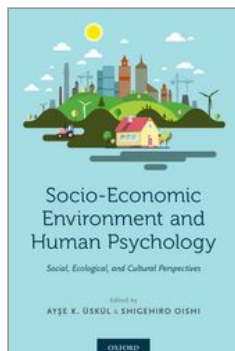


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## Socio-Economic Environment and Human Psychology: Social, Ecological, and Cultural Perspectives

Ayse K. Üskül and Shigehiro Oishi

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## Decision-Making Up Against the Wall

A Framework for Understanding the Behavioral Dimension of Low Socio-Economic Status

Jennifer Sheehy-Skeffington

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### Abstract and Keywords

This chapter provides an overview of research on the behavioral dimension of low socioeconomic status and a set of theoretical and empirical principles for better understanding it. In particular, the chapter focuses on those behaviors that are claimed to exacerbate a situation of poverty or deprivation, such as poor academic performance, myopic financial decisions, early child-bearing, consumption of unhealthy foods, and engaging in unhealthy lifestyle habits. Though such behavioral patterns have been used to make claims as to the defective values or motives of the poor, the chapter argues that studying them rigorously, aided by the experimental method, leads to a more nuanced and accurate picture, in which psychology is systematically shaped by socioeconomic position. After reviewing evidence from education, public health, and behavioral economics concerning

the behavioral dimension of low socioeconomic status, the chapter suggests an organizing set of mechanisms that might structure a comprehensive explanatory account of it.

*Keywords:* low socioeconomic status, poverty, deprivation, behavior, empirical principles

What is it like to be poor in a world of affluence? Why don't those on low incomes do more to enhance their well-being? The variety of responses from across the social sciences reflects diversity in premises and research methods. While many economists have based policy recommendations on rational actor assumptions about human behavior, public health specialists conduct large surveys of self-reported behaviors and attitudes, and an increasing number of sociologists present qualitative inquiries into the lived experience of poverty. Only recently has an experimental approach been used to generate insight into the psychological dimension of life as a low earner.

This chapter reviews findings concerning the set of seemingly suboptimal decisions and behaviors reliably associated with being low in socio-economic status, arising from the disciplines of public health, education, and behavioral economics. It then focuses on emerging efforts to apply experimental methods to this question, yielding insights that enable us to move toward a more nuanced understanding of the behavioral dimension of poverty. Introducing the importance of theories from social and evolutionary psychology, I end by sketching out an organizing framework focused on the psychological impact of two key aspects of the experience of life on a low income: resource scarcity and low subjective social status. By studying these components of low socio-economic status experimentally, **(p.106)** we might observe psychological processes usually associated with poverty even among those who have never experienced it. One way of making sense of this is to consider how cues regarding the power and resource distribution of our surrounding environment interact with a set of evolved social cognitive mechanisms shared by all of us. Though the resulting psychological responses may have negative downstream consequences, they may have been adaptive in our ancestral environment and may be rational in the context of the immediately salient demands of life on a low income.

### Behavior as a Factor in Rising Inequalities

Rising levels of income and wealth inequality within industrialized nations have attracted attention in both academic and political circles (e.g., Autor, Katz, & Kearney, 2008; Daly, 2012; Organisation for Economic Co-operation and Development [OECD], 2011). While much of the growth in income variance within the United States is driven by rapidly increasing wages at the top of the distribution (Autor et al., 2008), longitudinal data also points to persistent economic difficulty for those at the bottom (Shapiro, Greenstein, & Primus, 2001). Evidence for the persistence of poverty and dwindling levels of social mobility in the United States and the United Kingdom has been understood through appeal to economic, institutional, and ideological factors. Explanations for growing wage inequality between individuals center on the changing nature of the international economy, the domestic labor market, and political control over economic actors (Lemieux, 2008; OECD, 2011). Meanwhile, accounts of why such inequalities so commonly fall along ethnic and racial lines range from the imprint of past colonization to the ongoing, active discrimination against “outsiders” of many forms and the recruitment of stereotypes and narratives to justify it (Sidanius & Pratto, 1999).

