The circumstances surrounding poverty — tight financial challenges, instability of income and expenses, low savings, no insurance, and several other stressors — translate into persistent and cognitively taxing hardship for people in poverty contexts. Thoughts about money and expenses loom large, shape mental associations, interfere with other experiences, and are difficult to suppress. The persistent juggling of insufficient resources affects attention, cognitive resources, and ensuing decisions. Despite the demanding struggle with challenging circumstances, people in poverty encounter disdain rather than admiration, and obstacles rather than support. Societal appreciation for the power of context, along with behaviorally informed programs designed to facilitate life under poverty, are essential for those in poverty contexts to be able to make the most of their challenging circumstances.

Address
Princeton University, United States

Corresponding author: Shafir, Eldar (shafir@princeton.edu)

A major contribution of the behavioral sciences has been a deeper appreciation of the power of context to shape thinking and behavior. When situations are mild, people’s traits and dispositions can shape what they do, but as contexts grow more powerful, individual differences become less relevant [1,2]. And poverty is a very powerful context. In what follows, we consider some of the contextual aspects of poverty, and review recent research into the psychology that emerges as a result. We find people being attuned to and devoting substantial mental resources to the management of their insufficient resources. We also find them getting distracted, overly focusing on the here and now, and feeling discouraged. And instead of help and understanding, they encounter disdaining obstacles and traps. Naturally, this is not an exhaustive review, nor does it address the many ways in which poverty manifests itself across time, place, and culture. We set the stage predominantly in the modern American scene, with the presumption that the main features of living under poverty extend far beyond.

The context of poverty
Beyond levels of mere survival, poverty is partly a matter of norms and construal. As societies progress and norms evolve, things that were once considered luxurious can become commonplace. Tap water in the home, for example, was inconceivable in the mid-nineteenth century, and is still a dream in many places today. And yet, in the US, where tap water is now entirely normal, you can have it in your home and still be poor. Adam Smith, the Scottish economic thinker, explained it simply:

‘A linen shirt, for example, is, strictly speaking, not a necessity of life. The Greeks and Romans lived, I suppose, very comfortably though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt . . . ’ [3].

Like the linen shirt, many things, including a place to live, heating, even a TV, are strictly speaking, not a necessity, but a basic feature of ordinary life. Being able to avail oneself of those things becomes part of a person’s normal ‘needs.’ Of course, you could survive without them, but expecting them has become normal — like tap water and a shirt. And if you can’t afford those basic things, you will feel — and depending on your exact situation, may officially be counted as — poor. If you cannot afford the basic things that make for a minimally acceptable life in the time and place in which you live, you are living in poverty.¹

By its very nature, living in poverty — not being able to afford basic needs — entails persistent financial challenges. In the US today, roughly a hundred million people, a third of the nation, are living precariously near the poverty line, experiencing ongoing challenges trying to balance their finances [4,5]. Recent work has documented

¹ It is easy to think of ways to make this ‘perceived’ or ‘relative poverty’ argument sound silly. Yet, definitions of what is poverty are bound to remain fluid (as are definitions of wealth). What if everyone had a yacht and a summer house? Would you then be poor if you didn’t?! In fact, two centuries ago a stove and running water were unimaginable for many, much like a yacht and a summer house today. Similarly, consider life expectancy. A person in a developed nation who dies at the age of 40 today has died ‘young,’ whereas that was beyond life-expectancy 200 years ago.
levels of abject poverty beyond those typically imagined [6*], and nearly two-thirds of Americans report living paycheck to paycheck. Over a half of low-income families are asset-poor, lacking the liquid resources necessary to finance consumption for three months [7–9].

