Assumptions about behavior and choice in response to public assistance:
A behavioral decision analysis
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\textit{Manuscript in press, Policy Insights from Behavioral and Brain Sciences, please do not distribute or quote without permission.}

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Abstract (199)

Assumptions about decision-making and consumer preferences guide programs and products intended to help low-income households achieve healthy outcomes and financial stability. Despite their importance to service design and implementation, these assumptions are rarely stated explicitly, or empirically tested. Some key assumptions may reflect ideas carried over from an earlier era of social-service delivery. Or they may reflect research on decision-making by higher-income populations that do not hold or have not been tested in a low-income context. This disconnect between assumptions and evidence potentially results in less effective policy design and implementation—at substantial financial and social cost. This piece examines how insights from psychology can help policymakers analyze the core assumptions about behavior that underlie policy outcomes. Three policy areas serve as case studies, to examine some implicit and explicit assumptions about how low-income individuals make decisions under public and nonprofit assistance: banking, nutrition, and housing. Research on preferences and decision-making evaluates these foundational assumptions. This perspective provides a unique and under-utilized framework to explain some behavioral puzzles, examine and predict the actions of individuals living in poverty, and understand what are often disappointing program outcomes. Recommendations suggest how psychology and behavioral decision-making can impact policy research and design.

Tweet (138/140 characters): Mistaken assumptions about preferences undermine social policy. Behavioral decision research is a tool to fix this. Result: better policy.

3-5 bullet points:

- Assumptions about decision-making and consumer preferences guide programs and products
intended to help low-income households achieve healthy outcomes and financial stability.

- These assumptions are rarely stated explicitly, or empirically tested, but some may be wrong.
- Three case studies—banking, nutrition, and housing—examine some implicit and explicit assumptions about how low-income individuals make decisions under public and nonprofit assistance.
- The sciences of psychology and behavioral decision-making can inform policy research and design.
Historically, the perspective of psychology has been mostly absent from debates on public policy in the United States. This gap is evident among academic researchers, advocates, and decision makers who shape policy design and implementation. In comparison, the perspectives of disciplines such as economics, political science, and sociology have been much more present. In recent years, this has begun to shift, and psychologists have begun to find a voice in the policy world. The term “behavioral economics” appears everywhere in social policy circles, as policymakers and service providers strive to best use the insights provided by decades of psychological research. One high profile example of this was the 2009 appointment of Cass Sunstein, a prominent scholar in law and behavioral economics, to the White House Office of Information and Regulatory Affairs. President Obama’s appointment of Sunstein marked a significant government acknowledgement of how individual-level incentives – instead of top-down regulation – can leverage better behavior among consumers.

Much recent work (academic and otherwise) has discussed the potential utility of the wealth of psychology and behavioral research for the policy world, and particularly in the design of poverty-alleviation interventions (e.g., Congdon, Kling & Mullainathan, 2011; Hall, 2012; Thaler & Sunstein, 2008). Here, we specifically examine how psychology can help policymakers examine issues -regarding the core assumptions about behavior that underlie policy outcomes.

Programs and products intended to help low-income households achieve healthy outcomes and financial stability are, by necessity, based on a series of (often implicit) assumptions about consumer preferences and decision-making. Despite their importance to service design and implementation, these assumptions are rarely stated explicitly, or tested empirically. In some instances, key assumptions may reflect theoretical constructs carried over
from an earlier era of social service delivery, or decision models for higher-income populations that do not hold or have not been tested in a low-income context. Shifts in the demography of U.S. poverty since the 1970s and the increasing stigmatization of the poor may exacerbate disconnects between assumptions about preferences and actual behavior— with important implications for program take-up rates and outcomes. This disconnect between assumptions and evidence likely results in less effective policy design and implementation—at substantial financial and social cost.

Three policy areas serve as case studies to examine some implicit and explicit assumptions about how low-income individuals make decisions in response to public and nonprofit assistance. Empirical research on preferences and decision-making evaluates (supports or contradicts) these foundational assumptions. This perspective provides a unique and under-utilized framework to explain some behavioral puzzles, predict the actions of individuals living in poverty, and understand disappointing program outcomes. For example, why are take-up rates for public assistance programs often strikingly low among eligible households? What approaches can encourage low-income households to save and participate in formal banking? How can incentives and subsidies encourage healthy eating habits in low-income households? Why do low-income, Housing-Choice-Voucher recipients tend to remain in high-poverty neighborhoods, even when “better” options should be accessible?

