

**National Commission on Hunger
Testimony by Eldar Shafir
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I appreciate this opportunity to testify before the National Commission on Hunger.

By way of background, I am an academic, a behavioral scientist. I have focused much of my recent work on the psychology that arises in contexts of scarcity and, more generally, on the application of behavioral insight to matters of policy. I am the inaugural director of Princeton University's Center for Behavioral Policy, and co-chair of the World Economic Forum Global Academic Council on Behavior. I was a member of President Barack Obama's Advisory Council on Financial Capability, and have devoted the last decade to research into the psychology that arises when people juggle insufficient resources. In this testimony I would like to focus on that topic: The mental load, and behavioral consequences, that emerge with trying to cope with a life of scarcity, when a person does not have enough of a vital resource, like food or money.

It is by now well established that poverty correlates with a plethora of counterproductive behaviors. Poor and hungry households are often unbanked or underbanked, charged high fees for alternative financial arrangements and, with no access to savings, experience difficulties in smoothing consumption over time. This leads to a drop in consumption toward the end of the month, which exacerbates stress and creates additional difficulties, ranging from utilities being shut off, to increased disciplinary problems for their kids in school.

The poor and food-insecure often fail to take advantage of entitlement programs for which they are eligible; they engage in less preventive healthcare, and more often fail to adhere to prescribed drug regimens. They are generally less attentive parents, and they are tardier and less likely to keep appointments. Such behaviors are of great concern not only because they make life more difficult, but because they tend to deepen poverty and make life worse.

As a matter of fact, things get worse largely because of people's constant attempts to deal with the problems of scarcity. Living in conditions of scarcity, of hunger or poverty, requires the management of sporadic incomes and complicated schedules, a juggling of funds and careful timing of access and expenses to secure basic needs, and a constant dealing with difficult tradeoffs in challenging circumstances. The human cognitive system -- our bandwidth, our ability to attend, process, remember, etc. -- has severely limited capacity. When substantial cognitive resources are devoted to one area, fewer resources remain, impeding cognitive function elsewhere. Pressing food and budget concerns capture the mind, demand substantial mental resources, and leave less of one's mind available for other aspects of everyday life.

Several studies have documented these effects. In one series of studies, as they contemplated everyday financial demands, Americans at a shopping mall were tested on two measures of cognitive capacity: executive control, the mind's ability to guide thought and action in accordance with internal goals, and fluid intelligence, the capacity to analyze and solve problems in real time. When participants were not distracted, no differences were observed in the performance of the richer and poorer shoppers. The rich and the poor were equally capable. But when they were preoccupied by financial challenges, the poorer participants did significantly worse on the cognitive tests than the rich. When concerns of scarcity were brought to mind, the poor all of a sudden had significantly reduced fluid intelligence scores, and exhibited diminished executive control. And the effect was substantial. It was comparable to losing 13 IQ points, enough to take you from a "superior" IQ score to "average," or from average to "borderline deficient." It was bigger than the impact on cognitive function of spending a whole night with no sleep. Think of how you feel after a night with no sleep: low-income participants, when encumbered by the need to juggle insufficient resources, feel worse than that.¹

Of course, comparing the poor to the rich is not simple. The two groups differ on many other dimensions -- education, health, living conditions -- for one to be able to deduce causation rather than correlation. Therefore, other studies have evaluated the same person's performance a few months apart, once when they were poor and again when they were rich. Indian sugar cane farmers receive the bulk of their income annually at harvest time, and because they fail to smooth their consumption, they are poor before harvest and richer after. This allows one to compare the cognitive capacity of the same farmer at two different points in time: when he is poor (pre-harvest) versus when he's richer (post-harvest). The farmers performed much worse on fluid intelligence and executive control when they were poor than when they were rich. The same individual behaved less intelligently and more impulsively when he was poor.

Patterns observed among Americans in shopping malls, among college students, and among farmers in India all tell the same story: People who are highly capable in contexts of abundance, became less capable in context of scarcity, when their minds are overwhelmed by managing scarce resources. Note that this significantly diminished capability is characteristic not of poor people, but of people who found themselves in dire need.

With all one's attention directed towards immediate and pressing decisions, little attention remains to be allocated to important decisions that are less immediate. The experience of scarcity automatically orients the mind toward unfulfilled needs; it affords fewer mental resources for things -- even critically important things, like one's children, health, housing -- that are outside the immediate focus on scarcity. A natural outcome of a volatile struggle with the moment is a lack of buffer savings even, or especially, among those who in some ways need it most. When you live juggling insufficient resources, a neglect of loftier, future needs comes with the territory. It's true, things might only get worse if you borrow at high rates, if you fail to save, if you neglect your health, but at least you will have solved your most pressing problem *for now*.