Yet, while academic attention focuses on structural antecedents to economic polarization in industrialized countries, popular debate and elite discourse can be characterized by substantial focus on the individual level. This is particularly pronounced when it comes to explanations for persistent poverty. Public opinion data show how Americans’ attitudes toward the welfare state are shaped by their beliefs about the behavior and motivations of the poor (see Bullock, Williams, & Limbert, 2003; Gilens, 1999), in line with a general cultural tendency to see poverty as a problem of the individual, rather than a product of social and economic arrangements (Lott, 2002). Throughout the second half of the 20th century, a consistently **(p.107)** high number of Americans did not think that people on welfare tried hard to look for jobs, with common stereotypes referring to the poor as lacking the effort, motivation, “thrift,” and even moral values needed to get ahead (Bullock, 1999; Bullock et al., 2003; Kluegel, 1987). This bias toward behavioral explanations is mirrored in media images of the poor (Bullock, Wyche, & Williams, 2001) and in public attitudes toward poverty and

welfare beyond the United States (Clery, Lee, & Kunz, 2013). In the United Kingdom, the welfare reform agenda has been informed by assumptions regarding the need for those receiving government benefits to make more effort to advance their situation (Department for Work and Pensions, 2013), and the rising interest in “behavioral insights” among policymakers has been characterized as an attempt to shift responsibility for poverty reduction from the state to the individual (Sheehy-Skeffington, 2015). There, too, negative stereotypes regarding behaviors of those on the lowest incomes are mirrored in media images, which, through their focus on case studies (cf. reality shows such as *Benefits Street*) or fictitious communities (cf. soap operas such as *Emmerdale*), orient the audience to see poverty as an individual rather than a structural phenomenon (MacDonald, Shildrick, & Furlong, 2014; McKendrick et al., 2008). This focus on decisions and behaviors of the poor is not confined to the political, economic, or media elite: There is evidence that negative views of welfare recipients are consensual (Fiske, Cuddy, Glick, & Xu, 2002), and that many people who themselves are on low or no income characterize others in such situations as “dishonest” or “idle” (Bullock, 1999; see also Seccombe, James, & Walters, 1998).

The ideological tenor of pejorative stereotypes about those on low incomes makes it difficult to examine empirical or theoretical claims regarding the behavioral dimension of low socio-economic status (SES). An early attempt to grapple with it is found in social dominance theory, a multilevel model developed by political psychologists Jim Sidanius and Felicia Pratto to understand the ubiquity and persistence of intergroup inequality (Sidanius, 1993; Sidanius & Pratto, 1999). While most of their theory focuses on the role of structural and ideological forces of political and socio-economic exclusion, Sidanius and Pratto also make the provocative claim that high-power groups (such as middle-class Whites in the United States) are more successful than low-power groups at acting in ways that enhance their dominant status, thus acquiring ever more forms of positive social value, such as money, political control, and quality of life (Sidanius & Pratto, 1999, ch. 9). Examples might include putting a strong focus on educational achievement in child-rearing, saving money to acquire desirable **(p.108)** commodities, and building social networks that help one’s

friends and family to develop successful careers. On the other hand, members of low power groups have a greater tendency to behave in “group-debilitating” ways, which further solidify their low status in society (Sidanius & Pratto, 1999, p. 246). The products of such “behavioral asymmetry” are seen in a number of domains, including health, family life, educational investment, and engagement in criminal activity (Sidanius & Pratto, 1999; see also Sidanius, Cotterill, Sheehy-Skeffington, Kteily, & Carvacho, 2016). For example, it has been observed cross-nationally that those low in SES are more likely than their wealthier compatriots to engage in health-damaging behaviors (Pampel, Krueger, & Denney, 2010), while being less likely to make financial decisions that could improve their economic situation (Bertrand, Mullainathan, & Shafir, 2006), or to engage in behaviors necessary to perform well at school (Chowdry, Crawford, & Goodman, 2011).

Though harmful behaviors may characterize a very small fraction of the behavioral response to poverty, an emerging picture implies they are consistently observable through different research lenses and have the potential for negative consequences that may exacerbate socio-economic polarization in rich countries. The sensitivity of the topic, along with disciplinary canalization of inquiry, has prevented the development of an account of this behavioral dimension of poverty that gives due weight to both psychological processes at the individual level and social and economic processes at the structural level. While attempts have been made in sociology to theorize the psychological influence of socio-economic position (see, e.g., Becker, 1963/1973; Bourdieu, 1972; Merton, 1957; Wilson, 1987), there remains scope for robust empirical efforts to tackle this question and for the development of a unifying explanatory account to underlie them. In what follows, I review evidence for the influence of low SES on decision-making from the fields of education, public health, and behavioral economics, before proposing some principles that might guide a mechanistic understanding of these insights. In keeping with the spirit of the socioecological approach to psychology (Oishi & Graham, 2010), I argue that successful exploration of patterns of individual decision-making needs to keep the wider societal context firmly at the center of its analysis.

