The Price of Poverty

Psychology and the Cycle of Need

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Poverty is powerful. For those within its grasp, it alters every aspect of existence. People who happen to be born poor consume less than those born rich. They have worse access to education and healthcare and frequent exposure to corruption, extortion, and violence. An average person born in a place like Sub-Saharan Africa lives in a very different world than an average American.

But does poverty affect the way people feel, think, and act? This seems like an obvious question, and indeed, it is neither new nor mine: over the centuries, scientists, policymakers, and writers have asked whether poverty has psychological and behavioral consequences. Yet for many years, the question has been difficult to study because asking it has often been confused with blaming the poor for their poverty or attributing to them deficiencies that caused it. One prominent example is a 1965 report [1] by Daniel Patrick Moynihan, who was assistant secretary of labor at the time, entitled “The Negro Family: The Case for National Action.” In the paper, Moynihan argued that many poor black families in the United States were caught in a “tangle of pathology” -- a combination of absent parents, low educational attainment, unemployment, and delinquency -- and urged Washington to step in. Although Moynihan’s aim was to describe external circumstances that made it difficult to escape poverty, not inherent deficiencies within poor families themselves, he was widely perceived as blaming the victims. As a result, his analysis was broadly panned.

In recent years, scholars and the public have become more willing to examine the nuances of the link between poverty and mental well-being. One reason for that is a change in the focus of such studies. Whereas Moynihan wrote about race, today’s scholars write about poverty, which is less socially charged. Meanwhile, the emergence of behavioral economics has made it possible to systematically examine the ways in which decision-making can -- and does -- depart from the standard neoclassical model of economic behavior. Such research has made academics and policymakers more open to the idea that behavior can be affected by outside factors, poverty among them. Finally,
large survey efforts such as the World Values Survey and the Gallup World Poll and sophisticated randomized field experiments spearheaded by institutions such as MIT’s Jameel Poverty Action Lab have made it possible to approach social questions with more data and unprecedented rigor. As a result, asking about the psychological and behavioral consequences of poverty is no longer confused with blaming the victims, but is instead seen as the first step in solving the problem.

What, then, have we learned with this newfound freedom to explore the connection? First, that poverty does, indeed, have psychological consequences. In particular, it leads to stress and negative emotions such as sadness and anger. Those are, of course, bad outcomes in their own right. But they are also linked to economic problems. Stress is intimately connected to depression, which has severe costs for labor productivity. The best current estimates suggest that depression -- through absenteeism and lost productivity -- costs Europe and the United States up to one percent of GDP every year. Second, it turns out that stress and negative emotions also decrease people’s willingness to make long-term investments, for instance in health and education. Together, these dynamics may create a psychological poverty trap that can keep people mired in destitution.

MONEY DOES BUY HAPPINESS

When I tell people that I study the effect of poverty on psychological well-being, I am often confronted with the notion of the “happy poor.” Some people, even today, could describe “Africans” as “always smiling” and therefore happy, with a superficiality usually reserved for discussing dolphins. In this view, the poor live simple but fulfilled lives in a village where a small plot of land gives enough food to survive, a horde of children provide old-age pension, and a rich social network protects against economic shocks. As the seventeenth-century poet John Dryden put it, the poor are seen as the “guiltless men, that danced away their time/ Fresh as their groves and happy as their climes.”

Until recently, the best available scientific evidence suggested that such views might be correct. In 1974, the renowned economist Richard Easterlin published a paper titled “Does Economic Growth Improve the Human Lot?” in which he summarized survey data on the relationship between income and happiness from 19 countries. The data, he wrote, show that there is, indeed, a positive relationship between income and happiness within countries, but not across them; in other words, rich people in a given society appeared happier than poor people in the same society, but richer countries did not appear happier, on average, than poorer countries. This early finding provided fodder to the romantic view that money does not buy happiness.

