior of lower- and higher-income parents. Above, we reviewed research that suggests low- and high-income parents largely share the same parenting goals and values, and agree that it's important to conduct enriching activities with their children. The best evidence indicates that low- and high-income parents differ primarily in the level of stress each must negotiate while parenting, and in the impact of certain cognitive biases on parenting decisions.

Next we discuss two less time-consuming approaches to parenting programs, sometimes called *light touch* interventions. For this reason, they may hold particular promise.

### Family and Environmental Stress

The home visiting programs we've described so far all aim to alleviate parental stress and improve parental mental health, among other goals. Yet only Healthy Families America has demonstrated impacts on mothers' mental health, and only at some sites.<sup>81</sup> MIHOPE did find that home visiting, when averaged across model programs, was associated with statistically significant reductions in mothers' depressive symptoms, but the effects were small.<sup>82</sup> These small and inconsistent findings likely stem from the broad focus of these programs—they don't exclusively target mothers' mental health or stress reduction—and their difficulty in recruiting and retaining families.

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*Programs that focus on improving parents' mental health using clear clinical approaches hold the most promise for enhancing parenting behavior.*

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But a number of smaller, more targeted programs have found that improving parents' mental health or reducing stress results in improved parenting behavior. Mothers and Babies is one example. This six-week cognitive-behavioral intervention has been shown to reduce depressive symptoms and prevent depressive episodes among women before and after giving birth; as a result, it increases the mothers' sensitivity with their infants.<sup>83</sup> The program has been successfully embedded in traditional home visiting programs, offering a way to enhance home visiting's effects on parenting behavior. Family Foundations is another well-developed and rigorously evaluated intervention to improve parents' mental health. This program aims to minimize the strains of the transition to parenthood, and to help parents support and not undermine each other. At six months and one year after a child's birth, mothers and fathers in Family Foundations reported significantly fewer depressive symptoms compared to a control group. Mothers also reported less anxiety, and both mothers and fathers reported more support from each other. In interactions with their children, parents showed more sensitivity and more support for child exploration, and had a more positive affect; intervention fathers showed less negativity. Unlike those of most other programs, these effects were

largely sustained at three and six years after the program ended.<sup>84</sup>

The results from these programs suggest that some interventions can improve the quality of parenting in low-SES families by reducing parents' emotional and interpersonal stress and improving their mental health. But long-term home visiting programs with diffuse goals aren't likely to produce those effects consistently or at practically significant levels. Rather, programs that focus on improving parents' mental health using clear clinical approaches hold the most promise for enhancing parenting behavior.

### **Cognitive Biases and Decision-Making**

In the past few years, a new approach to supporting parents has emerged that avoids the difficulties of recruitment and retention in home visiting programs. These light-touch, behavioral interventions, usually designed with scale-up in mind, typically target specific, discrete parenting behaviors to get at the cognitive biases that may prevent mothers and fathers from using certain parenting practices. One example is the Parents and Children Together (PACT) Study, a field experiment conducted at the Behavioral Insights and Parenting Lab at the University of Chicago, which tested a behavioral intervention to increase parent-child reading time among low-income families.<sup>85</sup>

The PACT study hypothesized that present bias might be the key to understanding why low-SES parents read aloud to their children less often than higher-SES parents do. The intervention aimed to overcome this bias with a set of behavioral tools (goal-setting, feedback, timely reminders, and social rewards) designed to "bring the future



to the present” and help parents form the habit of regular reading. These tools were all deployed using text messages, rather than in-person staff visits, which made the program relatively easy for low-income parents with hectic, unpredictable schedules and high levels of daily stress.

On average, PACT more than doubled the amount of time parents spent reading to their children (the study measured time use objectively, using digital tools). But even more important was the finding that the intervention was substantially more effective for parents who were more present biased.<sup>86</sup> In short, parents who suffered from present bias were the very ones who benefited from an intervention designed to overcome it.

The PACT study doesn’t just suggest that difficulty making temporal tradeoffs is partly responsible for parents’ failure to read to their children. It also offers a blueprint for managing this cognitive bias. Using a set of known behavioral tools, parents are able to increase desired behaviors and improve their decision-making. Moreover, PACT’s cost per family was relatively low—a fraction of the per capita costs of current policy interventions designed to improve preschool children’s educational outcomes. This suggests that behaviorally based interventions can feasibly be adapted for policy purposes.

In another example of this new approach, Kalil and colleagues designed a behavioral field experiment, Show Up to Grow Up, to increase attendance and diminish chronic absences at subsidized preschool programs in Chicago.<sup>87</sup> The program sent parents personalized text messages targeting behavioral bottlenecks that were driving

children’s preschool absences. Based on outcome data from the preschools’ administrative records, the intervention decreased chronic absenteeism by 20 percent over 18 weeks. The study’s survey data showed that the parents who benefited most were those who, at the start of the program, had reported lower preferences for attendance. In short, parents with weaker beliefs about the usefulness of preschool benefited the most from messages and reminders that emphasized its importance.

Finally, to address challenges arising from cognitive scarcity, some promising new approaches focus on parents’ *executive function* skills, key components of which include impulse control, working memory, and mental flexibility. These interventions seek to relieve the effects of chronic toxic stress that can compromise decision-making among low-income parents. Although experimental evidence is currently lacking, some programs for low-income parents are using coaching, multimedia, and specially designed computer games to help adults improve memory, focus and attention, impulse control, organization, problem-solving, and multitasking.<sup>88</sup> Mindfulness meditation training, mind-body exercises (such as relaxation breathing), and “brain games” are other tools that may increase the quality of parent-child interaction by improving parents’ executive function skills—and likely improve mental health and health outcomes as well.<sup>89</sup> Like the other behavioral interventions described above, these programs could be deployed through technology in a way that could make home visits or meetings at children’s preschools unnecessary.

## Conclusions and Policy Implications

Many theories aim to explain why better-off parents are more engaged with their children than are disadvantaged parents, especially with regard to educational activities. These explanations include differences in the amount of time and resources available to parents, differences in expected returns for time spent with children, and differences in information or beliefs about the importance of educational activities or how to engage in them. We don't have enough empirical evidence to show that these mechanisms specifically explain much of the difference in parenting behaviors by SES. Yet most parenting intervention models, particularly home visiting and outreach to parents via early childhood education programs, are nonetheless guided by the assumption that information and knowledge will alter parenting behavior.

The research reviewed in this article suggests that programs can narrow parenting gaps between higher- and lower-SES families by addressing parents' emotional stress and their cognitive biases. To be sure, parenting programs, and many home visiting programs in particular, aim to reduce parents' stress and improve mental health. But because these time-intensive programs have trouble recruiting and retaining parents, perhaps in part precisely *because of* the parents' cognitive biases, it's hard for them to achieve significant effects on parenting outcomes. By contrast, many of the ideas in what we might call the "behavioral economics tool kit" are inexpensive, have a light touch, and are highly scalable. If heeded, these insights could greatly improve the effectiveness of existing parenting interventions and guide the design of promising new ones.

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