# HOW POVERTY AND COGNITIVE BIASES CAN IMPACT DECISIONS AND ACTIONS:

Using Research from Behavioral Economics and Psychology to Improve Workforce Development Services

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# I. EXECUTIVE SUMMARY

The workforce development system helps millions of individuals each year to upgrade their skills and obtain or advance their employment. To be successful, many of these individuals will have to make a series of critical decisions about their education and career, potentially navigate several complex and bureaucratic systems, manage a full calendar of appointments and deadlines, and juggle family, school and work responsibilities. They will also have to maintain motivation and confidence while persisting through periods of uncertainty and stress. Though attaining a higher level of education and advancing one's employment or career are challenging for anyone to accomplish, those in poverty may face some unique obstacles.

Today, new research from the fields of behavioral economics and psychology is shedding light on how poverty may shape an individual's decisions and actions. For some individuals, the circumstances and stresses of poverty consume a great deal of their cognitive abilities, attention, and self-control.[1] This decrease in mental bandwidth can contribute to poor performance in the classroom or workplace and lead some individuals in poverty to be overwhelmed by too many choices or complex decisions. Low-income individuals may also find it difficult to navigate complex systems or processes, and struggle to develop and follow through on long-term plans and goals because their attention and cognitive resources are focused on addressing the challenges of poverty, such as finding stable housing, or securing food or school supplies for their children.[2]

Our identities and self-perceptions may also impact decisions and actions. All of us have many identities that we alternate between in different moments. We form these identities based on the social groups to which we belong.[3] An individual's identity may include being a mother, college student, construction worker, woman, Latina, American, and more. Those in poverty may also hold other identities associated with being poor or low-income, a public housing resident, or welfare recipient, for example. The stigma and negative stereotypes that are often unfairly attributed to low-income populations can influence

individuals' views of themselves. While some may turn these views of those in poverty into a motivator, others may come to associate with these negative stereotypes and feel that they are lazy, unmotivated, or incompetent, which can lead to lower self-esteem and confidence. This lack of self-worth may lead some individuals to believe they cannot learn or succeed, and may also contribute to choices or behaviors that inhibit success in the classroom or workplace.

Our behaviors and choices are, of course, not just shaped by our income levels. All of us often develop and use rules of thumb or heuristics to inform our choices and behaviors. These rules of thumb can be useful in making complex choices easier, but can also be over relied upon, which can lead to biased and sometimes irrational decisions.[4] We may choose to stick with the comfort of the status quo because change is perceived as a loss, for example, even if changing would lead to better outcomes. We may also rely too much on information from the media or from our past experiences in predicting future outcomes. We also sometimes choose immediate payoffs or rewards relative over greater rewards that could come later.

In the workforce field, participants' choices or behaviors that harm their ability to be successful in school or work are often attributed to a lack of soft skills, motivation, or work ethic. While individual responsibility cannot be ignored, we also need to consider how the unique circumstances and context of poverty and other cognitive biases can contribute to an individual's actions. Behavioral economics and psychology research point toward some interventions that workforce development practitioners can use to address some of the barriers presented by poverty and human biases. These strategies, which may help unleash individuals' potential and strengths, include the following:*

- **PROVIDING DECISION-MAKING, GOAL-SETTING AND PLANNING SUPPORTS**
  Like all people, those in poverty sometimes need advice or assistance when important or complex decisions or decisions with long-term consequences must be made. Stress, fatigue, instability in our lives and our emotional state can also make it difficult to set goals and develop and follow through with plans. Obviously, a critical part of what many workforce development initiatives do is to help individuals develop and follow education and employment plans. Workforce development initiatives may consider how they can

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*Most of the information about these strategies is borrowed from the following report: Lashawn Richburg-Hayes, Caitlin Anzelone, Nadine Deschausay, Saugato Datta, Alexandra Fiorillo, Louis Potok, Matthew Darling, John Balz, "Behavioral Economics and Social Policy: Designing Innovative Solutions for Programs Supported by the Administration for Children and Families," OPRE Report No. 2014-16a, Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, April 2014, accessed January 5, 2015, http://www.acf.hhs.gov/sites/default/files/opre/bias_final_full_report_rev4_15_14.pdf

strengthen or enhance efforts to help their participants identify goals, detailed step-by-step plans for meeting those goals, interim milestones, potential barriers that could arise to derail progress, and potential strategies for addressing those obstacles. An important piece of these decision-making, goal-setting, and planning supports is integrating mechanisms to offer feedback to individuals on these tasks and their progress.

