# **Poverty Interrupted**

# Combating Intergenerational Poverty with Behavioral Economics



## What is Poverty Interrupted?

Poverty Interrupted is a radical new effort to permanently break the cycles of poverty that trap too many American families. In the past decade, the field of behavioral economics has transformed our understanding of what it means to live in poverty—and, as a result, forced us to reexamine the current set of anti-poverty policies and programs. ideas 42, the world's pre-eminent applied behavioral economics organization, is launching Poverty Interrupted in order to put this new understanding into practice. By designing and deploying innovative interventions grounded in behavioral science, we seek to ensure that the experience of poverty does not keep low-income families with young children from reaching their full potential. We are committed to achieving meaningful social impact and will rigorously assess the effects of these interventions, with the ultimate goal of scaling successful designs to reach low-income families across the United States.

### Why is decisive action required now?

Poverty remains a severe and persistent problem in the United States. Though the United States has the highest net national wealth, at an individual-level, the relative poverty rate\* in America in 2010 (the most recent year for which data is available) was 17.4%—well above the OECD average of 11.3% (OECD 2010). The consequences of such a sobering statistic reverberate across all income strata: the national cost of poverty—including both public expenditures and lost earnings—is estimated to be \$500 billion per year, or nearly 4% of GDP (Holzer et al. 2007). Children are especially vulnerable, with more than 21% of Americans under age eighteen living in poverty as of 2012 (DeNavas et al. 2013).

Poverty's prevalence among the youngest Americans is especially concerning because childhood poverty can have long-lasting cognitive and behavioral consequences. Children born into the lowest income quintile are nearly five times more likely to remain in the bottom 20% than to reach the top quintile as adults (Chetty et al. 2014). As early as kindergarten, the mechanisms that perpetuate poverty across generations have already diverted many low-income children onto a markedly different trajectory than their wealthier peers. By almost any measure—literacy, numeracy, attention skills, language use—children born into lower-income families are at a disadvantage (Duncan and Magnuson 2011; Waldfogel and Washbrook 2011). Over time, such gaps widen and become increasingly difficult—and costly—to close (Heckman 2006). As the years pass, children from low-income families are less likely to graduate from high school or attend college, more likely to engage in crime, and on average, give birth at a younger age (Ratcliffe and McKernan 2012; Chetty et al. 2014). As children growing up in poverty have children of their own, the consequences of poverty begin again in the next generation.

U.S. relative poverty rate in 2010

11.3%

OECD relative poverty rate in 2010

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**<sup>17.4%</sup>** 

<sup>\*</sup> Defined as the ratio of the number of people earning less than half the median household income to the total population.

The cycle of poverty is the antithesis of the American Dream, and inspires legitimate moral outrage. It should also drive concern for the long-term health of our national economy: our failure to invest early in children's lives carries a hefty price that must be paid out over decades. Low-income children without access to high-quality early education are more likely to be imprisoned as adults, to become teenage parents, and to drop out of high school. While the cost of the highest-quality early education programs rarely exceeds \$15,000 per child for several years, incarceration costs \$25,500 per inmate per year, often over the course of several decades. Teen pregnancy, meanwhile, costs taxpayers nearly \$11 billion per year, and each cohort of high school dropouts leads to \$148 billion in lost tax revenue and additional public expenditures over the course of their lifetimes. (Children's Defense Fund 2012)

Because poverty in the U.S. is pervasive, costly, and a major threat to our national future, we believe nothing less than a radical rethinking of its causes, consequences, and solutions is required. Poverty Interrupted will be the catalyst for the needed paradigm shift, with an initial focus on families with young children. We've selected this population for three key reasons:

- Children between birth and age five experience rapid growth and development and are thus particularly vulnerable to negative environmental influences during this period (Center on the Developing Child 2007).
- The earlier the intervention, the greater the return on investments in children's wellbeing (Heckman 2006). Evidence suggests that the return on investment for high-quality early childhood programming is as high as \$8.74 per dollar spent (Heckman 2006).
- The relationship between parents and young children is one of such interdependence that a focus on either parent or child alone is likely to be less effective than a two-generation approach.

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# How can Behavioral Economics change our understanding of this problem?

Many anti-poverty programs have had a meaningful impact on poverty in the U.S. Without them, the statistics cited above would undoubtedly be much grimmer. Still, more must be done to increase the effectiveness of existing programs and to foster new initiatives aimed at ending the cycle of poverty. Behavioral economics offers a promising means to achieve these important goals.