However, the small datasets available at the time led early researchers to the wrong conclusion. In a series of recent studies, the economists Daniel Sacks, Betsey Stevenson, and Justin Wolfers revisited the relationship between income and psychology. They analyzed responses from more than 139,000 people in 131 countries, and their findings are crystal clear: there is a positive relationship between income and emotional well-being both within and across societies. In other words, the romantic notion of the happy poor is simply not borne out by the data. Rich countries are happier than poor countries, and rich people in a given country are happier than poor people in the same country.

Of course, these studies don’t have anything to say about causation -- that is, whether poverty makes people unhappy or whether unhappiness makes them unproductive and, consequently, poor. (Plus there may be a third factor, such as religious beliefs, that affects both income and psychological well-being.) The only way to establish causality is to
find either a natural experiment, in which one of the variables changes for random reasons, or a true experiment, in which researchers manipulate one of the variables experimentally.

A good natural experiment to test whether changes in wealth lead to changes in psychological well-being is the lottery. Are lottery winners, who are by definition randomly chosen, happier after they get their cash than non-winners? There is no shortage of folklore claiming that they are not: stories of winners losing their friends to greed, their spouses to alcohol and gambling, and their money to spending sprees and bad planning. They end up lonely and bankrupt.

There are certainly a number of high-profile individual cases and early research to support this story. A 1978 study showed that lottery winners were no happier than non-winners; in fact, non-winners found more pleasure in everyday things than winners. However, the study included only 22 lottery winners and 22 non-winners, with response rates of only 52 percent and 41 percent, respectively, which makes the results impossible to interpret.

More recent research paints an entirely different picture: Jonathan Gardner and Andrew Oswald, economists at the University of Warwick, studied the effect of winning the lottery on a group of more than 33,000 British lottery players. Those who won more than 1,000 pounds (roughly $1,700) did significantly better on the General Health Questionnaire, a measure of psychological well-being.

One problem with this study is that psychological well-being is self-reported, which can lead to bias. For instance, people might be motivated to tell researchers what they think the interviewers want to hear. In this way, lottery winners might feel a duty to report that they are happy; after all, who are they to shrug off a large windfall? Recently, a Swedish team of researchers got around this problem in an ingenious study that capitalized on the Swedish bureaucracy’s obsession with data collection: in Sweden, the government knows not only who won the lottery (and how much) but also who consumed which mental health drugs. The economists David Cesarini, Robert Östling, Björn Wallace, and Erik Lindqvist used this information to show that lottery winners consumed fewer mental health drugs, especially anxiety medications, following their wins. More evidence that lotteries do not spell doom comes from another study of lottery winners in Florida, which showed that the bankruptcy rates of winners are no different from those of non-winners.

Of course, lottery players are hardly representative of all of the world’s poor. But governments and charities around the world are busy conducting another natural experiment through unconditional cash transfers -- an increasingly popular method of delivering assistance to the poor in which cash is sent directly to households without any strings attached. The logic behind these transfers, set out in a recent Foreign Affairs article by Christopher Blattman and Paul Niehaus, is that households know best what they need to buy, and giving them cash (rather than livestock or food) allows them to buy it. A typical cash-transfer program distributes funds to all households in a village that meet specified eligibility criteria -- such as a grass roof, a common proxy for poverty. Because very few refuse the money, recipients are a representative sample of this segment of the population.

To understand the effects of such transfers on psychological well-being, Jeremy Shapiro, now a researcher at Princeton, and I conducted a field experiment that observed two groups of poor households in Kenya in 2012-3. One group, which included 500 households, received transfers averaging $720 each from the charity GiveDirectly, roughly equal to five months’ worth of their income. The other group, containing 1,000 households, received
nothing. When asked a year later, members of the first group reported a significant upswing in happiness and life satisfaction as well as a reduction in stress and depression relative to members of the second group. To deal with biases related to self-reported data, we also measured participants’ levels of cortisol, the stress hormone, before and after the transfers. We found that certain types of transfers -- especially larger amounts and transfers to women -- reduced cortisol levels.

CHOOSING WISELY

The fact that poverty can cause stress is bad enough in its own right. But compounding the problem, stress can also be harmful economically. For one, because it is closely linked to depression, it can lead to poor work performance. Also, on a more subtle level, poverty can hinder decision-making in two key ways.