- **REMOVING HASSLES AND USING CHANNEL FACTORS**
  Participants in a workforce initiative may have to navigate many complex systems and processes. Entering community college, for example, involves applying for admission, taking assessments, applying for financial aid, registration, and enrollment. Removing the extra steps and hassle from processes such as this can help individuals who may have limited time or whose attention or focus may be limited. According to Crittenton Women's Union, "Any design efforts that decrease the time needed to apply for, maintain, travel to, or participate in programs or services should increase the likelihood of successful client participation and improved outcomes."[5] Similarly, changing small situational details or channel factors can help encourage behaviors if designed appropriately. For example, a college that allows for applications to be completed online, instead of just the mail, is helping to facilitate more applications by using a channel factor.

- **USING REMINDERS**
  In-person, email, mail, text or phone reminders can help individuals with low levels of mental bandwidth to maintain their commitments and avoid missing important deadlines or appointments.

- **USING PUBLIC AND PRIVATE COMMITMENTS**
  Some workforce organizations may struggle with participants maintaining their motivation and commitment to education and employment goals. Individuals who make promises to complete a task are more likely to finish it. Workforce initiatives may consider how asking participants to make public or private commitments to achieve their education and employment goals (as well as staff serving participants) may be integrated into their programs.

- **USING DEFAULT OPTIONS OR PROMPTED CHOICES**
  Default options involve requiring opt-outs (e.g., when an employer automatically enrolls an employee in a 401(k) program). Default options help remove the burden of making a choice when the decision is complex, includes too many choices, or when the decision is

occurring in an unfamiliar setting. Prompted choices involve having individuals provide a response prior to completing a task (e.g., requiring people to decide about organ donation to complete their driver's license application). Workforce organizations may consider using default options to automatically enroll their clients in critical programs such as an introduction to community college class or using prompted choices to encourage other positive actions such as asking students when they enroll in classes whether they'd also like to sign up for tutoring services.

- **CATEGORIZING OR GROUPING CHOICES**

  Too many choices can overwhelm individuals whose mental bandwidth is reduced. Putting choices in buckets or categories can help address this challenge, and choices may be limited as well so long as choice is preserved. For example, instead of asking students to choose what occupation they would like train for, the students may first be asked to choose from a smaller number industries or sectors that interest them.

- **PROVIDING APPROPRIATE ANCHOR OR REFERENCE POINTS**

  Individuals often use an initial piece of information to anchor to help them make decisions.[6] The reference points we anchor to, may include past experiences or information from places such as the media. Poor or inaccurate reference points or overreliance on past experience as a predictor for future outcomes may need to be addressed by workforce initiatives. Workforce organizations may, for instance, have fact sheets about tuition costs, wages, and employment to help participants set proper expectations and make more informed choices. Organizations may also have to work to improve confidence and self-esteem among individuals whose previous negative experiences in school, work, or training are shaping their expectations.

- **FRAMING CHOICES AROUND GAINS AND LOSS**

  Individuals tend to weigh the perceived losses of a choice more strongly than the potential gains. If a workforce program's participants are not responding to an opportunity, the program may consider how to put more emphasis on gains or reframe the losses.

- **PROVIDING EARLY REWARDS**

  Breaking the status quo can be challenging for all individuals. Workforce organizations may consider how they can provide a win or reward early on in their programs or services to encourage people to adopt the path to change.

- **PRIMING POSITIVE IDENTITIES**

  An individual's choices and actions depend in part on which of their social identities is active or salient. Identity priming strategies help individuals activate a positive identity or social category. Workforce development initiatives may consider how to avoid priming identities with which individuals may negatively associate, such as "high school dropout" or "food stamp recipient" in favor of activating positive identities such as "successful parent", "hard worker", or "leader of a local choir or community group". Identity priming may be done quickly by asking individuals to talk or write about an instance where they were successful or proud of something they did. Positive priming may also be used when low-income individuals are engaged in tasks that may be priming negative identities (e.g., providing information about their income or employment).