And there is one more thing. It has to do with temptation. Not having *enough* turns many ordinary things -- the kinds of things comfortable people get without thinking twice -- into temptation goods. The *same good*, which is a mere frivolity, hardly a temptation, when you have plenty, becomes a temptation that must be resisted when you don't have much. When there's abundance, temptation not only is less costly, but there is less of it. And self-control is itself a limited resource. When you use a lot of it, you have less left. Several studies have found that engaging in tasks that require self-control lowered participants' ability to perform tasks that required persistence and concentration. When you apply repeated self-control in one place, you have less left for other uses. And that is the irony. When you have too little, you need to focus with greater care and many more things must be resisted. But focusing and self-control are finite resources, and when you run low you perform worse.

What all this suggests is that living with persistent scarcity leads to a slew of planning, management, and control challenges, and generate failures and missed choices. The thoughtful and responsible behaviors people need most are precisely those sabotaged when they are strapped for resources. And what that means is that as we strive to improve the conditions of the food-insecure and the poor, we must focus on a variety of simple benefits and programs that are likely to improve the everyday management of scarcity conditions.

When you live under conditions of scarcity, what helps you most are the features that promise to make the juggling a little easier: predictability, job stability, regular pay, affordable health

coverage, unemployment benefits. All are central features of a more manageable, less challenging everyday life, one that affords people the bandwidth required to do things well. The data suggest that government safety nets are not luxuries that nations can choose to dole out when coffers are full; rather, they can be powerful tools in the effort to improve conditions, precisely when things are difficult. As such, thoughtful attempts to ameliorate the ease and predictability of everyday life are especially crucial when large numbers of people are food insecure and faring poorly.

In many ways, the attention given to managing the lives of the poor and the food-insecure is often of the wrong kind. Aggressive marketing campaigns have targeted this population with products ranging from high-interest credit cards, payday loans, predatory mortgages, rent-to-own, and various other fringe-banking schemes, to food deserts and the availability of less healthy and more expensive foods.

At the same time, less has been done to aggressively promote more supportive options, such as various not-for-profit services, reliable banking, short-term low-interest loans, childcare, transportation, and so forth. When various benefits are finally offered, they are often offered in a manner that imposes a high demand on the bandwidth of the poor, rather than attempt to reduce the load and make things easier. When benefits are offered to those who are juggling too much, they should be made available in ways that are easy and smooth, not as further challenges to an already complicated management problem. Predictability and ease are of immense importance. For people juggling too much and with limited bandwidth, small glitches, like unreliable benefits, or payments that come at slightly variable times (say, a 3rd Monday, which might fall before or after the 15th of the month), are all complications in a challenging daily life. When we think about ameliorating the lives of the food insecure, a critical need is to make access to healthy foods not only affordable, but also more reliable, smooth (?), and respectable.

It is worth pointing out that those among us who are better-off often find ourselves, either by default or through minimal effort, in the midst of a system composed of attractive default options, “no-fee” options, automatic options, reminders, expert advisors, and so forth, features designed to shelter us from error and help us reap the greatest benefits. It is, paradoxically, those less-well off who find themselves without such aids and instead confronted by obstacles—institutional, social, and psychological—that render the conduct of their daily lives all the more overwhelming and fallible.

The International Covenant on Economic, Social and Cultural Rights, a multilateral treaty adopted by the United Nations almost a half century ago, following on Roosevelt’s Freedom speeches, and part of the International Bill of Human Rights, recognizes “the right of everyone

to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions."

Living under scarcity, poor and with food-insecurity, is all-consuming, error-prone, and unforgiving. It makes us less capable, and even less intelligent. It presents persistent challenges and, contrary to the right to improving conditions, it increases the chances that we fail. As the leaders of an advanced and civilized nation, it is incumbent upon you to do what you can to provide the context, the access, and the minimal resources to make those challenges more manageable, thus providing those struggling under difficult conditions the chance to thrive.

¹ See, e.g.: Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. 2013. Poverty impedes cognitive function. *Science*, vol. 341, no. 6149, pp. 976-980; Mullainathan, S., & Shafir, E. 2013. *Scarcity: Why Having Too Little Means So Much*. NY: Henry Holt Times Books.