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Behavioral Decision Research, Social Class and Implications for Public Policy

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Chapter contributed to Russell Sage Foundation edited volume: "Facing Social Class: How Societal Rank Influences Interaction" Eds: Susan T. Fiske & Hazel Rose Markus In 2009, the American Community Survey projected that roughly 14% of Americans are living beneath the poverty line (United States Census Bureau, 2010). However, despite policies and programs to address achievement gaps and behavior differences between individuals from different ethnic and socioeconomic backgrounds, striking discrepancies persist between the experiences, performance and outcomes of working class versus middle class individuals. In this chapter, I explore the applications and implications that behavioral decision research has for policy design and implementation in the domain of services and benefits for low-income populations.

Introduction

Traditionally, two perspectives have been taken within the social sciences to explain poverty and the behavior of low-income individuals. One viewpoint describes individuals living in poverty as being people who, like the rest of society, engage in actions that align with their goals, in a rational manner. The second describes these individuals' behavior as emanating from a "culture of poverty" which renders their behavioral patterns as highly misguided. Neither of these perspectives has strong empirical support as a plausible explanation of the behaviors of individuals in this population. Bertrand, Mullainathan and Shafir (2006) argue that neither of these perspectives is an effective viewpoint for understanding and predicting behavior.

The first viewpoint – one that presupposes rationality - assumes that all choice results from consistent, well- informed preferences that exhibit internal coherence (Sen, 1987), with no exception made for individuals from specific social groups. This viewpoint assumes that those in poverty, too, pursue their goals efficiently, with little need for outside intervention. From a

policy perspective, this perspective is dangerous as it suggests that broad anti-poverty efforts and related social policies, services and programs are ill-advised and wasteful.

The second viewpoint takes note of a controversial opinion discussed in the literatures of anthropology and sociology. The "culture of poverty" notion, coined by Oscar Lewis, is a social theory which posits that low-income individuals possess a unique system of values and a pathological inability to make well-informed choices (Lewis, 1959; Lewis, 1966). According to Lewis, this pathology separates low-income groups from mainstream society, causing lowincome individuals to remain in poverty. He describes a subculture that perpetuates a cycle which causes children to be socialized into patterns of behavior, social norms and social understanding which further impede their capability to break away from the underclass. Therefore, the culture of poverty view does not accept the explanation that low-income individuals, as a group, have had their lives transformed by poverty. Instead, this theory argues that the pathology of low-income individuals is the cause of poverty. Despite the fact that there has been no compelling empirical support for Lewis' model, its ideas persist among lay conceptions of low-income individuals (Goode & Eames, 1996). In the context of public policy, this perspective implies that anti-poverty programs may only be effective in the short term. If the culture of poverty notion were true, these efforts would only serve to alleviate the symptoms of a deeper problem.

In contrast to these two existing frameworks, a behavioral perspective provides a different lens with which to examine the behavior of individuals living in the context of poverty.

The use of a behavioral framework entails adapting the assumption that low-income individuals (like those from other demographics) suffer from biases and are susceptible to influences

stemming from the specific situational factors they face. The adoption of this perspective has the potential to allow researchers, policy makers and practitioners to more effectively explain some behavioral puzzles of the low-income group. For example, why do low-income individuals often fail to open bank accounts? Why is take-up of public assistance programs often strikingly low? Professionals addressing these types of questions can benefit from tools derived from the insights of psychology, a field which has largely been conspicuously silent regarding these issues.

The primary goal of my research agenda, through a nuanced analysis of factors considered when engaging in judgment and choice is to shed light on some aspects of the behavior of low-income individuals. The overarching theme throughout this work is an absence of vast differences in the psychology of low-income earners compared to middle and upper class individuals. This perspective, drawn from the field of psychology, suggests that understanding the behavior of any human is quite complex. People often have mediocre judgment, have preferences that change often, and behave impulsively and myopically (especially when lacking the cognitive resources necessary for self-control).

A closer examination of the behavior of low-income decision makers (utilizing the tools of social psychology and behavioral decision research) suggests that the differences seen are simply due to which features of the environment matter most to low- versus high-income individuals and how each group weighs these features when making decisions. To specifically confirm this, I provide experimental evidence through examples based on existing knowledge within the psychological literature. Furthermore, I discuss instances where low-income decision makers behave in a manner that would be considered more "rational", as compared to their

high-income counterparts. There exists an insufficient appreciation for these cases, as they undermine popular opinion that low-income individuals engage in behavior that is short-sighted, misguided and in need of outside intervention.

There are two secondary outcomes I hope to facilitate in this exploration of behavior in the context of poverty. The first is to more effectively consider the viewpoint of low-income individuals. Social psychology suggests that the social environment and norms from individuals drive behavior, and it is worthwhile to consider specifically how this occurs for those in the context of poverty. To do this, it is useful to use the existing theoretical frameworks as an anchor, but to move beyond existing generalizations that have lumped low-income actors in the same group as the middle class majority. The second goal is to connect these research findings to a real-world context and real policy issues. Application of this research outside of controlled lab settings will provide policymakers and low-income advocates with an additional set of tools to consider when engaging with this population.