In poverty contexts, unexpected issues and urgent needs regularly arise. A household survey in the Detroit area found that within a 12-month period, 90% of low to moderate income households experienced major illness or medical expense, eviction, utility shutoff, phone disconnection, insufficient food, or a bankruptcy filing [10]. Recent surveys describe persistent volatility in both income and spending that strain working families’ efforts to meet basic needs [11*]. Many lower-income jobs offer no security and frequent fluctuations in hours and in wages [15]. With a modest budget and no savings, many expenses become prohibitively big. It is common, for example, to have more than thirty percent of your income devoted to housing costs when your income is low, but very rare when you are rich [7,12]. In 2013, one in four U.S. households used at least one alternative financial service, such as a pay day, auto-title, or refund anticipation loan, in the preceding year [13,14]. And, despite the high threat of adverse events, the poor are less likely to have unemployment insurance, life insurance, disability insurance, or other forms of insurance protection. (For more on trends in employment, social assistance, and other factors that make the everyday challenges of low-wage American workers more complex, see [8].)

This combination of circumstances — instability of both income and expenses, combined with low savings and no insurance — translates into persistent hardship, as adverse events challenge one’s ability to meet basic needs, with no room to fail. Mullainathan and Shafir (2013) define ‘slack’ as the ease with which one can cut on other expenses in order to satisfy an unexpected need. When you spend more than thirty percent of your income on housing and add the cost of transportation, food, clothing, utilities, and the rising cost of education; you quickly find yourself with no slack. Low-income households have fewer financial buffers and limited access to liquid financial resources, such as savings or low-cost credit [16]. In the face of unanticipated shocks, they first cut back on slightly less urgent needs, such as certain foods and bills least likely to have dire consequences. Then, they must cut back on essentials, which means skipping payments and incurring costly late fees, utility or phone reconnection fees, eviction threats, and disruptions to work, education, and family life, not to mention the hassle, the phone calls, and the long-term and costly penalties to one’s credit score [11*,17].

In addition to constantly living near a financial precipice, the poor face many other stressors. Neighborhoods are noisy, unsafe, and provide little community trust. Housing is substandard, health care and child care often unavailable, and close friends and relatives often need urgent help themselves [6*,18,19*,20–23]. Low-income people commonly experience chronic stress [24], ‘suffering not so much from a dearth of possessions as from a cavalcade of chaos — pay cuts and eviction notices, car troubles and medical crises — that rattles [their] finances and nudges [families] toward the economic brink’ [25].

The poverty mindset
Living in a context of scarcity and chaos, with no slack, where income instability requires a constant juggling of pressing tasks, affects people’s attentional resources and decisions. When you manage scarce resources, you need to do so with great care. You do not have the luxury that abundance brings of being able to make mistakes. Persistent vigilance is required since any miscalculation or distraction can have dire consequences. Thoughts about money and finances are top-of-mind. Pressing needs capture attention [26–28], and render trade-offs highly accessible [29*,30]. Several studies have found that the poor tend to think about tradeoffs significantly more often, shop more carefully, attend to, and know and remember prices better [29*,31]. Thus, persistent financial challenges become imposing mental ones as well. Thoughts about cost and money come to the minds of the poor spontaneously, and are difficult to suppress. Such thoughts can interfere with other experiences, and shape mental associations. The poor often see an economic dimension in everyday experiences — like going to the doctor, or having a flat tire — that to others may not appear economic at all [32].

Behavioral economics has long studied choice inconsistencies that arise from people’s reliance on peripheral cues. Whereas the normative theory of choice posits that people’s preferences are based on the options’ consequences, people’s actual choices often change with how an option is presented, or ‘framed.’ [33,34] Especially in the area of ‘mental accounting,’ various examples involve choice inconsistencies that arise from people’s vague sense of the value of things. For example, the propensity to drive, say, 45 min in order to save $50 is significantly higher when the savings are off of a $100 purchase (and thus appear larger) than off of $1000 purchase (where they appear smaller). A poverty mindset, on the other hand, renders trade-offs more salient and the value of small transactions clearer. Consequently, it leaves people less susceptible to irrelevant cues, and significantly reduces inconsistent choices: low-income respondents, for example, were less likely to exhibit the differential propensity to travel in the $100 versus $1000 versions described above [35].

But while the poor focus on prices and tradeoffs and worry about pressing transactions, they are prone to neglect other things that at the moment appear less urgent [36]. Solving today’s pressing needs may result in new
and more serious financial problems tomorrow. When people ‘tunnel’ by focusing on what’s urgent, other things stay out of mind [29*]. With this month’s rent looming large and menacing, saving for a child’s eventual education, or for retirement, is left for some hopefully easier future time.