### Education and Public Health: Cognitive Development and Psychological Factors

The most established field looking at the intersection between psychology and poverty is the study of the impact of deprivation and adversity on the **(p.109)** development of cognitive function in childhood. The damaging effects of extreme poverty and childhood trauma on the development of the infant brain (Nelson & Sheridan, 2011) offer a sobering lesson in the importance of early childhood intervention in the most extreme cases. More surprising, however, are the cognitive differences found among children who have not experienced trauma or deprivation but are merely low in socio-economic status. Lower income is associated with smaller brain surface area among children (Noble et al., 2015), and low SES in childhood is negatively associated with intellectual development (Guo & Mullan-Harris, 2000) and later academic achievement (Evans & Rosenbaum, 2008), even controlling for the impact of differing educational quality. Alongside evidence for the importance of childhood experience in shaping academic success is evidence that socio-economic changes in adulthood also impact the cognitive skills needed for it (Singh-Manoux, Richards, & Marmot, 2005; Turrell et al., 2002). Doing well at school and college is not just a matter of cognition but of motivation and commitment—resources for which poverty again puts one at a disadvantage. The lower one's family income, the more likely one is to have poor school attendance, to spend less time on homework, to exhibit behavioral problems in class, and to drop out of college (Ready, 2010; Silver, Measelle, Armstrong, & Essex, 2005; Walpole, 2003).

Moving on from the domain of education, public health scholars have robustly found that individual behaviors play a significant role in sustaining health inequalities across the socio-economic gradient (Adler & Rehkopf, 2008; Pampel et al., 2010). The lower one's socio-economic status, the more likely one is to engage in health-damaging behaviors such as tobacco use, physical inactivity, and poor nutrition (Pampel et al., 2010) even taking into account income-related differences in the availability of avenues for exercise and the purchase of healthy food. Of the set of psychosocial mechanisms that might mediate this link, one that stands out is what is known as “personal control”: individuals' beliefs regarding the extent to which they are able to control or influence their life outcomes (Seeman, 2008). This construct has been

conceptualized in a number of ways (see Skinner, 1996, for a review), from one's perception that events are driven by forces internal versus external to oneself (what is known as "locus of control," Rotter, 1966), to one's sense of "personal mastery" (Pearlin & Schooler, 1978) or generalized self-efficacy (Bandura, 1977, 1997, 2001). Higher SES is reliably associated with greater internal locus of control (e.g., Pincus & Callahan, 1995), higher personal mastery (e.g. Lachman & Weaver, 1998), and increased self-efficacy (Gecas, 1989), **(p. 110)** while lower SES is found to be accompanied by the experience of powerlessness and anomie (e.g., Mirowsky & Ross, 1986; see also Seeman, 2008). The more one believes one has power over one's conduct and future direction, the more one is likely to engage in self-regulation, resisting the temptation to smoke, drink, and eat salty/sugary/fatty foods in the face of stress (see Pepper & Nettle, 2014; Sheehy-Skeffington & Sidanius, 2015). In line with this, a stronger sense that one is able to act in ways that matter for one's life outcomes is connected to better health-related behaviors and decisions (from eating healthily to refraining from smoking: Bandura, 2001; Legander & Kraft, 2003; McAuley, Lox, & Duncan, 1993; Seeman & Seeman, 1983), and with them, positive health-related and other life outcomes (Bobak, Pikhart, Rose, Hertzman, & Marmot, 2000).

The study of the role of behavior in sustaining inequalities in education and health outcomes implies that life on a very low income means a life less likely to feature the intellectual resources, academic decisions, sense of efficacy, and health behaviors needed to enhance one's future well-being. What large-scale epidemiological and survey methods cannot arbitrate between, however, is whether the experience of poverty has a causal impact on cognitive resources and personal control or whether it is diminished cognitive and control abilities that lead one's family to be poor in the first place. In the domains of behavioral economics and social psychology, efforts are being made to use the experimental method to test directly the causal influence of the situational and societal experiences that might shape the psychology of low socio-economic status.