Recent work exploring decision making in the context of poverty

The research presented herein provides illustrative examples of how the fields of behavioral decision research and psychology contribute to a more nuanced understanding of the decision making of low-income versus high-income individuals. As social psychology has long demonstrated, the power of the situation, when determining behavior, is often critically underestimated (Jones & Harris, 1967). Behavioral decision research demonstrates how fine distinctions in context (in the form of differences such as framing or the existence of channel factors) can produce tangible and predictable shifts in behavior.

Steele and Sherman's (1999) notion of "afforded psychology" provides an excellent example of the use of this type of perspective on low-income behavior. They describe the psychology of low-income mothers, as it relates specifically to social mobility and economic security. The theory of afforded psychology is based upon the assumption that severely disadvantaged mothers exist in contexts that are extremely unreliable and unpredictable – both socially and financially. They argue that this is the case because these women suffer from a combination of economic disadvantage, restricted social and financial opportunities and general social isolation. Without the ingredients that produce a much more secure life in the relatively wealthy (child care, health care, stable employment and housing), they face a series of complex dilemmas on a constant basis. Steele and Sherman argue that this leads to a nuanced psychology with a series of components.

First of all, and somewhat ironically, they claim that these women cling strongly to a sense of independence and self-reliance. Although potentially seen as highly dependent from the perspective of outsiders, Steele and Sherman make the argument that these women must be highly self-reliant, as they have often lacked concrete and consistent support. In addition, the constant instability and uncertainty makes these women extremely untrusting of potential opportunities for upward mobility. Because of this lack of trust, these women are unable to effectively implement this desire for self-reliance and independence. Taken together, this makes this group much more driven by their immediate needs (rather than longer term goals for themselves and their families). It is crucial to note that this theory is not based on the assumption that these women have an inability to achieve their goals, instead, their

environment is one that facilitates the myopias and poor judgment that all people are often subject to, regardless of social class or other factors.

There are numerous opportunities for experimental psychologists to contribute to both theoretical and practical debates about the behavior of individuals living in the context of poverty (Bertrand, Mullainathan, & Shafir, 2006). The voices of the fields of both social psychology and judgment and decision making have been considerably faint in the ongoing theoretical and practical debates in these areas. I provide examples of my own work and similar work from other researchers who demonstrate the utility of a behavioral perspective in understanding and predicting judgment and choice. This research spans the specific areas of decisions at tax time, the structure of mental accounting and decisions to save, and choices relevant to long term physical and financial health.

<u>Self Affirmation and Identity as Behavioral Interventions</u>

In this section, I draw on two distinct but related theories: stereotype threat and self affirmation. The theory of stereotype threat illustrates how an individual experiences anxiety or concern in a scenario where they have the potential to confirm a negative stereotype about a social group to which they belong. In contrast, self affirmation theory describes how individuals reduce the impact of a possible psychological threat by focusing on a separate area where they feel competent. Both of these theories, described below, are useful tools for exploring social class effects on behavior. Low-income individuals face countless opportunities to confirm negative stereotypes about their group on a daily basis. The psychological threat associated with the social identity tied to poverty can be especially prevalent when members of this group

participate in programs or services geared toward this group. For example, a low-income worker who has been asked to participate in a financial planning seminar may have a fear of showing incompetence in this area (in the presence of a higher status outgroup member). This might cause the individual to make mistakes or completely disengage altogether, if possible.

Several studies have shown that stereotype threat can have an impact on the attitudes, behavior and performance of stigmatized individuals. The research on stereotype threat shows that when an individual in a stigmatized group (due to factors such as race, gender, social class) is forced to perform in the stereotype relevant domain, they may inadvertently conform to and demonstrate that stereotype by performing at a lower level (Steele & Aronson, 1995). Specifically, a member of a marginalized group may worry about being judged or treated in terms of a stereotype, and engage in a behavior to confirm it. This generates a psychological burden or distraction from the fear of being seen through the lens of a specific stereotype.

In fact, a recent meta-analysis shows that stereotype threat appears to impact the performance of both women and blacks on the Scholastic Aptitude Test (Walton & Spencer, 2009). The concept of stereotype threat has been demonstrated for low-income individuals (Croizet & Claire, 1998). In this study, undergraduate students completed a task which involved a series of word problems. The participants in this experiment were classified as being high or low SES (based upon parental occupation and amount of financial aid). The verbal task was described as being one that would "assess intellectual ability" for solving the problems (in the experimental condition) or "test several hypotheses about the role attention plays" in the function of verbal and lexical performance (the control condition). The intent was to arouse feelings of stereotype threat in the experimental condition. In fact, the higher SES students

performed higher than their low SES counterparts – but only in the experimental condition, where the task was framed as an intelligence test. Very little follow up work has been done specific to low-income individuals in the area of stereotype threat.

Related to this, self-affirmation theory is based on the general premise that individuals are motivated to protect their perceived sense of self-worth. On a daily basis, individuals find themselves in situations that have the potential to threaten feelings of self-worth. As first discussed by Steele (1988), self-affirmation theory is based on the premise that people harbor a motivation to protect and maintain their perceived self-integrity (see also Aronson, Cohen, & Nail, 1999; Sherman & Cohen, 2006). When this integrity is threatened, individuals must find a way to restore this self-worth. These threats may occur in reference to the individual or to a group identity (for example, pertinent to race or gender).