Poverty is not exclusively a behavioral problem. Challenges at the individual level stem from a variety of structural and systemic forces that include institutional racism, poorly functioning infrastructure, and a dearth of living-wage jobs. No policymaker or program designer should underestimate the effects of growing inequality in American society, or of policies that intentionally or unintentionally favor the already-privileged.

Still, human behavior is an important, and often neglected, component of the array of issues that combine to perpetuate poverty. While we as a society continue to work toward much-needed structural reforms, we must simultaneously leverage advances in behavioral science research to refine existing interventions, and design new ones that are better suited to the everyday

challenges poverty presents for millions of Americans.

Poverty Interrupted is one of the first economic mobility initiatives to begin from the premise that poverty both exerts a unique set of cognitive costs and magnifies the biases common to all humans. It repudiates the "culture of poverty" school of thought, which blames people living in poverty for their problems, and adds a more nuanced understanding to the view that low-income individuals always choose the most beneficial option amid challenging external circumstances. Poverty Interrupted turns instead to insights from the field of behavioral economics for a powerful reframing of intergenerational poverty.

Behavioral economists interpret the world differently than most. While economists typically describe behavior as the expression of a stable preference, or as the result of a careful weighing of costs and benefits, behavioral scientists study the countless ways in which humans often stray from the economists' script. Though these deviations are often helpful, they occasionally hinder people's ability to act on their goals and intentions. To understand when and how gaps between intention and action occur, behavioral researchers begin with the insight that context matters: seemingly minor differences in the way that information is presented, a space is organized, or an interaction is conducted often have a profound impact on decisions and actions. Behavioral designers specialize in creating programs, policies, and products that help bridge this gap between intention and action.

In addition to identifying the contextual features that matter most in any given situation, behavioral economics helps us to reconceptualize poverty itself as a unique "context". Though the specifics differ widely from city to city and household to household, poverty's defining feature is typically a chronic lack of key resources such as money, time, and food. As Eldar Shafir and Sendhil Mullainathan wrote in their 2013 book *Scarcity: Why Having too Little Means So Much*, this experience of scarcity affects cognitive functioning in predictable and damaging ways. When faced with severely limited resources, individuals tend to automatically (and often unconsciously) "tunnel" or intensely focus on the most pressing problem while neglecting all other demands. Such focus can be beneficial in the short term but becomes counterproductive over time, as tasks that are important but not urgent—planning for the future, investing in key relationships—are crowded out of the tunnel. In quantifiable terms, the cumulative effects of tunneling and other shifts in cognitive functioning created by scarcity can temporarily lower an individual's IQ by approximately thirteen points (Mullainathan and Shafir 2013).

To better understand the implications of this finding, imagine a pipe carrying a steady stream of water. The water's progress depends not just on the pipe's size, but also on its unobstructed opening: if rocks and other debris are lodged inside, or if the pipe's internal gates are closed, the water will slow or stop. An individual operating at her full cognitive capacity operates much like a pipe with unimpeded flow. When that same individual experiences scarcity, on the other hand, it is as if several large obstacles have been added to the pipe. Although her inherent capacity remains unchanged, her progress nonetheless slows as these barriers impede or divert her energy.

Poverty is, in essence, chronic scarcity; and chronic scarcity is, in turn, a chronic tax on cognitive bandwidth. Though all humans have limited stores of willpower and attention, only people in poverty must devote an inordinate portion of this store to meeting basic needs for

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# 13 points

food, shelter, clothing, and the like. Likewise, while the biases and heuristics that occasionally lead humans astray are common at every income level, people living in poverty have the least room for error. Without a financial cushion or a network of family and friends able to lend a hand, the familiar experiences of forgetting a deadline or misinterpreting an important piece of information can have devastating effects.

Ironically, efforts to provide individuals with the resources they lack often exacerbate scarcity's effects. The process of securing and maintaining social services and benefits can entail a number of cognitively taxing tasks — keeping track of multiple deadlines, locating the information and materials needed for each new set of required forms, and rearranging childcare and employment schedules in order to make it to an office during business hours. The low uptake, inconsistent compliance, and high attrition rates that are often cited as evidence of a lack of interest or commitment among families served by anti-poverty programs may in fact be symptoms of chronic scarcity.

This reframing of poverty as chronic scarcity, with all the cognitive costs that scarcity entails, stands in marked contrast to the notion of a "culture of poverty." People living in poverty are no different than anyone else in the way that they respond to scarcity; they simply experience scarcity more frequently and more acutely than most. Likewise, they are no more prone to cognitive biases than the rest of us; instead, their circumstances magnify fundamental human tendencies. Outcomes for individuals with equal inherent capacity will inevitably diverge if some are forced to assign a significant portion of this capacity to managing a shortage of key resources, while others are free to focus their energy and abilities on pursuing their full potential.