Our case studies discuss products designed to encourage take-up and use of savings tools by low-income consumers, public benefits and subsidies aimed at encouraging healthy eating habits among low-income families, and the Housing Choice Voucher (HCV) program, which provides rent subsidies for over 2 million low-income households nationwide. A behavioral decision-making framework helps to discuss decisions in the context of poverty, by highlighting
factors that low-income households may consider when judging their options or making choices. An applied behavioral view offers novel tools to help policymakers serve low-income populations. Using this foundation, we consider these three policy areas through a different lens.

**Asset Building/Saving**

The majority of families do not have enough savings to weather a substantial financial crisis (Collins & Gjertson, 2013; Lusardi, Schneider & Tufano, 2011). One study showed that nearly a quarter of Americans would not be able to come up with $2000 in 30 days – and many reported that they would be forced to resort to products such as payday loans or pawn shops to find the cash (Lusardi, Schneider & Tufano, 2011). The issue of savings is of particular importance for individuals at the lowest end of the income spectrum. The very poor may, realistically, be one small financial shock away from catastrophe. Even a modest amount of savings could help these lowest-income families be more resilient in the face of emergencies. Many researchers and policymakers have focused on ways to provide more access to formal banking tools. Various efforts across the country encourage low-income workers to sign up for bank accounts and purchase products such as savings bonds.

One example is the Bank On initiative. Started in San Francisco in 2006, Bank On programs are public/private partnerships among financial institutions, local and state governments and community organizations, which aim to reduce barriers to banking and to bring the under-banked and unbanked into the financial mainstream (Bank On, n.d.). The programs provide low-income, under-banked, and unbanked people with low-cost and free bank accounts, as well as financial education materials to incentivize opening accounts and keeping them open.

These efforts to increase savings rates among low-income individuals assume that individuals do not have access to tools for savings. This is not unrealistic, given that 43% of
households with a yearly income below $30,000 are either unbanked or under-banked (Bank On). Instead, the use of check-cashing services is widespread in low-income communities. Under-use of savings accounts and other savings products puzzles advocates and researchers.

However, recent evidence from behavioral economics suggests that low-income families need reminders and nudges, just like their higher-income counterparts. Commonly, better-off workers automate much of their financial life—reducing the need for individual conscious action. Direct deposit of paychecks into bank accounts is typical for higher income individuals. In addition, many of the more financially stable also automate transferring portions of their earnings into retirement or other savings accounts.

The asset-building area was one of the first that widely considered the potential of impact of psychology and behavioral economics on how programs are designed and implemented. Much research has explored the design of interventions to increase savings actions among consumers, without a focus on only the relatively wealthy. One notable example is the “save more tomorrow” intervention (Benartzi & Thaler, 2004). The authors designed a prescriptive savings plan that allowed employees to commit a portion of their future earnings to a retirement savings account. In this case, the vast majority of participants (78%) elected to participate in the program when it was offered, and the savings rate increased from approximately 3% to 13.6%. More recently, in a novel study of consumers in Bolivia, Peru, and the Philippines, reminders to save (via text message) raised the rate of savings by about 6% (Karlan, McConnell, Mullainathan, & Zinman, 2010).

Given such findings, innovators in this field would benefit from considering how small but opportune tweaks to the decision-making environment can improve financial outcomes for potential low-income savers. Instead of solely focusing on access to savings tools, techniques to
increase their use should aid in the savings process. One study (Manturuk, Dorrance, & Riley, 2012) explored how a popular type of savings program, an individual development account (IDA) could be more effective by using insights from behavioral economics. IDA accounts typically involve a matched-savings program, often encouraging low-income consumer to save toward a specific goal. However, even when matched by another source, these accounts are often not utilized once they are opened. What behavioral principles best explain the risk of early account closure in a New York matched-savings program? Information failure best predicted early account closure. This failure came primarily in two forms: people not knowing how much would be matched by the program, and financial hardship such as unforeseen medical bills or other financial emergency.

Behavioral principles can inform and refine the design of well-tested products and programs. More research of this type will, in the long term, provide evidence for product design that will ensure the greatest levels of take-up and retention in savings programs.

**Nutrition and Food Choice**

For many low-income Americans, access to healthy foods, namely fresh produce, is not always easy. Research over the past decade has documented how neighborhoods devoid of farmers’ markets and supermarkets that sell fresh produce and healthy food, “food deserts,” have impacted the health outcomes of people in poverty. For example (Laraia, Siega-Riz, Kaufman, & Jones, 2004), living more than four miles from a supermarket or grocery store had a negative impact on the consumption of healthy foods among pregnant women. Additionally (Powell, Auld, Chaloupka, O’Malley, & Johnston, 2007), the increased availability of chain supermarkets (which are more likely to offer produce and to sell it at lower cost) had a significant association with adolescent BMI, in comparison to the availability of non-chain grocery and convenience
stores. Moreover, most food deserts are in areas that have lower levels of education and income and high levels of unemployment (Dutko, Ver Ploeg & Farrigan, 2012).