**The Behavioral Economics of Poverty: An Accumulation of Cognitive Pitfalls**

Understanding suboptimal economic decisions is the central activity of the growing field of behavioral economics, in its focus on how economic agents display human limitations and complications (Mullainathan & Thaler, 2000). Such complications are presented under the banner of cognitive short-cuts and pitfalls, which result in economic decisions that are not perfectly maximizing of utility, thus going against the expectations of rational actor models (Kahneman, Slovic, & Tversky, 1982; Kahneman & Tversky, 2000). One example of such pitfalls is a bias toward the present, such that the same good is valued more strongly if received immediately than if received at some stage in the future, even if its objective value in the future is increased (a phenomenon known as “future discounting” or **(p.111)** “temporal discounting”; see Kirby & Marakovic, 1996). Even when controlling for sex, age, education, and depressive symptoms, the more an individual biases his or her preference for immediate rewards over future rewards, the more likely he or she is to engage in health-damaging behaviors such as overeating, smoking, and lack of exercise (Chabris, Laibson, Morris, Schuldt, & Taubinsky, 2008; Mitchell, 1999; see also Dixon, Marley, & Jacobs, 2003, for an influence on gambling, and Kirby, Petry, & Bickel, 1999, on drug usage). Other well-documented, quasi-universal cognitive heuristics and biases include valuing something more when it is given up than when it is gained (loss aversion: Tversky & Kahneman, 1991), an inclination to prefer default options (status quo bias: Kahneman, Knetsch, & Thaler, 1991), and a tendency to respond to decisional conflict, in which one is faced with many desirable options, by refraining from making any decision at all (Botti & Iyengar, 2006; though see Scheibehenner, Greifeneder, & Todd, 2010).

While such cognitive proclivities are linked to economically suboptimal decisions in everyone, they will have the most serious consequences for those on the lowest incomes. In contexts of poverty or near-poverty, loss aversion might mean a decision not to change towns to gain employment for fear of loss of social ties, temporal discounting may drive the taking out of an expensive loan one is unlikely to be able to repay, and decisional conflict might prevent one from investing in a retirement plan that involves a choice between many fund options (Bertrand et al., 2006; Iyengar, Jiang, & Huberman, 2004). Thus one lesson in applying behavioral economics insights to the case of poverty is that decision-making habits



that affect all of us are more noticeable and more consequential when made by people who have less decisional slack in the first place (Bertrand, Mullainathan, & Shafir, 2004, 2006).

The “irony of poverty,” as outlined by Mullainathan (2008), is that just as constrained resources increase the costs associated with making bad decisions, so resource constraint actually increases the likelihood of making such bad decisions in the first place. That is, many characteristics of living in poverty, such as the need to focus on basic provisions for the present, or the lack of excess money for future planning, increase the chances that cognitive short-cuts will be taken, and short-term considerations will be privileged over longer term ones (Sheehy-Skeffington & Haushofer, 2014). In line with this expectation, there is evidence that the incidence and severity of decision-making driven by cognitive heuristics and biases varies with education and socio-economic status (Lunn & Lyons, 2010). For example, loss aversion is found to be more extreme among the less **(p.112)** educated (Booij, van Praag, & van de Kuilen, 2009), while temporal discounting is consistently observed to be more steep among those with low income and/or educational attainment (Green, Fry, & Myerson, 1994; Harrison, Morten, & Williams, 2002). In examining the potentially greater susceptibility of the poor to economically-consequential decision-making biases, Lunn and Lyons (2010) highlight how a difference in extremity of bias will in turn interact with the informational and social environment along socio-economic lines. Whereas the wealthy may have plenty of time, technological capacity, and social networks that they can use to obtain extra information that might counter a cognitive bias, the poor are often forced to make decisions in a rushed and information-poor setting, in which misleading heuristics generally thrive (Lunn & Lyons, 2010).

The most exciting development in this area is the recent move beyond correlations between income and economic decision-making to experimental evidence. Studies in which middle-income participants gain temporary exposure to the experience of life on a low income have provided causal evidence for the possibility that it is the situation of resource scarcity that is driving decision-making patterns of the poor, as opposed to differences in enduring cognitive traits or ability (Mullainathan & Shafir, 2013). Shah, Shafir, and Mullainathan (2012) had college undergraduates and a general US sample

play a game in which a random subset of players had very little time in each round, and all players had the opportunity to borrow time from future rounds, at varying rates of interest. Compared to those with a big time budget, those in the “time poor” condition borrowed more and at higher rates, and such excessive borrowing led to worse performance than if they had engaged in little or no borrowing. The authors put this decision-making pattern down to a tendency to shift attention toward a limiting resource in the moment (in this case, the limited time one has in any particular round) and thus to neglect the overall goal of the game (Shah et al., 2012). A subsequent set of studies showed how the cognitive constraints imposed by poverty can lead to the impression that the poor are less intelligent than the rich. Mani, Mullainathan, Shafir, and Zhao (2013) asked shoppers in a New Jersey mall to contemplate financial situations that were either easy or hard, such as coming up with money for an essential car repair that costs \$150 or \$1,500, respectively. While participants were contemplating these scenarios, they completed tests of cognitive performance and of fluid intelligence. Results showed that when the “easy” financial task was given beforehand, posing little cognitive strain on any participants, income was not related to cognitive performance. When asked to contemplate a financially difficult scenario, **(p.113)** however, low-income participants exhibited diminished performance on the cognitive and intelligence tests, seemingly because their cognition was “overloaded” by having to contemplate taxing financial challenges while doing them. Again supporting the idea of financial concerns leading to cognitive load, a field study with Indian sugar cane farmers indicated that such performance deficiencies occur within the same people at time periods when they were poor, compared to times when they were rich (Mani et al., 2013). An experimental link between resource scarcity and economic decision-making biases was also found in a study conducted in China by Liu, Feng, Suo, Lee, and Li (2012). Here, mere exposure to photos with poverty-related (versus affluence-related) cues led to an increase in temporal discounting—that privileging of present over future rewards that is the signature of suboptimal financial decisions.