- **USING SOCIAL PROOF AND SOCIAL INFLUENCE**

  Our peers influence our actions and decisions. Social proof strategies provide information to individuals about how people in their same social groups choose or act in a situation to encourage them to do the same. Social influence strategies rely on members from an individual's social group who have authority to persuade or influence the individual to do something. Some workforce organizations implement social proof and influence strategies through alumni groups, mentoring programs, and cohort strategies.

- **PROVIDING COMMUNICATIONS, WORKSHOPS, OR TUTORIALS ON THE BRAIN AND LEARNING**

  The workforce development system serves millions of individuals, and many of them may have come to believe they cannot learn for various reasons, including the stigma of those in poverty or negative experiences with the education system. Individuals with these fixed mindsets may benefit from activities or tutorials about how the brain works, how it can grow stronger, and how feelings of frustration and struggle during the learning process are normal and indications that the brain is growing in response to new information.

The interventions and strategies outlined above are not applicable to all workforce development initiatives and all contexts. The experiences, identities, choices, and behaviors of those in poverty are obviously not universal, nor are the challenges and opportunities they face in labor markets or educational systems. Ultimately, the interventions or mix of strategies a workforce organization uses will depend heavily on context and the problem the organization is attempting to solve. Research on behavioral economics and psychology, however, does indicate key recommendations for workforce development organizations and funders to consider in the continuous efforts to improve services, participation, and outcomes:

1. **WORK TO EXPAND SUPPORT AND FINANCIAL SERVICES**
   The financial worries and stresses of those in poverty can affect their ability to be successful in the classroom and workplace. Expanding wrap-around support services such as housing assistance and financial services such as financial coaching may help lessen these worries and stresses and allow individuals to focus their energy and attention more on their academic studies, job responsibilities, or career growth.

2. **UNDERSTAND THE PROBLEM AND BUILD IN EVALUATION**
   Workforce organizations considering behavioral and psychological strategies should take time to understand and diagnose the problem they are attempting to solve. The strategies discussed above achieve the best outcomes and success when they are targeted towards a specific context and problem. Workforce organizations facing low participation or initial uptake of their services or programs may require a different set or mix of strategies compared to those that may be facing challenges with participant persistence or completion. Interventions should also be appropriately evaluated when implemented in order to measure whether the intervention solved or minimized the problem it was designed to address.

3. **USE COMMON SENSE APPROACHES TO IMPROVE DESIGN & DELIVERY OF PROGRAMS & SERVICES AND CREATE FRIENDLY & SUPPORTIVE SERVICE ENVIRONMENTS & CLASSROOMS**
   Some behavioral interventions such as removing hassles and providing decision-making, goal-setting, and planning supports are appropriate in most workforce development

contexts. In addition, some programs and organizations designed to serve the poor persistently (though often inadvertently) remind their clients that they are low-income or somehow different. Workforce organizations should strive to create classrooms and office environments that help students and workers retain their dignity, activate their positive identities, improve their self-esteem, excite people about their future, and remove any stigma of those in poverty.

4. **EDUCATE FRONT-LINE STAFF & INSTRUCTORS ABOUT THE IMPACTS OF POVERTY AND CONCEPTS FROM BEHAVIORAL ECONOMICS & PSYCHOLOGY**
Interventions outlined in this report such as identity priming, choice architecture, using public or private commitments, using social proof, and removing hassles are tools front-line staff and instructors should have in their repertoire to tackle behavioral or decision-making challenges they encounter.

5. **EXPAND THE CONVERSATION ON HOW POVERTY CAN IMPACT DECISIONS AND ACTIONS WITHIN YOUR ORGANIZATION & COMMUNITY AND WITH EMPLOYERS**
We hope this new research on poverty and cognitive biases sparks fresh conversation about how we design programs, systems, and policies that aim to support low-income families, and encourage workforce leaders to help lead that dialogue. We also hope the workforce field will find opportunities to raise the issue of poverty and how it can impact a business's performance and bottom line with relevant employer partners and members of the business community.