Shah et al. [28] ran several laboratory experimental games in which participants were randomly assigned either small or large budgets (making them ‘poor’ or ‘rich’). While they played, half the participants were given the chance to borrow at high cost. What Shah et al. [28] found was that the poor — those with smaller budgets, who were quickly running out — borrowed more and, because borrowing was so expensive, it hurt them. In moments of need, the loan looked urgent and appealing, so they paid less attention to the high interest rates. And it came back to hurt them. Having borrowed, they needed to repay larger sums and thus depleted their budget sooner, ending up with lower pay than if borrowing had not been available. The rich, in contrast, rarely borrowed and were unaffected—because they did not avail themselves of the high-interest loans, they did just as well when the loans were available as when they were not.

Payday loans are a common financial vehicle amongst lower and middle-income households [37]. These loans are easy, legal, and allow people to avoid the stigma and stress of not paying their bills. The typical payday loan involves receiving an advance on your paycheck for a week or two, but this comes at the price of an exorbitantly high effective interest rate. Payday loans are highly contentious in policy circles and are often used to argue that the poor are myopic. Unless you are anticipating an imminent windfall, an expensive loan today is bound to make tomorrow only harder. Taking such a loan looks shortsighted and unthinking. And in a sense, it is. But what is remarkable is that this is not due to a personality trait, or lack of understanding, but rather to the context in which people are placed. In Shah et al.’s studies, participants were randomly assigned: the ‘poor’ were no different than the ‘rich’ except for the flip of a coin. They were not any more myopic, or financially inept. The ‘poor’ over-borrowed because of the psychology produced by poverty itself.

Preoccupation with pressing budgetary concerns occupies the mind, leaving fewer cognitive resources available elsewhere, thus impeding cognitive function in all aspects of life, financial and otherwise. As several studies have found, poor patients are more likely to forget to take their medications, poor parents tend to be less attentive parents, and poor farmers weed their fields less than wealthier farmers. As the poor tunnel on persistent challenges, they have less bandwidth for things in the periphery and, as a result, ignore, discount, and forget things that matter. Scarce financial resources, in other words, bring with them scarcity in another resource, namely cognitive capacity, or bandwidth [29*].

In one set of studies [38*], shoppers at a mall were asked to consider everyday financial scenarios that presented either manageable or highly challenging financial difficulties. One scenario, for example, concerned a car breaking down and needing to be fixed at a cost of either $1500, a serious challenge for many participants, or $150, which most could afford with relative ease. While participants contemplated how they would go about managing these financial challenges, they were presented with tasks intended to gauge their executive control and fluid intelligence.

Rich participants did equally well on the cognitive tasks whether they contemplated the manageable or the challenging scenarios. The poor, when entertaining the manageable scenario, did just as well as the rich. But when they were confronted with the challenging scenario, poor participants did significantly less well on executive control and fluid intelligence tests. The preoccupation with how they would deal with the large expense, with how they would juggle their needs, had a similar effect to what we would have observed had we asked them to retain a seven-digit number in short-term memory. It imposed cognitive load; which left less cognitive capacity for other tasks. They performed as we would expect from someone ‘whose mind is elsewhere.’ Versions of these studies were replicated with sugar cane farmers in India, who, because the bulk of their income arrives all at once, at harvest time, find it hard to smooth consumption throughout the year. The same farmer exhibited diminished cognitive performance before harvest, when poor, compared to after harvest, when richer. [38*].

Society’s approach to poverty
Remarkably, while the poor face multiple challenges and ongoing struggles, instead of respect they encounter disdain, and instead of help they face innumerable obstacles. Studies shows that the poor are scorned, perceived as incompetent, and disrespected [39,40]. The stigma of poverty includes the feeling of being viewed as a societal burden, lazy and unmotivated. Such ‘welfare stigma’ [41,42], can lead to cognitive distancing [41,43] and underperformance [44] among the poor, including foregoing important benefits to which they’re entitled, both in the public and nonprofit sectors [45,46].