The aforementioned behavioral economic study of poverty has made excellent use of previously documented phenomena, mostly drawn from cognitive psychology, in analyzing many

factors at play when poor people make decisions—factors that are often overlooked by policymakers and development economists charged with designing interventions that are reliant on behavioral compliance (Banerjee & Duflo, 2011). Rather than seeing those living in poverty as either fundamentally perfect or fundamentally faulty in their decision-making, we get a picture of “regular” people placed in situations that constrain their ability to make decisions in their best long-term interest and that punish them harshly for not doing so (Sheehy-Skeffington & Haushofer, 2014). Bringing this together with the evidence from education and public health enables us to expand the lens from cognition and economic decisions, to consider a wider set of psychological processes and a range of personally consequential behaviors that occur in the complex sociopolitical context of poverty.

### A Mechanistic Approach to Studying the Behavioral Dimension of Low SES

The first step in integrating insights from applied fields toward a framework for understanding the behavioral dimension of low SES is narrowing in on the key psychological mechanisms underpinning the patterns of decisions and behaviors reviewed previously.

Public health scholars have already highlighted one—the construct of personal control or generalized self-efficacy (Seeman, 2008). As it turns out, personal control is one of the most important predictors of positive life **(p.114)** outcomes in a range of domains (Baltes & Baltes, 1986; Bandura, 2001). Increased personal control has been empirically linked to improvements in occupational functioning (Price, Choi, & Vinokur, 2002) and academic achievement (Bandura, 1993; Multon, Brown, & Lent, 1991), while epidemiological studies link strong control beliefs to better self-rated health and functional status (for a review, see Seeman, 2008), and decreased symptoms of psychological distress (e.g., Talbot, Nouwen, Gingras, Bélanger, & Audet, 1999). Analogous to the domain of health, personal control has its impact on academic outcomes through its positive influence on educational motivation and behaviors (Shell & Husman, 2001; Zimmerman, 2000).

A second key mechanism is hinted at by the behavioral economists and has an established role in understanding socio-economic differences in educational outcomes:

“executive functioning”—the set of high-level cognitive processes that serves to monitor and control thought and action (Zelazo, Carter, Reznick, & Frye, 1997). Executive functions include attentional flexibility and goal focus, precisely the mechanisms needed to overcome decisional conflict (Botvinick, 2007) and arguably impaired by scarcity in the studies by Shah et al. (2012) and Mani et al. (2013). As performance on tests of executive function is also inversely correlated with susceptibility to decision-making biases (de Bruin, Parker, & Fischhoff, 2007), executive functioning likely plays an important role in gaining a mechanistic understanding of how economic decisions are affected by the situation of resource scarcity (see Mullainathan & Shafir, 2013; Sheehy-Skeffington & Haushofer, 2014). Beyond economics, executive functioning has been robustly linked to occupational performance (Katz & Hartman-Maeir, 1997), and the link between poverty and academic achievement has been found to be mediated by selective attention (Mezzacappa, 2004), working memory, and inhibitory control (Lipina, Martelli, Vuelta, & Colombo, 2005; see also Ardila, Roselli, Matute, & Guajardo, 2005; Lupien, King, Meaney, & McEwen, 2001; for a review, see Hackman & Farah, 2009). Indeed, higher level cognitive resources such as reasoning and long-term memory can only be fully recruited once the core executive functions are working well (Friedman et al., 2006). One consequence of this is that when executive functioning is impaired, people’s decisions make them look less intelligent than if their executive functions were working well (Engle, Tuholski, Laughlin, & Conway, 1999).