In studies on affirmation, it is most commonly induced through a short written exercise. Participants who are to be affirmed are asked to describe, in a short essay, a value that they have related as personally important. Examples of this include religious affiliation, relationships with friends and family, or a sense of humor. Participants are then asked to describe several specific personal experiences where this value had been important, and how it made them feel positive about themselves. In the comparison condition, participants write about a value from the same list, but are told to write about a value that they had not rated as personally important. In one study (run with Americans citizens) conducted after the 2001 attacks on the United States, self- affirmation eliminated partisan divergence (between self-described U.S. patriots and non-patriots) in the interpretation of a report analyzing the terrorist attacks (Cohen et al., 2007). When participants were affirmed before reading the report, the correlation

between patriot status and response to the report was no longer observed. In other words, a self-affirmation manipulation virtually eliminated any correlation between identity and openness to the report. The authors argue that individual attempts to protect the integrity of one's self-concept may threaten the integrity of interpersonal relationships. A self-affirmation appears to be effective at decreasing bias and increasing open-mindedness in a negotiation.

There are other examples within the literature that show the use of self-affirmation as a behavioral intervention. In a review of studies that used this method (McQueen & Klein, 2006), it was determined that the majority of manipulations "affirm" participants by instructing them to focus on a highly valued personal characteristic or ideal. While specific exemplars are typically generated by participants (usually in the form of a short essay), there are cases in which the experimenter prompts participants to consider a specific domain. However, most of the dependent variables measured in these studies are cognitive. There are few examples of experiments that examine the influence of self-affirmation on more consequential behaviors, and the overwhelming majority of studies which use affirmation as a manipulation have been completed using undergraduate student participants (all studies except for two in the review paper by McQueen & Klein, 2006; one of these used Israeli soldiers, the other used elementary school students). Few studies have tested the potential effectiveness of an outside of the laboratory self-affirmation manipulation, one that has implications for real behavior.

However, recent work has shown that simple affirmation interventions have been effective in reducing the race achievement gap between high school students of different ethnicities (Cohen, Garcia, Apfel, & Master, 2006). In an experiment with real outcomes at stake, a brief in-class writing assignment improved the grades of African American students, reducing

the racial achievement gap by 40%. Students spent fifteen minutes writing about a specific value that was either important to them (affirmation condition) or *might* be important to someone else (neutral condition). The decrease in the achievement gap was not a short-lived effect—the measured differences were over the course of an entire semester. Results like these suggest that the use of simple, cost-effective psychological interventions could go a long way towards alleviating identity- and stereotype-related stress and producing tangible and real-world benefits. The Cohen et al. piece is groundbreaking because it explores the beneficial effect of an affirmation manipulation on a tangible outcome in a natural setting, one that is subject to countless sources of interference over an extended period. In the context of social class, affirmation might be particularly useful as a means of decreasing stereotype type threat for low-income individuals. When it comes to real-world service provision, this stereotype threat might make this population less receptive to programs and services that might make them more aware of the negative stereotypes and stigma associated with their group.

In my own work, I have used a self-affirmation intervention among a group of low-income individuals (Hall, Zhao & Shafir, in preparation). In our first study, after random assignment to either a self-affirmation or neutral condition, participants' interest in a financial benefits program is measured. Individuals who have been affirmed show a greater likelihood to receive information about the Earned Income Tax Credit (EITC) program. The EITC is the largest and most-claimed tax credit for low-income families. It is calculated as a supplement to "earned income," money received from working for pay. It was originally approved in 1975 as a work incentive (REF), and households below a certain income level will receive the EITC as a refund.

In this study, volunteers in a soup kitchen were randomly assigned to engage in one of two verbal tasks. In the affirmation task, participants described a specific personal episode during which they had experienced some type of personal success. Individuals in the control condition described what they ate on a daily basis, in detail. These interventions were unique, as they are distinct from the usual written affirmation prompts. We felt that an oral manipulation would be better for a population that might experience anxiety over writing.

After this task the participants are compensated, and led to believe the task is complete. After being compensated and leaving the room, they are subsequently greeted by a third individual (ostensibly unrelated to the study) and asked to stop and discuss the EITC and local free tax preparation opportunities. While participants in each group are just as likely to stop and talk when approached, individuals in the affirmation condition are roughly twice as likely (79%) to receive information about the EITC, relative to a neutral control condition (36%).

We have replicated this using a set of simple cognitive tasks, which show that low-income individuals who have been affirmed also are significantly less likely to show cognitive depletion, as measured through two tasks. The participants completed one of two verbal manipulations, the same as described above. After this, they completed two additional tasks. Raven's Progressive Matrices are multiple choice non-verbal measures of reasoning and are often considered measures of general intelligence (Raven, 1936). In this task, the participant must choose the missing symbol or element that completes a pattern. The second test we used was based upon simple studies on cognitive control, the ability to allow behavior to adapt from moment to moment based on shifting goals in a task. Participants completed both a set of

Raven's matrices and a simple cognitive control task after completing the affirmation or neutral task. Those in the affirmation condition performed better on each task.