Parents raising young children on little income face more challenges than most. Their struggles to pay their monthly bills on time and in full, to access and maintain the public benefits that help them bridge the gap between income and expenses, and often to juggle several low-wage jobs with complicated childcare arrangements, all pile considerable stress on top of the usual work required to parent a small child. The mental and physical energy expended to make ends meet leaves little cognitive bandwidth leftover for the activities that could help the family escape poverty in the present or prepare the child for a prosperous adult life, such as pursuing a college degree or job training program, acting as the child's first teacher, and maintaining stable and supportive relationships with loved ones.

#### How can Behavioral Economics offer new solutions?

Poverty Interrupted will deploy two strategies for supporting low-income families: (1) reinforcing the cognitive capacity of both parents and children and (2) reducing the cognitive burden of navigating life under scarcity. In the pipeline metaphor outlined above, these strategies equate to increasing the resiliency of the pipe against external forces and removing or shrinking the obstacles impeding the water's flow. These broad categories suggest a wide range of opportunities to address the bandwidth tax imposed by chronic scarcity and, ultimately, to break the cycle of poverty for millions of families.

Recent neuroscience research offers good news regarding the former strategy: the human brain—including the regions that control executive function (or "life management") skills—remains relatively plastic into adulthood (Babcock 2014). This suggests that with ongoing

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practice and support, adults can develop increased self-control, attention, and problem-solving abilities – in effect, strengthening their cognitive pipeline. This increased capacity will improve parents' ability to manage their existing load, even in the absence of substantive changes to their economic circumstances. It will also enable them to devote additional "bandwidth" to the important work of facilitating their children's mental, physical, and socioemotional development.

Similar capacity-building activities aimed at young children have also shown great promise in changing long-term trajectories. Studies have shown that the Perry Preschool Program, one of the most successful early childhood interventions to date, was effective in large part because of its impact on non-academic skills like self-control, attention, and mental flexibility (Heckman 2013). Such abilities are in many ways prerequisites for success in school and work and can partially offset the chronic stress and trauma that typically accompany life in poverty (Center on the Developing Child 2011).

The second strategy, removing cognitive obstacles, entails the identification of the primary stressors in families' lives and the creation of behaviorally-informed interventions designed to ameliorate them. Alone or in combination, such interventions will cut down on the time, money, and—perhaps most importantly—mental capacity required of parents to consistently meet their own and their children's needs. Ideally, such interventions will be combined in holistic programs that address housing, health, financial capability, employment, childcare, and other key components of family wellbeing.

To understand the type of behaviorally-informed service Poverty Interrupted is likely to design and test, it is useful to consider the challenge of finding and paying for childcare. Because nontraditional and inconsistent work hours are more common among low-income workers, many low-income parents are unable to find a childcare facility that will accommodate their schedule (Enchautegui 2013).



As a result, parents are often forced to rely on multiple caregivers and devote considerable time and energy to managing their schedule and transporting their family from place to place. Last-minute changes to a scheduled shift or a babysitter's availability can throw off these careful arrangements with potentially disastrous results. From the child's perspective, such instability can interfere with healthy development (Moore and Vandivere 2000). The Poverty Interrupted team has identified a number of options for reducing the cognitive load of this particularly taxing task, ranging from extending childcare facilities' operating hours or providing low-income parents a weekly credit for a car service, to offering a concierge-like assistant to which parents could outsource schedule management or an on-call babysitter who could care for children on very short notice.

Any of those changes to child care arrangements might be one component of a suite of interventions aimed at reducing the overall bandwidth tax for a family. By ameliorating

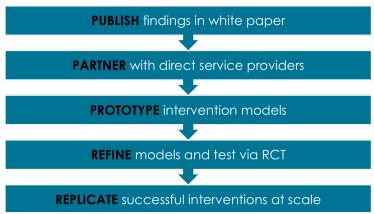
stresses from sources like child care, income, housing and other basic needs, we believe we can mitigate much of the cognitive tax of chronic scarcity.

### How is the Poverty Interrupted initiative approaching this challenge?

Over the course of 2014, the Poverty Interrupted design team conducted an academic literature review, interviewed more than thirty-five experts, met with leaders from innovative anti-poverty programs across the U.S., and conducted interviews and focus groups with low income parents. We are currently in the process of using our findings to identify key behavioral challenges and promising solutions. A white paper published in early 2015 will summarize our findings and outline a number of recommendations for policy-makers, program designers, and service providers.