My third proposed psychological mechanism has appeared as temporal discounting in economics and impulse control in the domains of education and health: that set of behavioral patterns summarized under the **(p.115)** heading “self-regulation.” Understood as the ability to act in line with long-term over short-term goals, self-regulation has emerged as one of the most important predictors of child and adult life outcomes (Vohs & Baumeister, 2011) and is an important mediator of the link between poverty on the one hand and academic achievement and physical health on the other (de Ridder & De Wit, 2006; Evans & Rosenbaum, 2008). The classic studies of Walter Mischel demonstrated how a child’s ability to resist an immediate, tempting reward, in favor of a larger reward arriving at a later time point, predicted their

academic outcomes, subjective well-being, and even earnings, later in life (Mischel & Ayduk, 2004). More recent developments in the study of self-regulation have shown the positive downstream impact of techniques that improve one's ability to implement a desired goal (Gollwitzer & Sheeran, 2006) and the utility of regulatory strategies and related character traits in overcoming obstacles to health and learning (Chen & Miller, 2012; Duckworth, Peterson, Matthews, & Kelly, 2007).

The robust associations between socio-economic status on the one hand and personal control, executive functioning, and self-regulation on the other have the potential to unify a wide set of findings on decision-making and behavior into a psychological understanding of the experience of low SES. Without studies that directly test causal claims, however, such associations shed limited light on the ways psychology might be shaped by socio-economic position. The application of experimental methods to this question has been slow, as there are clear reasons why random assignment of individuals to grow up in and live in contexts that are high or low in SES is unfeasible. Yet the work of Mullainathan, Shafir, and their collaborators implies that some of the psychological impact of living on a low income can be experimentally created even among middle-income participants. Specifically, these researchers argue that it is the experience of resource scarcity that acts as an important component of the psychological situation of poverty, triggering deficits in cognition and a focus on the present, thus leading to damaging economic decisions (Mullainathan & Shafir, 2013; see also Haushofer & Fehr, 2014). Their work shows how the experimental method can be used to induce the temporary experience of resource scarcity, in order to demonstrate its causal impact on executive functioning and, as a result, economic decision-making (Shah et al., 2013).

Poverty means more than having few resources, however; it also means realizing that one has fewer resources than others. It is this perception of low subjective social status that I propose as the second key component of the psychological situation of poverty (see Sheehy-Skeffington & Haushofer, 2014; Sheehy-Skeffington & Sidanius, 2014, 2015). Positing **(p.116)** a central role for subjective status in the experience of low SES allies with decades of research in social and evolutionary psychology that teaches us that the subjective

experience of low relative social standing has a potent influence on well-being (e.g., Blanchard, Sakai, McEwen, Weiss, & Blanchard, 1993; Kaplan & Manuck, 1999; Suls & Wheeler, 2000; Sapolsky, 2004) and behavior (e.g., Loewenstein, Thompson, & Bazerman, 1989; Morgan et al., 2002). This fits with a recurring finding in public health, that the behavioral impact of objective SES operates through the influence of subjective standing—one's self-perceived position in the social hierarchy of one's surrounding organization, community, or country (Adler, Epel, Castellazzo, & Ickovics, 2000; Goodman et al., 2001; Singh-Manoux, Adler, & Marmot, 2003).

Just as the psychological impact of resource scarcity has been studied in the lab, so attempts have been made to shift perceptions of subjective socio-economic status in an experimental manner, in order to examine their causal impact on key psychological resources. In three studies, Sheehy-Skeffington and Sidanius (2015) collected detailed sociodemographic information from participants with a range of backgrounds in the United States, recruited online, in universities, and from the general public. They then randomly assigned participants to receive feedback that they were either very high or very low on the “socio-economic ladder” of American society, before measuring executive functioning with three neuropsychological tasks. Those perceiving they were relatively low in SES performed worse on measures of executive functioning than those thinking they were relatively high in SES. In a fourth study, the low SES group were less likely to spot the best of three complex credit card loan offers, implying that financial decisions reliant on core cognitive processes are also impacted by the experience of low subjective SES (Sheehy-Skeffington & Sidanius, 2015).

One can also apply this experimental approach to the case of personal control, to shed causal light on the link between it and SES, as first uncovered by the public health literature. Sheehy-Skeffington and Sidanius (2014) used experimental methods in order to demonstrate for the first time that both low subjective status and resource scarcity, as induced in the context of SES, lead to lower sense of power and dominance, and with it, a diminished sense that one can control one's life outcomes. The authors observed lower levels of self-reported personal power or control among those who had received negative (versus positive) feedback regarding their standing in

US society, those who played a household budgeting game in which they had very small (versus very large) budgets, and even **(p.117)** those who completed a set of income scales that implicitly made their income appear relatively low (versus relatively large; Sheehy-Skeffington & Sidanius, 2014). This is in line with recent research in the psychology of power and of social class, which argues that the experience of low power and rank is central to understanding behavioral patterns associated with life in working- (versus middle-) class contexts (Dubois, Rucker, & Galinsky, 2015; Kraus, Tan & Tannenbaum, 2013; see also Kraus, Piff, & Keltner, 2009).