The theory of self-affirmation is based upon the notion that individuals seek the protection of their perceived integrity. There is no reason to suspect that this would not also be the case for low-income decision makers. In fact, low-income individuals might be more likely to engage in these processes, assuming they are exposed to more threats in their everyday lives. In the same way that a black or female student may worry about confirming a stereotype about their group, a low-income individual will face the same type of threat. Therefore, when engaging in a situation which involves discussion of finances, for example, a low-income individual may be fearful of appearing to be unintelligent and incapable of achieving financial stability and independence. From the standpoint of service provision these results also suggest that lay intuitions' reasons for why low-income individuals do not often take up beneficial programs (lack of understanding the programs, lack of valuing the programs) may not necessary apply. A decision not to engage with an individual or organization offering a service or program may truly stem from an immediate unwillingness to deal with a potential psychological threat.

In addition, I have conducted a small study which utilizes a different type of priming, specifically focused upon a specific social identity. Prior work has demonstrated that it is possible to render specific aspects of an individual identity salient during a given moment, and this may have an impact on judgment and choice (Turner, 1985; 1987). This can come from salience in a cultural or social identity (such as race or ethnicity) or from a more specialized role (such as being a parent or teacher). This is possible because individuals possess a multifaceted, malleable self concept (Turner, 1985; Markus & Kunda, 1986). For example, students primed

with their scholarly (versus social) identity are more likely to choose scholarly magazines – such as The Economist or The Wall Street Journal (LeBoeuf, Shafir & Bayuk, 2010).

A recent pilot study I conducted explores identity salience among low-income consumers (Hall, unpublished data). Individual adults who reported living with dependent children were engaged in either a priming of their parental identity or a neutral condition. They were subsequently asked to perform a task in which they allocated a hypothetical \$1000 tax refund to various categories (such as saving, paying off debt, buying gifts). Participants in the parental prime reported a greater interest in saving a portion of their refund (11% versus 2%). When stepping away from this finding, one can imagine how, for the resource and time depleted lower class, a chronic focus on the benefits of saving for a child's future is relatively difficult. However, a timely short-term prime with one's children could increase behavior toward that end. For the middle and upper class, a greater amount of resources makes this less of an issue. While they might also benefit from this prime, they also have the luxury of concentrating more resources and attention. Lower-income families must struggle with such a higher amount of immediate, short-term concerns that it is harder to chronically focus on long term goals such as saving for the education of a child when making shorter term financial choices.

Overall, these studies suggest provocative insights for understanding effective marketing and program delivery to encourage take-up of savings products among low-income consumers. For example, decisions to take up beneficial programs or services may not stem from a lack of interest or understanding on the part of an individual. In contrast, low take-up may be the result of a fear of confirming a stereotype about the group. Perhaps this could be especially prevalent if a low-income individual is interacting with someone they perceive to be from a wealthier

outgroup. These factors might cause an individual to disengage where they might otherwise express interest in a program or service.

In addition, these studies provide useful extensions to the existing research on social identity and self affirmation. The work provides evidence supporting the notion of stereotype threat, self-affirmation and identity salience outside of the confines of race and gender, where they have been extensively studied.

Future research ought to further examine the utility of these techniques in simple, low-cost behavioral interventions to encourage positive behaviors such as saving and take-up of financial and social benefits. When a policy maker, service provider or advocate for the poor has a better understanding of how the context of poverty has an impact on judgment and behavior, it will be possible to better work with this population. As more evidence demonstrates low-income individuals enjoy the same types of "irrationality" as middle and upper class individuals, it is easier to see that the previous notion of the culture of poverty is insufficient to truly describe and predict behavior. In the next section, I explore this point further through an examination of a well-established finding regarding preference for saving on simple purchases by low- versus high-income consumers.

Mental Accounting and Savings Preferences

In the decision making literature, another prominent area of exploration has been the study of mental accounting. Researchers study how individuals perceive, categorize and evaluate their financial choices and outcomes (for a review, see Thaler, 1999). Most research on mental accounting falls into one of three categories: how outcomes are perceived and

experienced, how activities are assigned to specific "accounts," and the frequency with which accounts are re-evaluated. The purpose of studying mental accounting is to broaden the general understanding of the psychology of choice. For the most part, when making financial decisions, individuals do not incorporate all relevant factors (such as current wealth, future wealth, the probability of outcomes, etc.). Instead, people often use simplified rules, which the study of mental accounting helps to describe.

While the mental accounting literature has contributed to the understanding of general consumer behavior, no work to date has examined these phenomena with respect to low-income consumers. In terms of simple, everyday decisions regarding buying and saving, low-and high-income decision makers make many of the same choices. Deciding whether or not to spend more time to save a certain amount of money is a common choice for both groups, but these choices might be more consequential for lower-income individuals. In addition, low-income individuals might be more used to focusing on smaller amounts, amounts that may carry less meaning for those with greater incomes. Saving a modest amount on a pair of shoes might seem appealing to both groups, but the lack of a financial buffer experienced by low-income individuals might make them less sensitive to the proportion saved. If low-income consumers instead focused on the absolute amount saved, this would suggest that, in this context, low-income consumers are potentially more rational than their higher income counterparts. A finding which would go directly against a culture of poverty suggested inability to make the beneficial financial choice.