From hard-to-understand and menacing legal forms [47], abusive rental housing practices [19*] and court-ordered monetary sanctions [48], to ballooning mortgages [49] and unreliable and predatory banking [14,50], cruel and unregulated markets put the poor in more menacing and less cooperative contexts than those surrounding people who are well off, and who typically need the help less. And help can make a difference. Friendlier forms
and improved defaults lead to increases in take-up of benefits programs, greater savings, and higher college matriculation [46,51]. Simple procedures that affirm their capability and sense of pride can boost the performance of the poor and increase their willingness to explore various programs [44]. The timing and frequency of the distribution of program benefits can influence student school outcomes [52]. Direct income supports have been shown to reduce the depth of poverty, bolster children’s opportunities to succeed, and enhance long-term mobility. For example, various tax credit programs (like the Earned Income Tax Credit), as well as food stamps, have been linked with long-term benefits for children in recipient families, including improved birth weight, better school outcomes, and increased rates of employment in adulthood [53].

Recent studies find that problems due to impoverished experiences and environments arise in very early childhood, even in utero. The biological embedding of adversity occurs early in development, and a failure to promote emotional and cognitive progress in infancy can lead to lifelong deficits in cognitive and emotional capacity [18,54,55–58]. Context shows its impact from the very start, and in fundamental ways. Simply moving to a better neighborhood has a significant impact on children’s long-term chances of success, increasing their college attendance and earnings [59]. Such findings ought to shake social science and policy researchers. They illustrate how so many of the problematic decisions we observe lie not in poor people, but in the poverty contexts in which they find themselves having to make decisions.

According to this picture, government-supported safety nets, improved neighborhoods, behaviorally-informed benefits programs, all designed to facilitate the juggling of everyday challenges in poverty contexts, are essential features not only in the hopes to provide improved conditions and better chances for the poor, but as part of society’s attempts to reduce poverty. A useful metaphor [29], is that of cockpit design. No matter how talented and hard-working a pilot may be, she is more likely to soar into successful flight seated in a cockpit that’s behaviorally sophisticated and well-designed, as opposed to one that’s built for failure.

A fundamental requirement for all this is an appreciation of the power of context to shape thought and behavior. Behavioral science’s arguably most important contribution still hasn’t found its way to standard social science and everyday policy thinking. While American thought-leaders and policy makers insist on ‘personal responsibility,’ there’s a collective failure to appreciate the extent to which behavior is shaped by contextual factors, which, as in the case of poverty, can be persistent and overpowering. How exactly to alter this biased understanding remains a difficult question. Clearly, some cultures are more attuned to thinking about contextual influence than others [60]. Yet there are plenty of political, social, and economic disincentives to try. In the face of persistent inequality, it is appealing for the more fortunate to believe their status was hard(er) earned and well deserved [61]. Unfortunately, those sentiments go hand in hand with thinking that those who are less fortunate deserve less. It is critically important for us behavioral scientists to more successfully convey the under appreciated power of context, and its effects on the lives of the poor.

Conflict of interest statement
Nothing declared.

Acknowledgements
The author gratefully acknowledges support from the National Science Foundation (Award SES-1426642), and the Sloan Foundation (Grant 2014-6-16).

References and recommended reading
Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest

A recent survey and analysis of the destructive effects of financial instability, especially the persistent volatility in both income and spending, that strain working families’ efforts to meet basic needs.


30. Addessi, with the help of recent empirical studies and analyses, the psychology that emerges in context of scarce resources, and its implications for the lives of the poor.


An impressive demonstration of how a simple and cheap intervention, when designed well, can lead to significantly improved outcomes among low-income participants who, otherwise, might seem not to care.


One in a chain of several important recent papers documenting the long-term impact of early life adversity on brain structure and function. In this case, documenting SES effects on neural outcomes of female infants at five weeks of postnatal age.


One of a series of recent publications by Chetty, colleagues documenting the profound impact of the specific neighborhood where a poor American child is born on her chances at success in life.


A thoughtful economist considers our proclivity to ignore the role of luck in the assignment of credit and blame, and how a more sophisticated appreciation of luck, as opposed to skill, in human affairs, could lead to more effective and more just policies.