Policymakers have utilized different strategies in attempts to make healthy foods more accessible to lower-income people. Programs such as the Supplemental Nutrition Assistance Program (SNAP) and the Women, Infants and Children food and nutrition plan (WIC) supplement the food budget of low-income households. In addition, recent efforts to increase access to fresh produce and eliminate food deserts aim to increase the amount of healthy food purchased and consumed. Two novel examples are the Twin Cities Mobile Market in Minneapolis, and Mogro in Pueblos, NM. Part food cart, part grocery store, the Mobile Market seeks to bring fresh produce to underserved urban neighborhoods at below market price (Twin Cities Mobile Market, n.d.). Mogro operates in much the same way, but in rural areas, which are often overlooked in the discussion of food deserts (Mogro, n.d.).

Both of these strategies, however, operate on similar assumptions—that availability of healthy food alone, whether by general extra dollars each month or proximity to a store that sells fresh produce, will help to increase the amount consumed by lower-income families. However, research has shown otherwise. Giving WIC recipients an extra $10/week ($40/month) in coupons that were specifically for the purchase of produce increased fruit and vegetable consumption, both during the intervention and after it stopped, as opposed to WIC dollars alone (Herman, Harrison, Afifi, & Jenks, 2008). Not only did the coupons increase the consumption of fruits and vegetables during the study, but even six months after the study had concluded, participants who had received the coupons were still consuming more produce than those who had not received them.

Additionally, distance traveled to a supermarket alone was not a good predictor of fruit
and vegetable consumption (Aggarwal, Cook, & Jiao, 2014). Supermarket choice better predicts fruit and vegetable consumption, with shoppers who chose to go to higher-end supermarkets (such as Whole Foods) consuming more produce. Only one-third of respondents shopped at the supermarket closest to their house, and consumption of produce was higher at higher-cost supermarkets.

In short, increased availability of fresh produce is not enough, on its own, to change eating habits. Instead, if policymakers want to impact produce and healthy food consumption, subtle policy changes and subsidies may be more effective. WIC recipients’ preferences changed over time through the receipt of the produce coupons. Instead of simply increasing the amount of WIC dollars received, the increase in dollars that could be spent only on produce allowed recipients to grow accustomed to the increased fruits and vegetables in their diets—a preference that persisted even after the subsidy was gone.

Supermarket choice may be more about making sure that supermarkets and grocery stores are well stocked with produce, rather than making sure that every neighborhood has a supermarket. There is also something to be said about the findings that lower-income shoppers were traveling farther to shop at lower-cost supermarkets. This is another case where people are acting rationally (going to the lowest-cost supermarket), but with a preference change, could spend less money on transportation and more money on produce.

None of these interventions is a one-size-fits-all method. A narrow subsidy (participants required to spend the coupons on produce only, but could choose the type of produce) significantly impacted the preferences and buying habits of consumers. Future research can tease apart these issues, to gain a better understanding of the decision processes at play in these common decision environments.
Housing and Neighborhood Choice among Low-Income Housing Voucher Recipients

Many low-income families lack access to safe, stable housing, and make difficult tradeoffs between housing and other basic needs. In recent decades, federal housing policy has increasingly favored a choice-based model of housing assistance. In contrast to place-based housing that ties rent subsidies to specific units, these models utilize portable vouchers to allow recipients to rent privately owned units in the neighborhoods of their choosing.

The core goals of housing assistance are to reduce rent burdens and improve housing quality and stability—and on these measures the housing choice voucher (HCV) program has proven to be effective. But policymakers and practitioners often expect that housing choice will also allow low-income families to reach high-quality schools, live closer to jobs, and in neighborhoods safe from crime. Public housing authorities (PHAs) that manage voucher programs are increasingly pressed to demonstrate progress towards poverty de-concentration goals but have little incentive, funding, or capacity to implement “mobility” programs that support moves to opportunity-rich neighborhoods. In effect, housing policy expects that vouchers on their own will shift low-income households’ residential location patterns and choices.