To explore this, I conducted a series of studies that attempted to replicate a well established finding in the area of mental accounting. Kahneman and Tversky (1981) explore a decision to save with the following classic example:

Frame 1: Imagine that you are about to purchase a jacket for \$125 and a calculator for \$15. The calculator salesman informs you that the calculator you wish to buy is on sale for \$10 at the other branch of the store, located a 20 min. drive away. Would you make the trip to the other store?

Frame 2: Imagine that you are about to purchase a jacket for \$15 and a calculator for \$125. The calculator salesman informs you that the calculator you wish to buy is on sale for \$120 at the other branch of the store, located a 20 min. drive away. Would you make the trip to the other store?

In both of these questions, the individual is faced with the prospect of saving \$5 on a purchase. However, participants are far more likely to make a trip to save \$5 when it represents a larger proportion of the total price. The majority of participants (68%) are willing to travel to save in the first frame, compared to the second (only 29%). Many researchers have replicated this finding (Mowen & Mowen, 1986; Ranyard & Abdel-Nabi, 1993; Moon, Keasey, & Duxbury, 1999).

In two sets of studies comparing low to high income adults (Hall & Shafir, working paper), I show that low-income individuals do not replicate the traditional pattern of mental

accounting. I show this initially through adapted versions of Tversky and Kahneman's original stimuli, examining willingness to travel to save money. In these studies, high-income participants replicate the expected pattern of results, while the low-income participants do not show the preference reversal that has been previously demonstrated.

When asked to decide between two saving options, higher income participants prefer the savings option that reflects the greater proportion (replicating previous findings). When the amount saved is not identical, high-income participants still choose the greater proportion, even when it is a lower absolute amount. Low-income participants do not replicate this; instead, they appear to rely more on absolute values. Without the financial buffer enjoyed by individuals in a higher-income context, these individuals may be more sensitive to absolute amounts, even under similar types of choice scenarios. A second set of studies more rigorously extends this using a novel design which forces participants to choose between various savings scenarios. These studies provide further support for the notion that low-income participants are more focused on absolute amounts. These patterns of results cause the low-income consumers to appear to be relatively more rational in this domain of choice. This finding provides a compelling example of how the relative "rationality" of low-income consumers is often underappreciated.

More recent research shows that this effect does not appear to be a function of numeracy among low-income individuals. Previous work has shown that low-numerate individuals are less likely to show the proportional savings effect (Peters et al., 2006). Recent data I have collected replicates this among high-income individuals, but both high and low numerate low-income participants show fail to show this effect.

While preliminary, these results have the potential to be informative for policy makers and advocates of low-income populations, and they could be especially relevant for marketing programs towards low-income individuals. While an individual with a higher income may be inclined to respond to highlighted cost ratios (save 30% on your heating bill!), this research suggests that, when targeting the low-income population, it may be more beneficial to highlight absolute amounts (save \$30 on your heating bill!). The original proportional savings finding is a robust effect, but one that seems to apply to the middle class majority. This work suggests that low-income consumers do not have the same preference for proportions, a finding that could potentially be crucial for individuals designing efforts to encourage general saving and other positive financial choices. The same intuition that makes a prospect seem attractive to a middle or upper class policy maker or poverty advocate might not resonate with a low-income consumer.

If advocates for those living in poverty can have a better understanding of what features are most important for the low-income group, they can alter their message to be received more effectively. Although, in this case, low-income individuals appear to make a choice that is more financially rational, they may still be susceptible to the framing of a choice that capitalizes on the preference for absolute savings. Future research will be needed to tease this apart further, as the current evidence most strongly supports the notion that low-income individuals do not replicate the commonly seen preference for proportional savings. There is not sufficient evidence to clearly describe what features seem to be driving their pattern of choices in this context. However, it is clear that this is a case where low-income individuals are engaging in financial preferences that are more coherent, as compared to their high-income counterparts.

This strikingly pattern of behavior lends support to the notion that this population is not necessary in need of interventions stemming from "culture of poverty" assumptions about their behavior and preferences.

Overall, findings of this nature provide further support for the broader argument that assumptions stemming from the middle class majority may not adequate describe and predict the behavior of low-income individuals. In this case, the evidence demonstrates that this group does not replicate the findings of a robust, well-known psychological effect (preference for higher proportional savings) in the literature. As will be discussed in the next section, this approach is becoming more common in the scholarly literature, and these findings provide an additional set of tools for understanding low-income behavior, designing policy and the implementation of specific programs.

Risk and Choice Among Low-Income Consumers

The work I have conducted with my collaborators builds upon an increasingly common perspective from both within and outside of the behavioral sciences. It was at one time quite uncommon to use this approach, as the culture of poverty notion prevailed in theorizing about behavior of the poor. However, more contemporary research exploring behavior among low-income populations seems to consider the implications that societal inequality has on social environments much more (whether explicitly or not). This work capitalizes on the insights of social psychology and behavioral decision research, and is particularly useful in the context of poverty, as it allows for a more realistic exploration and analysis of how individuals actually respond to policies and programs.

This behavioral approach allows for low-income consumers to be shown to be affected by the same biases and limitations as all humans: factors such as low self-control, procrastination and problems with commitment. If individuals living in poverty really suffered from a "culture of poverty" these factors would not matter, because any observed financial and social choices would be driven by internal, learned factors, as opposed to external and a function of the situation.