First, as the economist Sendhil Mullainathan and the psychologist Eldar Shafir explain in their recent book [8], living in poverty engenders a mindset of scarcity: it pushes people to focus on salient, pressing issues at the expense of others that may be just as important but not equally urgent. For instance, Indian farmers who are worried about a drought and a failing harvest might not prioritize vaccinating their children, which might be just as pivotal for their economic well-being in the long run.

Compounding this problem, destitution comes with more responsibilities than affluent people may realize. As the development economist Esther Duflo has pointed out, in rural Kenya water does not come out of the ground already sanitized, unlike the water that comes out of taps in the West. Farmers in Kenya have to go out of their way to make the water drinkable -- and may easily forget to do so in the presence of more acute concerns. Critical tasks are neglected, not because the poor consider them unimportant, but because they simply don’t have the bandwidth to attend to every one. According to Shafir and Mullainathan, this effect is so strong that it impairs cognitive performance in general. Together with the economist Anandi Mani and the psychologist Jiaying Zhao, they found that Indian sugarcane farmers experienced a dip in IQ [9] just around the time when they were the poorest -- namely just before the harvest.

The second way in which poverty may have an impact on economic outcomes is through its influence on stress and negative affect (an umbrella term used by psychologists to describe negative emotions such as sadness and anger). For instance, the Harvard psychologist Jennifer Lerner showed in a series of landmark studies [10] that such negative emotions can cause people to prefer short-term rewards over long-term ones. In a typical experiment, participants were invited into a testing room, where they were shown a video clip that induced sadness. They were then asked whether they preferred to receive a smaller amount of money in the near future or a larger amount later in time. Those who had watched a sadness-inducing video were less willing to delay gratification than others who had watched a neutral video. Conversely, feelings of gratitude, induced by asking participants to recount their positive past experiences, made people more willing to tolerate delays.

A similar rise in impatience appeared when a team of researchers (including me) experimentally raised levels of the stress hormone cortisol in participants by administering its precursor [11] hydrocortisone. Other researchers have found that people are not only more impatient but also more risk-averse when they experience stress or after hydrocortisone administration. The same goes for exposure to stressful events in the real world. As studies by researchers from the University of California at San Diego [12] and South Korea’s Sogang University [13]
recently showed, wartime trauma leads to risk-averse behavior.

BREAKING THE VICIOUS CYCLE

The psychological feedback loop that keeps the poor trapped in poverty thus has three links: poverty causes stress and negative emotions, which lead to shortsighted and risk-averse decision-making, which can, in turn, exacerbate poverty. The findings are still preliminary, and other factors -- such as adverse climates, corruption, and weak rule of law -- certainly play a role in perpetuating the condition. But it is not too early to draw a few lessons from the new research for policymakers trying to break the vicious cycle.

The first is that variables such as stress and happiness are important metrics of success for development programs. New indicators, both self-reported and biometric, offer hope of tracking the welfare of poor people more directly than the established metrics (such as income and consumption) and should be used in concert with them. Thus, if a program does not affect economic outcomes but offers psychological benefits (such as an intervention to combat domestic violence), it may well be worth considering. Conversely, a program that delivers economic advantages but hampers psychological well-being may have reduced value as a policy tool. For instance, although microloans can help a family start a business, the pressure to repay them generates stress -- a factor that donors should consider when assessing their value.

Second, policymakers should ask whether improvements in psychological well-being can raise economic welfare, and by how much. Only a handful of trials have examined the efficacy of mental health interventions in developing countries, and the information they provide about the effects of improving mental health on economic outcomes is incomplete. Conducting further research on this topic is all the more important given the strong link between poverty and mental health.

Collecting such evidence would allow better comparison of potential donor initiatives. For instance, we might find that giving cash to the poor is more effective in alleviating their stress and depression than trying to target stress and depression directly. Or we might find that the opposite is true. Either conclusion would allow donors and policymakers to better focus their efforts. Once that happens, the same amount of development aid will benefit more people, and we will take another small step toward making poverty less powerful.