This illustrates assumptions about low-income households’ behavior and decision making that have not been fully articulated or examined. Evidence is dated, but apparently many voucher holders do not move at all, and use their subsidy to rent the same units they lived in before they had a voucher (Finkel & Buron, 2001; HUD, 2004). The average voucher holder lives in a lower-poverty neighborhood compared to public housing, but does not typically live in an opportunity-rich neighborhood (Devine, 2003; Ellen & Horn, 2012; Galvez, 2011; Pendall, 2000).

Constraints limit the subsidies’ effectiveness in offering true neighborhood choice for
voucher holders. Central among them are landlord discrimination against voucher holders and the scarcity of affordable housing in low-poverty neighborhoods. But also problematic are some basic assumptions about household behavior that are implicit to program design and “mobility” expectations.

The notion that housing choice will improve neighborhood locations relies on the assumption that low-income families are dissatisfied with their neighborhoods and will prioritize moving to a lower poverty area once they have a voucher. Explanations for why this does not seem to happen for voucher holders tend to focus on the role of social networks or place-based attachments in location decisions, or on information gaps about higher-quality neighborhoods. In short, the argument is that low-income families may be reluctant to leave support networks in high-poverty areas and are unfamiliar with low-poverty alternatives.

But these assumptions about housing and neighborhood preferences may be flawed. Proximity to social networks does not always play a leading role in location decisions (Briggs et al., 2010; Galvez, 2011). Among renters generally, neighborhood satisfaction appears to be less important to short-term move plans than it is for homeowners (McHugh et al., 1990). And while participants in public housing relocation programs were dissatisfied with extremely high-poverty neighborhoods (Cunningham, Sylvester, & Turner, 1999; Orr et al., 2003; Popkin & Cunningham, 2000; Smith et al., 2002), other research suggests that voucher holders in other contexts may be more satisfied with their neighborhoods than policymakers presume (Galvez, 2011; HUD, 2004).

One consideration often absent from analyses of housing and neighborhood outcomes is that voucher holders remain extremely poor and impacted by their experience living in poverty, even as their housing income increases from a voucher. Chronic poverty, long-term exposure to
low-opportunity neighborhoods, and financial and personal instability likely play critical roles in physical or mental health, expectations for neighborhood quality, or perspectives on the voucher as a mobility tool. Low-income households—including voucher holders—often move involuntarily, and a history of poverty and instability leaves some ill prepared to prioritize neighborhood or school quality (DeLuca & Rosenblatt, 2010; DeLuca et al., 2011; Deluca 2012; Rosenblatt & DeLuca, 2012). In some circumstances, voucher holders remain in high-poverty areas or low-performing schools as a way to protect children from potentially destabilizing moves. Or, voucher holders face so many competing pressures and crises that housing searches deliberately targeting high-opportunity neighborhoods were unrealistic. Our own exploratory qualitative research conducted in Seattle regarding voucher holders’ housing location decisions supports both of these assessments. Finally, there is evidence that voucher holders with access to cars are more successful reaching higher-opportunity neighborhoods (Pendall et al., 2014). Cars are an essential resource for higher-income people, yet their importance to low-income families tends to be overlooked.

In the end, assumptions about voucher holders’ move preferences and experiences may overstate both the likelihood that searches will target lower-poverty neighborhoods and the role that information gaps about alternative options may play in housing decisions. If so, vouchers on their own will not trigger moves to high-opportunity neighborhoods without additional supports. Also, passive mobility services focusing on information gaps—which are the most common types of programs—will be ineffective. A handful of programs (the Thompson mobility program in Baltimore, most notably) incorporate a comprehensive array of information and services to help voucher holders reach high-opportunity neighborhoods. But in this policy area, insights from behavioral economics have been largely absent and may be particularly useful to help
policymakers and practitioners understand what types of interventions may be most effective to help low-income families make and pursue neighborhood mobility goals.

Conclusions

Assumptions about preferences and behaviors are everywhere in public policy and benefit programs. While necessary, these assumptions are often implicit, not clearly and openly discussed or questioned. These three case studies provide some concrete examples of how flawed assumptions about behavior undermine policy goals, and how a more nuanced understanding of behavior and choice can improve policy and program design. In each example, more research should take the perspective of the targets being served, in order to address and consciously consider these behavioral assumptions. In efforts targeting low-income consumers this is of particular importance, as policymakers are unlikely to be well versed in the true social environments facing low-income families. This makes it all the more likely that improper expectations develop. Further complicating an already messy policy process is the tendency for decisionmakers and advocates to devote insufficient time and resources to explicitly explore and articulate their expectations.