One of the first findings that truly embraced this approach to understanding the behavior of low-income populations explored motivations behind the demand for rent to own contracts (Zikmund-Fisher & Parker, 1999). "Rent-to-own" contracts provide an opportunity for individuals to purchase durable goods over an extended period of time. Individuals may return the item at any time, but end up paying two to four times the standard retail prices. In this paper, the authors explore constraints on liquidity (degree to which an asset can be purchased or sold without losing value), high inter-temporal discounting (tendency to give greater value to rewards as they move closer to the present), self-management of financial myopia (or financial short-sightedness) and risk aversion as possible explanations for the demand of these contracts. They find that this behavior is best explained as a response to risk-aversion and expense shocks that low-income consumers face. In other words, the escapability of the contracts in the face of a financial crisis was an attractive feature. Families were more likely to choose rent-to-own contracts when their income streams were less stable. This finding sheds light on the fact that assumptions behind these types of choices (lack of knowledge, myopia) may not be entirely accurate. In fact, in the short run, a compelling argument can be made that low-income individuals are being at least somewhat rational with the decision to use this

contract versus a more traditional use of a line of credit or payment plan. This is, of course, in conflict with the fact that behavior of this sort may make it very difficult for a low-income family to build long term wealth and assets. The dilemma is supported by Steele and Sherman's afforded psychology theory, and provides further evidence of the predicament that many low-income families may face when trying to balance short and long term financial goals.

Another set of findings, also in the domain of financial decision making, explores the decision to play the lottery by low-income consumers. It has been well established that low-income households spend a significant portion of their income on lotteries (Clotfelter & Cook, 1987; 1989). This is particularly alarming, because state lotteries have the lowest expected payout of any other form of legal gambling (Clotfelter & Cook, 1989); typically lottery players earn about 50 cents for each dollar spent. It has been estimated that, among families with earnings under \$10,000, roughly 3% of income is spent on lotteries (Clotfelter, et al., 1999). This absolute propensity to gamble by low-income populations, relative to the wealthy (Clotfelter, et al., 1999) is clearly unfortunate, as these behaviors undermine efforts by public and nonprofit programs and services to help individuals deal with short term financial crises and build longer term financial stability.

However, a recent set of experiments suggest that highlighting income inequality and an individual's *relative* wealth can have an impact upon the propensity to purchase lottery tickets (Haisley, et al., 2008). When primed with their income as relatively low (using the response scale in a survey), participants were more likely to "purchase" lottery tickets as their compensation for participation – nearly twice as much as those who were primed with their income as being more middle of the road. This finding supports their hypothesis that a

perception of low income (relative to some implicit standard) is enough to increase consumption of lottery tickets. This result is particularly striking as the income response scale was embedded in a series of various demographic questions. Furthermore, the authors also show that low-income consumers were more likely to show a demand for lottery tickets when they were presented with situations where either rich or poor people receive advantages.

Participants answered questions about how likely a rich, middle class, or low-income person would be to experience different life outcomes (for example, being awarded a scholarship, being elected mayor, finding money, or winning at a slot machine). These questions implicitly highlighted the fact that any individual has an equal chance of winning a lottery, if they play.

Without being explicitly asked whether a low versus higher income person would have a better chance of winning the lottery, those in this experimental condition were more likely to "purchase" lottery tickets as their compensation.

These results suggest that the decision to participate in lotteries by low-income individuals may be (consciously or otherwise) motivated by factors that are more nuanced than simple cognitive errors or ignorance. In this case, a visible, relatively low income level impacts choice more than either a strictly rational or culture of poverty influence. Not entirely surprising, as theories such as social comparison (Festinger, 1954) and relative deprivation theory (Crosby, 1976) suggest that people do not evaluate the absolute value of their income, performance and assets, but instead are highly influenced by comparisons with others. Both of these sets of findings show how assumptions about two patterns of behavior among low-income groups (interest in rent-to-own contracts and purchase of lottery tickets) may not be simply explained by a lack of information or understanding of the situation. Instead, they are

driven by situational factors specific to this population. In the next section, a similar logic applies to understanding choice in a completely different domain: food preferences.

Food Choice Among Low-Income Families

A major concern of policy makers and low-income advocates are health related choices and behaviors. One specific area in this domain explores food choice. The U.S. government spends millions of dollars annually on programs to supplement healthy eating. The federal WIC (Women, Infants and Children) program provides grants to states to supplement food, health care, and nutrition education for low-income pregnant women, nursing women and children up to the age of five years who are at some nutritional risk. In addition the federal SNAP program (Supplemental Nutrition Assistance Program, formerly known as "food stamps") has provided cash benefits and nutrition education to low-income Americans since the late 1930s. In addition, thousands of food banks operate across the country to provide low-income families with additional access to food. With all of these programs and services, an emphasis is put on encouraging low-income individuals to eat fresh, healthy food. This stems from the fact that it is well known that low-income individuals are less likely to consume healthy food (Lock et al., 2005) and this thus contributes to the health gap between relatively low- versus high-income individuals (Kant, 2004).