In 2015 and beyond, we will seek to partner with several direct service organizations to implement and test several of these recommendations in cities across the U.S. using rigorous experimental methods to ensure our interventions work, and to measure the magnitude of their impact. Subsequently, successful interventions will be scaled up and expanded to

reach many more families. While we know we cannot entirely eliminate the conditions of scarcity that the millions of Americans living in poverty face on a daily basis, we are confident that with the right kind of investments we can mitigate scarcity's detrimental effects on behavior and decision-



making and improve many families' chance for long-term success. Though Poverty Interrupted is an ambitious endeavor, we believe it is necessary given the choice we face: invest in real success now or bear the increasing cost of the status quo for decades to come.

#### How can I be involved?

The Poverty Interrupted team is actively seeking partner organizations interested in using behavioral economics to enhance or expand their work. We are especially eager to collaborate with high-impact organizations that serve (or are interested in serving) both low-income adults and their children. Because the team at ideas 42 uses experimental methods to test the effectiveness of our interventions, we seek partners with strong data collection systems in place and an interest in conducting a randomized controlled trial (RCT).

Poverty Interrupted is also interested in expanding our reach with the support of funders who share our convictions that the widespread poverty we see in 21st-century America is unacceptable, and that our society desperately needs new strategies to drive lasting change. To learn more about opportunities for partnering with or funding Poverty Interrupted, please contact ideas42 Vice President Anthony Barrows (Anthony@ideas42.org).

## **Bibliography**

Babcock, E.D. (2014) *Using brain science to design new pathways out of poverty*. Boston, MA: Crittenton Women's Union.

Chetty, R., Hendren, N., Kline, P., & Saez, E. (2014) *Where is the land of Opportunity? The geography of intergenerational mobility in the United States* (Working Paper 19843). Cambridge, MA: National Bureau of Economic Research.

Center on the Developing Child at Harvard University. (2007) A Science-based framework for early childhood policy: Using evidence to improve outcomes in learning, behavior, and health for vulnerable children.

Center on the Developing Child at Harvard University. (2011) *Building the brain's "air traffic control" system: How early experiences shape the development of executive function: Working paper No. 11.* 

Children's Defense Fund (2012). "Be Careful What You Cut: Data Sources and Calculations". http://www.childrensdefense.org/be-careful-what-you-cut/assets/documents/bcwyc-calculations.pdf

DeNavas-Walt, C., Proctor, B.D., & and Smith, J.C. (2013) *Income, poverty, and health insurance coverage in the United States: 2012.* U.S. Census Bureau, Current Population Reports, P60-245, Washington, DC: U.S. Government Printing Office.

Duncan, G.J. and Magnuson, K. (2011) "The nature and impact of early achievement skills, attention skills, and behavior problems." In *Whither opportunity: Rising inequality, schools, and children's life chances*, edited by Greg J. Duncan and Richard J. Murnane (eds.), 47-69. New York: Russell Sage.

Enchautegui, M.E. (2013) "Nonstandard work schedules and the well-being of low-income families." *Low-Income Working Families*, Paper 26. Washington, DC: The Urban Institute.

OECD (2014), *Society at a Glance 2014: OECD Social Indicators, OECD Publishing.* http://dx.doi.org/10.1787/soc\_glance-2014-en

Heckman, J. (2006) "Skill formation and the economics of investing in disadvantaged children." *Science*, 312(5782): 1900-1902.

Holzer, H.J., Schanzenback, D.W., Duncan, G.J., & Ludwig, J. (2007) *The economic costs of poverty in the United States: Subsequent effects of children growing up poor.* Center for American Progress.

Heckman, J., Pinto, R., & Savelyev, P. (2013) "Understanding the mechanisms through which an influential early childhood program boosted adult outcomes." American Economic Review 103, No.6: 2052–86.

Moore, K.A. & Vandivere, S. (2000) "Stressful family lives: Child and parent well-being." *National Survey of America's Families*: Series B, No. B-17. The Urban Institute.

Mullainathan, S. & Shafir, E. (2013) *Scarcity: Why having too little means so much*. New York: Times Books.

Ratcliffe, C. & McKernan, S. (2012) "Child poverty and its lasting consequence." Low-Income Working Families, Paper 21. Washington: The Urban Institute.

Waldfogel, J. & Washbrook, E. (2011). "Early years policy". Child Development Research 2011