The recommendations discussed above and the interventions described in this report are not cure-all solutions for improving workforce development services and programs for low-income populations. Behavioral and psychological interventions cannot repair a poor instructor or curriculum, insufficient support services, or a lack of employer engagement. These interventions and recommendations should also not detract from addressing the much larger challenges low-income people face, such as stagnating wages, regressive tax policies, the high cost of childcare and housing, and the large geographical distance often seen between quality jobs and where people in poverty reside. Nonetheless, we hope the information in this report offers workforce leaders some food for thought and some additional tools they can use to help low-income individuals to reach their full potential in the classroom and workplace.

## II. INTRODUCTION

A primary function of the workforce development system in the U.S. is to help low-income workers or those in poverty to become more self-sufficient. To assist workers in achieving this end, workforce development initiatives often support individuals in poverty to improve their education or skills in order to obtain higher-quality, higher-paying jobs.

In addition to helping workers attain higher levels of education and obtain employment, workforce development initiatives are often involved in identifying and addressing systemic barriers that low-income individuals face. Workforce programs may work to make changes in the labor market, educational and training system, and public policy arena. For example, workforce leaders may attempt to change the schedule of educational offerings in order to accommodate the busy lives of adult learners, may push for businesses to hire a more diverse workforce, or may advocate for more government funding of job training. Addressing these external, systemic barriers is critical to creating educational and economic opportunities for workers. What often get less attention, however, are the internal barriers that some individuals in poverty face that impede their participation and success in educational programs and the workplace.

These internal barriers can manifest themselves in an individual's decisions and behaviors. These choices and actions may not always appear to be in the individual's best interest. He or she may refuse a job training opportunity, drop out of college, neglect to show up for a job interview or important appointment, or get into a heated argument with a classmate or co-worker over a seemingly trivial issue. These choices or behaviors are often attributed to a lack of self-esteem or confidence, low motivation, or poor work ethic. The decisions and actions are also often blamed on a lack of soft or interpersonal skills. The penchant for identifying these actions as personal attributes or deficits, however, fails to consider contextual and environmental factors that may be contributing to these decisions and behaviors.

For many of the low-income individuals that workforce development initiatives serve, their choices and behaviors are driven in part by the poverty in which they live. Research from behavioral economics and psychology is shedding new light on how the unique circumstances and environment of poverty can affect an individual's mental cognition and identity, and as a result, his or her decisions and actions. Cognitive biases that cut across socio-economic class also affects our choices and new research is improving our understanding of these biases as well. All of these findings hold potential for informing how workforce development and educational strategies, services, and systems could be better designed to improve participation and completion rates in training programs, and success in the classroom and workplace.

In this report, Seattle Jobs Initiative (SJI) presents information and research from behavioral economics and psychology gathered from a literature review for the workforce development field to consider. We discuss the implications of this literature, describe interventions and strategies that can help mitigate the

impacts of poverty and cognitive biases on individuals' decisions and actions, and provide examples of how workforce strategies have implemented these interventions. The report also provides a framework from behavioral economics for diagnosing decision-making and behavioral problems and identifying and testing potential strategies for addressing these problems. Our hope with this report is to spark fresh conversation and thinking about how the workforce development field can leverage concepts and research from behavioral economics and psychology to improve services and outcomes for low-income individuals.

Finally, a critical part of any effective workforce development strategy is to understand the needs, challenges, strengths and opportunities of the worker population being served. For many workforce organizations, the population is one that is predominantly low-income. The population, of course, can be subdivided into many more groups including young and old, urban and rural, white and minority, male and female, immigrant and native, homeless and housed, single and married, parents and childless, high school graduates and those with less than a high school education, and many more subgroups. In this report, we discuss how a stronger understanding of the conditions and impacts of poverty can influence how workforce development initiatives design and implement services for these populations. We want to be clear up front, however, that that poverty impacts people in different ways. Not all low-income individuals face the same challenges and their choices and actions vary greatly.