More recently, specific efforts such as the Farmers Market Nutrition Program (affiliated with WIC) have attempted to increase the consumption of fresh produce by low-income individuals. These programs provide these families with special assistance with purchasing fruits and vegetables, in particular. Farmers can enroll in the program as vendors and are

reimbursed after accepting vouchers from customers at farm stands and markets. Previous strategies to increase the decision to consume targeted foods (such as fruits and vegetables) have not been widely tested. However, a recent study showed that WIC eligible postpartum women in Los Angeles who received vouchers for fresh produce (redeemable at grocery stores or at farmers markets) increased their consumption of these foods (Herman, et al., 2008). This increase was sustained during the intervention period and persisted six months after the intervention ended.

While this study was relatively small, and not representative by any means, it provides compelling evidence for considering more focused efforts to change behavior in these domains. Specifically, this study suggests that a shift in the availability of specific types of food and incentives to consume certain types of food may have a great impact. A lack of consumption of healthy food by low-income population may not simply reflect disinterest in this food, but instead be a result of its availability. The concept of "food deserts" was introduced as an argument for understanding the impact of disparities of food prices and areas with geographic constraints in access to traditional grocery stores (Walker, et al., 2010). Recent research supports the notion that food deserts may, in part, contribute to difficulties regarding access to affordable, nutritious food (United States Department of Agriculture [USDA], 2009). In addition to providing access to healthy food, public programs attempt to provide opportunities and support for stable housing, a much more expensive endeavor. The logic of a behavioral approach to understanding housing choice also applies, as discussed below.

Housing Subsidies and Neighborhood Outcomes

The federal Moving to Opportunity (MTO) program provides low-income families with the chance to move to less disadvantaged communities. It was suspected that providing low-income families with a voucher to move to a higher income neighborhood (along with providing housing counseling) would lead to better schooling opportunities (Brooks-Gunn et al, 1993; Rosenbaum and Kaufman, 1992). However, when following up with families four to seven years later, there were no improvements in educational outcomes observed for the treatment group versus those who did not receive housing subsidies (Orr et al, 2003; Sanbonmatsu et al, 2006).

In a large mixed methods study, the impact of the MTO program on educational outcomes was directly explored. Using surveys, interviews and a comprehensive data set, it was discovered that parents, for the most part, did not move their children to neighborhoods with higher performing schools (DeLuca &Rosenblatt, 2010). Specifically, many parents expressed the belief that moving to a better school would not necessarily help their children. They believed that as effort and motivation in schooling on the part of the student was more important than the educational environment or quality. Furthermore, many families lacked information about school quality, and had exceptionally low expectations for all schools. These beliefs persisted, despite the fact that families, for the most part, emphasized the important of education for their children. As with the prior examples, assumptions about the intentions of low-income individuals (in this case, desire to move to neighborhoods with better schools) did not sufficiently describe their beliefs.

<u>Implications of Previous Research</u>

A behavioral perspective on behavior gives both researchers and practitioners the opportunity to refine commonly held-assumptions about the behavior of low-income populations. Much of the well established findings in the fields of social psychology and behavioral decision research have been tested almost exclusively using members of the middle and upper class. Exploring some of these phenomena in the context of low-income settings can help researchers understand the boundary conditions on some of these effects. The previous research I have conducted on mental accounting suggests that the social environment of poverty facilitates behavior that actually looks *more* rational than the behavior of the middle and upper class counterparts of low-income individuals. The work on self-affirmation and identity salience describes specific cases where the social environment may have an impact on behavior and suggests potential methods for communicating with and designing interventions for this population.

The rent-to-own and lottery ticket research suggest that decisions to seek out (seemingly) costly financial contracts and engage in gambles with very low expected payouts may not be solely the result of myopia, lack of intelligence, or lack of information. Features of the decision environment may have direct impacts on many of these choices. A better understanding of both the assumptions and reality behind decision motivations and other features of the social context may allow researchers, policy makers and advocates to work to generate more creative solutions to many of these issues. It is crucial, from a policy perspective, to understand how people actually respond to incentives, based on their social environment. Based on the nuanced understanding of the demand for lotteries provided by the work of Haisley and her colleagues, some researchers are working with practitioners to

consider the efficacy of lottery-linked savings for low-income consumers. They are considering the notion that the cognition and emotions that low-income individuals have towards lotteries may be powerful motivators for increasing take-up of programs and services. This would be a creative approach that could potentially facilitate powerful long-term benefits for these individuals. This type of approach will not only help researchers better understand the limitations of existing theory, but will also facilitate a better comprehension of how these principles can be effectively applied as interventions in the real world.

Finally, it is critical to highlight the finding that many of these findings question some of the core, repeatedly replicated findings in behavioral research. In addition, these results provide evidence that low-income decision makers are not as "irrational" as often described. A reconsideration of these central assumptions about the behavior and preferences of this population would potential lead to vastly different approaches to policy design and implementation.

Future Directions

There is a growing demand among practitioners to apply behavioral science in a way that is powerful and meaningful. This desire has largely originated within the field of asset-building and financial education, but is expanding to domains such as housing and healthcare as well.

There are countless behavioral puzzles that can be explored using this approach, but efforts by policy-minded researchers ought to address questions and issues that carry implications for both theory and practice.