Efforts are being made to understand the impact of resource scarcity and low subjective social status on self-regulation too. Behavioral economists have demonstrated how the stress and negative affect associated with resource scarcity, when experimentally recreated in the lab, can increase temporal discounting, the economic manifestation of poor self-regulation (Haushofer & Fehr, 2014; see also Lerner, Li, & Weber, 2013). Risk-taking has also been shown to increase in response to experimentally induced perceptions of low relative SES, a pattern claimed to underlie the high incidence of problem gambling among low-income groups (Callan, Shead, & Olson, 2011; Mishra, Barclay, & Lalumière, 2014; see also Hill & Buss, 2010; Kuziemko, Buell, Reich, & Norton, 2011). Finally, researchers taking a lifespan development perspective have shown how presenting images depicting economic scarcity to people who have grown up in high-risk environments leads to poor self-regulatory behaviors in the domains of eating (Hill, Rodeheffer, DelPriore, & Butterfield, 2013) and spending (Griskevicius, 2012; Griskevicius, Tybur, Delton, & Robertson, 2011).

### From Deficit to Psychological Shift: Evolutionary Perspectives

I have thus far made a case for the use of an experimental approach to investigate the causal impact of socio-economic position on specific psychological mechanisms, in order to explore how the behavioral dimension of low SES is more than a product of trait differences or irreconcilable values. In this last section, I argue that the application of evolutionary theory to understanding the adaptive nature of decision-making in the context of poverty suggests that such behavioral patterns should also be seen as more than merely suboptimal.

Emerging research on the behavioral dimension of low SES from researchers taking an evolutionary perspective offers a glimpse of how decision-making patterns that seem irrational or damaging from a contemporary middle-class vantage point might in fact be adaptive in an ultimate sense.

**(p.118)** The most informative theoretical perspective in this regard is life history theory, which highlights how decision-making patterns of all species are shaped by limits on the energetic resources any one organism has to invest over the lifespan (Stearns, 1992). According to this approach, humans take on board information about the resource availability and stability of the surrounding environment when they are very young and use this to set in place a decision-making strategy that is either “slow”—involving delaying reproduction and saving energy to invest in a long life with a stable partner—or “fast”—involving reproducing early and generally being willing to expend energy on short-term over long-term goals (Ellis, Figueredo, Brumbach, & Schlomer, 2009). Seen from this perspective, if one grows up in a situation of resource scarcity, especially one that includes family disruption or neighborhood violence, it makes adaptive sense to prioritize the present over a highly uncertain future—a future that one may never come to experience (Ellis et al., 2009; see also Nettle, 2010).

The application of life history theory helps us to reframe what looks like impairment in self-regulation as a *regulatory shift in focus*, from the future to the present, which would have been adaptive in our evolutionary past, even if it manifests in behaviors (such as unhealthy eating, teenage pregnancy, and school dropout) that are damaging in contemporary industrialized societies. Seen from this perspective, apparent self-regulatory failures might in fact constitute an adaptive shifting from long-term to short-term goals in response to cues



that the environment is threatening or unpredictable (Daly & Wilson, 2005; Hill & Buss, 2010; Kidd, Palmeri, & Aslin, 2013; see also Mischel, 1961, for an early application of this argument to the case of cross-cultural differences). Indeed, the self-regulatory shift triggered by life in low-income contexts may be linked to what is a rational *reappraisal of personal control*: if one's environment is not reliable, it makes sense to be realistic about what impact one's actions will have and only to hold off on behaviors that might confer an immediate benefit where there is a sound prospect of being able to bring about a future benefit in its place (see Pepper & Nettle, 2014, 2017).