As the workforce development field moves forward with efforts to use research from behavioral economics and psychology to better understand the lives of those in poverty, as well as to improve training curriculum, instruction, support services, and processes related to intake, assessment, and enrollment, our hope is a discourse that not only recognizes each low-income worker as an individual, but that it also recognizes the strengths of many of those in poverty. Writing on the shame of poverty, Robert Walker and his colleagues remarked, "To survive on a low income in very challenging conditions requires skill, inventiveness and fortitude."[7] For the workforce development field, the task then becomes not just one of mitigating the negative impacts of poverty, but of leveraging and tapping into the incredible resourcefulness, resilience, skills, and capacity of those who endure it. We hope this report will help drive innovations and strategies that help individuals in poverty to unleash that potential.

# III. HOW POVERTY AND COGNITIVE BIASES CAN SHAPE CHOICES AND BEHAVIORS

Poverty can shape and impact an individual's cognition, identity, and ultimately, his or her decisions and actions. These influences can deter or interfere with participation in education and job training programs and harm performance in the classroom and workplace. Some rules and frameworks we develop to help us make decisions, however, cut-across socio-economic classes and can lead to cognitive biases that also shape our choices and actions. In this section, we highlight research that shows how the circumstances of poverty and cognitive biases are factors that deserve the workforce development field's attention.

## BEHAVIORAL ECONOMICS AND POVERTY'S IMPACT ON COGNITION

Individuals make numerous employment and education decisions throughout the course of their lives and careers. They decide what educational institutions to attend, what subjects and topics to study, what jobs to pursue, what wage they need, where to work, and much more. Making good education and employment decisions also means following up on those decisions with appropriate actions. These decisions and actions have large implications for an individual's career, livelihood, and ability to be self-sufficient.

Conventional economic theory holds that individuals make rational decisions to maximize their own personal economic gain or utility. The theory also assumes that individuals' self-control, attention, and cognitive capacities do not vary under different situations. If conventional economic theory is applied, individuals will make education and career decisions that promote their own well-being. Individuals in practice, however, are flawed decision makers when it comes to maximizing their own utility.[8] People often make decisions that

are detrimental to their education, careers, and finances. Various factors can influence what choices people make. The context and environment in which people make decisions, the social groups to which people belong, and individuals' self-perceptions, for example, can significantly impact choices and behaviors. The field of behavioral economics has emerged to explain that we are not always rational decision makers. Situational and environmental factors such as poverty can impact our decisions and actions. A prominent framework in behavioral economics that helps explains this is termed the "psychology of scarcity".

The psychology of scarcity proposes that brainpower or mental bandwidth, including cognition, attention, and self-control, are finite resources that can become fatigued. The conditions of scarcity, in which an individual fails to meet his or her need for time, social relationships, sleep, and/or financial resources, creates unique circumstances that can impact his or her mental bandwidth, and as a result, his or her decisions and actions. Mental bandwidth can become especially fatigued or taxed under conditions of economic scarcity or poverty when a significant amount of mental resources are being used.[9] And those living in poverty are likely to experience scarcity and its consequences more frequently: "People living in poverty are no different than anyone else in the way that they respond to scarcity; they simply experience scarcity more frequently and more acutely than most."[10]

The financial and life worries associated with poverty, and the difficult tradeoffs low-income individuals must make on a regular basis, reduces their cognition. The cognitive resources we use to learn, remember, make decisions and problem solve may become impaired under conditions of economic scarcity. The situational stresses of poverty can be so great that they can actually reduce IQ temporarily by as much as 13 points. Such a reduction could obviously impact academic and workplace performance. Individuals facing decisions that require them to analyze complex information or decide among many choices may find it difficult to do so with reduced bandwidth.[11]

The tax exerted on mental bandwidth by poverty also greatly inhibits attention. Economic scarcity may drive people to "tunnel" or only focus on solving the immediate emergencies in front of them (e.g., putting food on the table, finding shelter, paying the utility bill). While tunneling can be helpful in resolving an immediate crisis, it can keep us busy and distract us from other tasks and issues. These distractions can be detrimental in the long-term. Individuals who are tunneling, or focused on one pressing issue or task, may forget to do something, even if the action has benefits that outweigh the costs.[12]

Tunneling may also impact the ability to plan long-term. In one focus group of individuals who grew up in poverty, participants said "daily problems were the focus of their lives and almost all reported that education was simply not discussed."[13] Individuals in job training or educational programs have a variety of "schedules, deadlines, and paperwork requirements," but limited attention may lead them to neglect these requirements.[14] Limited attention may also decrease their ability to focus in the classroom.