In this final section, I discuss future directions in my own research agenda. With this work, my first goal is to push the boundaries of the theory at describing behavior for this subgroup of low-income Americans. In addition, I want to test the effectiveness of these tools as behavioral interventions. Two research approaches are described in order to do so.

Intervention testing in the field

Even the most simple research designs require thoughtful and careful implementation to be tested outside of lab settings. Even for simple survey research, this can often prove difficult when dealing with a population such as low-income individuals. Often this work must be conducted with the cooperation of nonprofit and government agencies. Effective collaboration is often difficult, given that these organizations are often overworked and understaffed.

However, I have worked with organizations to set up small "lab sites" to explore large scale behavioral interventions. I have recently secured funding that will allow this work to be taken to a much larger scale. Presently, Volunteer Income Tax Assistance (VITA) sites provide the best opportunity to do so. More than 12,000 VITA sites are open nationwide, helping close to a million low-income tax filers complete their taxes each year. The IRS continues to expand its partnerships with nonprofit and community organizations. These sites represent an enormous opportunity to conduct quality field research in a controlled setting.

Therefore, if a low-cost, easy way to increase savings at tax time (for example) was tested and successful at one site this change could be relatively easily implemented at similar VITA sites. This is a critical and totally unique decision-making moment. It is an ideal setting to insert well-designed nudges that can help people make the best decisions possible. These sites

also happen to be ideal places for behavioral scientists to run studies. VITA sites are well suited to observing people and collecting data. Sites are filled with a population that is otherwise often difficult to reach, demographic data is collected and stored as a matter of course, the site is filled with committed high capacity staff, and people are guided through a series of important decisions that can be easily tweaked to create a potentially powerful intervention.

Staff and volunteers can be trained to work as research assistants who can implement the studies and monitor data collection. In this way, the research is an almost seamless part of the site's daily process. In addition, having program staff that double as researchers allow researchers to dramatically increase the number of people who can be part of the study, moving sample sizes from hundreds to thousands. With my current collaborators, I will attempt replications of findings of my previous research in the context of decision at tax time. This includes the use of self-affirmation as a behavioral intervention and identity priming (parental identity). This work will also explore the finding that low-income consumers tend to underestimate their tax refunds (Romich, Hall & Miesel, under review) and how that might be a useful tool for encouraging savings at tax time.

In this initial attempt to explore these research questions on a larger scale, there are two guiding practical questions. First, how can we increase take-up of savings products? Second, how can we increase enrollment into public benefit programs? These questions impact scores of low-income consumers. Any lessons we learn in these studies have significant potential for scale and portability, as VITA sites across the country can possibly implement similar interventions.

Interactions of class and culture, and the implications for choice

More recent work I am conducting explores how knowledge of and experience within the two worlds of home and school interact with features of the social context to influence the self-perceptions, judgments, and behaviors of youth from working class backgrounds. In particular, we seek to examine risk perception among two dimensions of social identity: cultural background (European Americans, Asian Americans and Immigrants) and class background (working class versus middle class). Building upon the existing literature within cultural psychology (Markus &Kitayama, 1991; Nisbett, Choi, Peng, & Norenzayan, 2001), I hope to expand the theoretical discussions regarding what aspects of social identity contribute to decision making around risk. Specifically, the proposed research is significant because it has the potential to (1) demonstrate that decision-making around risk varies across contexts (home, school); and (2) link variation in decision-making around risk with aspects of social identity (social class, culture).

Individuals who are born and raised in a working-class context but have transitioned into a middle-class context such as community college or university become essentially bicultural individuals – they have knowledge and experiences in two social classes. The same logic applies to individuals who have extensive experience in both individualist (American, Western European) and collectivist (East Asian) cultures. Using a recently developed and pilot tested methodology, a colleague has found evidence that reasoning about risk differs from home and school among immigrant Asian youth, especially from working class backgrounds. That is, immigrant youth make different decisions about marriage, career, and breaking the law to help a family member when they are primed to think of home, versus when they are primed to think

of school. This frame-switching behavior is a function of culture and class, and is not observed in non-immigrant youth (Leu, in preparation).

There is support for this pattern in the few other studies that examine decision-making around risk in diverse settings. East Asians have been found to take more financial risks and fewer social risks compared with European Americans (Weber & Hsee, 1998; Hsee & Weber, 1999), and lower-socioeconomic individuals use a different set of heuristics for making financial decisions compared with middle-class individuals (as previously discussed within this chapter).

Conclusion

As the U.S. population continues to diversify, behavior and achievement gaps between individuals from different social classes have persisted. Policy makers continually attempt to understand why many negative outcomes tend to afflict lower income populations and design programs and interventions to counteract them. A prominent issue is how cultural/ethnic background and social class might interact to produce differences in judgment and choice.

Decision-making around risk allows individuals to negotiate an array of social and financial choices.

Understanding the sociocultural and contextual influences on decision-making in general can have far-reaching implications, both for the basic processes underlying judgment and decision-making and for public policy in an increasingly pluralistic society. A reconsideration of the (often implicit) assumptions that low-income consumers behave irrationally is a critical step in the right direction. Advancement in this field (at the scholarly and practical level) has the

potential to inform education and financial policies which affect the next generation, many of whom come from working-class communities.

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