When considering how to improve assumptions about behavior, behavioral decision research can shed light in two ways. First, even where assumptions about preferences are essentially correct, expectations for actual behavior may not be—and low-income consumers may need “nudges” or other situational interventions that will encourage them to follow through with their stated goals or preferences. Most individuals want to save money and eat healthy food, so policymakers can help steer them toward behaviors that will help them follow through by supporting their motivation and decreasing situational barriers in their environment. This insight about how small, targeted interactions can influence behavior may apply to a wide range of
policy areas and is not specific to the poor.

Second, sometimes policymakers have assumptions about behavior and preferences that are simply incorrect or incomplete. For example, in the case of housing policy, this may lead to interventions that do not resonate with the individuals being served, and disappointing outcomes for some measures of program success. Behavioral decision research can help distinguish between these two scenarios, and provide unique tools to address each.

Next Steps

As noted at the start, these three case studies are meant to serve as a starting point for a discussion of the role that assumptions play in social policy. We hope these examples provide an opportunity to identify and reconsider commonly held notions behind other poverty alleviation programs. A more comprehensive assessment of the potential disconnects between assumptions and evidence in different policy areas and interventions needs to be done. In addition, programs aimed at encouraging economic mobility or healthy behaviors should be more clearly tied to evidence from psychology on judgment and decision-making. Several research tools can make this possible.

For policy design, policymakers, practitioners and advocates should more deliberately and actively explore the client side perspectives that are implicit in any program, product, or intervention meant to influence or leverage decision making. One tool to achieve this is qualitative research that explores how low-income individuals and families experience different decision contexts and make tradeoffs, in order to focus and frame interventions to have the intended results. Simply stated, designing social policy and outreach must consider whether the clients view the decision environment in the same way the policymakers do. This step may seem obvious but is often neglected due to time and resource constraints. Ultimately, a better
understanding of the life experiences of the target population can lead to more realistic expectations of how different types of outreach and communication will truly resonate with the population of interest.

A second tool to explore client perspectives is to engage in a process called “behavioral mapping.” This extensive process consists of a systematic method of exploring a decision environment to understand the potential problems leading to suboptimal behaviors. First, the problem is clearly defined (and linked to some specific, measurable behavior). Next, the behavioral issues are diagnosed, allowing for a careful consideration of the various behavioral roadblocks, given the problems and decision environment. This allows for the next stage, where an intervention is designed to combat one or more of the behavioral roadblocks. Finally, the intervention is tested – contributing to a greater collective knowledge of the circumstances under which various tools work in complex social environments.

Third, experimentation in program evaluations can be an effective tool for assessing when and how interventions work, but only after qualitative research or behavioral mapping establish a solid foundation to inform behavioral assumptions. Increasingly, concepts from psychology and behavioral economics improve existing programs and implementation. However, even the most simple and obvious “nudges” require scientific methodology and testing to better understand and generalize their effectiveness.

Further, researchers can more readily recognize possibilities for opportunistic experiments or rapid-cycle evaluation. In the case of opportunistic experiments, randomized control trials (RCTs) are conducted to evaluate the efficacy of already planned interventions (as opposed to interventions implemented for the research study) (Resch, Berk & Akers, 2014). Opportunistic experiments are often conducted when resource constraints force governments to
fairly (randomly) distribute some benefit or program that cannot be offered widely to those eligible. By more readily utilizing these types of experiments, policymakers and researchers can improve upon planned or already existing policies and programs, and determine whether a behavioral approach improves the outcomes of the invention in comparison to a more traditional model.

More recently, researchers have begun to consider “rapid-cycle evaluation,” a method that examines how well an intervention is working – as the experiment is being conducted. This type of research investigates how effectively different behavioral factors are operating. A recent study used rapid-cycle evaluation to explore the effectiveness of a change to the delivery of SNAP benefits in New York City, within the context of a randomized control trial. Systematic testing of different types of communication allowed the researchers to study what types of program implementation and communication were most effective.

Finally, psychologists should more actively pursue field research. Psychological theories have been disproportionately developed based on findings from the lab. As the discipline continues to mature, more effort should develop and test theories in the field, to create more externally valid and directly policy relevant insights.

Overall, this commentary has aimed to provide examples of situations where faulty assumptions may set unrealistic expectations for policy outcomes, and how psychology and behavioral decision research can provide useful insights for more effective design and implementation of public policy. Despite the potential insights that a behavioral perspective can bring, the field has remained largely silent on social policy-related issues. No comprehensive reviews of the evidence on decisions in context of poverty have been conducted. Insights from behavioral economics and psychology have just begun to percolate into the social policy arena,
and more progress is needed to effectively integrate the field’s insights about behavior and choice into social policy.
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