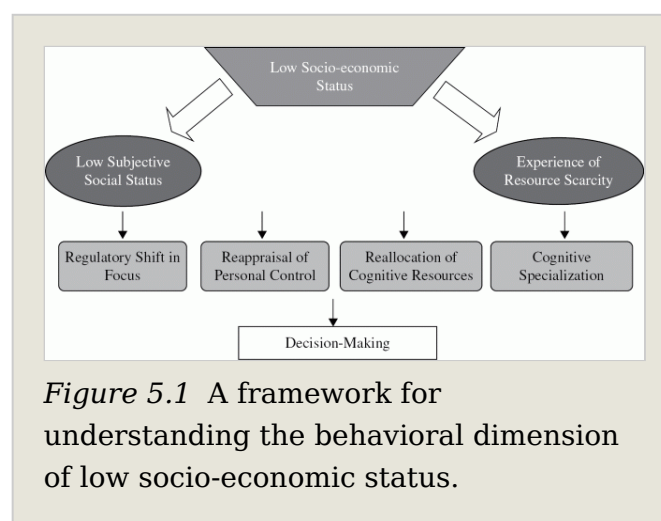
It is likely that a comparable set of processes is occurring in the case of executive functioning: the experience of resource scarcity might trigger not an overall cognitive deficit but a *reallocation of cognitive resources* toward meeting pressing fitness needs (see also Kurzban, Duckworth, Kable, & Myers, 2013). A similar process has been theorized by a small group of researchers working in evolutionary developmental psychology, who predict that growing up in a high-risk environment might lead to selective **(p.119)** impairment in cognitive skills that are of little use in such environments (such as inhibitory control) but enhancement in cognitive skills that are particularly in need in such environments (Frankenhuis & De Weerth, 2013; see also Frankenhuis, Panchanathan, & Nettle, 2016), a form of *cognitive specialization*. Cognitive skills that would be advantageous in high-risk environments include the ability to shift rapidly between tasks (found to be stronger among those exposed to unpredictability at home in youth: Mittal, Griskevicius, Simpson, Sung, & Young, 2015) and to process aggressive facial expressions (found to be better among children who have been maltreated: Rieder & Cicchetti, 1989).

Might the same reorientation, from looking at deficits in psychological resources to looking at selective shifts in psychological processing, occur not only in response to resource scarcity but also to low subjective social status? There is suggestive evidence that the answer is yes. The literature on the psychology of social power, for example, discusses how it is beneficial for those perceiving themselves to be low in the social hierarchy to express diminished personal control and thus to engage in deferential, goal-neglecting behaviors in line with their social position (Keltner,

Gruenfeld, & Anderson, 2003). Another set of social psychological studies has shown how what look like self-regulatory failures elicited by low-status primes—such as gambling and spending limited money on superficial material goods—can in fact be understood as rational efforts to regain status as quickly as possible (Haisley, Mostafa, & Lowenstein, 2008; Rucker & Galinsky, 2008; Sivanathan & Pettit, 2010). Finally, in the case of executive functioning, Sheehy-Skeffington and Price (2016) have suggestive evidence that once a cognitive task is presented in a way that links it to future gains in societal status, the discrepancies in performance previously observed between low- and high-SES groups disappear (Sheehy-Skeffington & Sidanius, 2014). The implication is that cognitive resources were not impaired by the experimental induction of the perception of low SES; rather, such resources were reallocated toward seeking ways to regain status and thus could easily be brought “back online” if the cognitive task is framed as status-relevant.

Through advances such as this, we can see how experimental methods and attention to ultimate explanations have much to offer in understanding the behavioral dimension of low socio-economic status in a more nuanced and mechanistic way than has been done previously. In Figure 5.1, the two key components of low SES and the four sets of psychological processes central to decision-making in poverty are presented in one framework.

**(p.120)**



### Conclusion

The underlying causes of societal inequality are a complex mixture of historical, economic, political, and sociometric factors, aided by the determined behaviors of those at the top who do not wish to see redistribution in income toward the bottom. Against this backdrop, the study of the psychology of poverty aims to develop an understanding of one understudied component of the persistence of inequality: that set of harmful, yet voluntary, decisions and behaviors performed disproportionately by those low in SES. Though psychological in focus, such an approach takes into account our social and evolutionary origins and is alert to how contemporary social structural conditions cause particular behavioral responses to be more available, or more “afforded,” than others (Steele & Sherman, 1999; see Oishi & Graham, 2010). It assumes that such decisions and behaviors are primarily the product not of defective psychological traits, nor even of situationally induced psychological deficits, but of an adaptive psychological shift in response to salient ecological conditions (see Sheehy-Skeffington & Haushofer, 2014). Where studied with the aid of the experimental method, the link between this psychological shift and the conditions of low SES can be more rigorously understood. The momentary triggering of the experience of resource scarcity or low subjective social status does not nearly approach the effects of chronic relative deprivation and powerlessness endured by the contemporary poor, nor does it grapple with issues such **(p.121)** as how poverty is experienced at different points over the life course. Nevertheless, it may help us to understand the building blocks of a psychological situation that might affect any of us and thus is less alien than is commonly assumed.

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