Impaired mental bandwidth caused by poverty can also negatively impact executive control, which governs planning, willpower, and impulse control.[15] Self-control is the ability to control emotions, desires, and behaviors.[16] Controlling emotions and behaviors also relies on willpower. Self-control, willpower, and planning are essential to developing and successfully pursuing long-term goals. Individuals often sacrifice certain purchases to save money in the long term or forgo work or other activities to complete a post-secondary education. Limits on self-control, willpower or planning may lead some individuals to sacrifice future rewards for short-term gains.[17] A lack of self-control or willpower may also lead individuals to procrastinate on important tasks. Sufficient self-control and willpower also allows us to manage our anger, frustration, and other emotions. Individuals experiencing scarcity may, therefore, exhibit behaviors that seem irrational as a result of compromised executive control.

Beyond the situational impacts of poverty on mental bandwidth, poverty may also prompt long-term effects and even structural changes to the brain. Living in poverty can lead to repeated exposure to situations that are stressful, unpredictable or dangerous, which can result in individuals being in a persistent state of flight or fight, or cause them to freeze. If this stress response is activated too frequently, the parts of the brain responsible for developing executive function skills such as impulse control, working memory, and mental flexibility may be inhibited and the proper neural connections may not be formed. Not all individuals exposed to poverty will be harmed in such a way. Some individuals and communities are more resilient than others. Luckily, the brain's plasticity also allows it to recover from these circumstances and develop effective executive function skills.[18] These findings, however, suggest the impacts of poverty are not something to take lightly.

Similar to everyone else, low-income individuals do not always make rational education and employment decisions, and sometimes these decisions and the accompanying actions produce negative results. What is unique for low-income individuals, however, is that that they often have less room to make mistakes,

particularly where money is a factor. In essence, those in poverty lack "slack," or a feeling of abundance that provides a cushion to economic shocks.[19] Further, their decisions and behaviors can be attributed in part to the fact that they are low-income. In other words, poverty influences the choices they make and the actions they take.

Many job training participants and community college students are low-income and are under constant duress because of their lives in poverty. For all students, "[b]udgeting and cash management issues can consume a good portion of students' mental bandwidth."[20] For low-income students, however, these budget issues may be even more pronounced and require even more mental energy and attention. Many participants in job training programs also grew up in poverty and were exposed to its stresses for long periods of time, which may affect brain and cognitive function. Participants in workforce initiatives are also often managing many competing demands. Three quarters of college students are juggling some combination of work, family, and academic responsibilities.[21] Such juggling requires a great deal of energy and concentration and can lead to scarcity of time as well.

Scarcity helps explain why some individuals find too much information overwhelming, fail to complete important tasks, do not follow through on set plans or decisions, or set aside or abandon their goals due to what seem like minor issues.[22] This understanding has the potential to reshape how we design and deliver workforce and education services. As we discuss in the next section, other research on poverty's impact on people's identities also helps explain why the poor may make choices that are not seemingly in their best interest.

## POVERTY AND IDENTITY

Individuals have many identities that they derive from the social groups to which they belong. Gender, race or ethnicity, geographical home or residence, occupation, educational level, income level, political or religious affiliation, and parental status are just a few of the categories that an individual may draw on for potential identities. Individuals alternate among these identities depending on context and situation.[23] According to Akerlof and Kranton, "Identity may describe the interactions of an instant, a day, a few years, a lifetime, or generations."[24] A person's self-identity at any given moment, and whether he or she positively or negatively associates with that identity, can impact his or her decisions and actions. For example:

> "[A] working mother might think of herself primarily as a mother when in the company of her children but see herself primarily as a professional while at work. The list of potential identities is extensive, with some identities (e.g., "mother") likely to conjure up strikingly different values and ideals from others (e.g., "welfare participant").[25]

Though distinct from behavioral economics, identity economics, which looks at how one's identity, or sense of self, influences economic choices and outcomes, is another emerging field of economics that overlaps with behavioral economics. First introduced by George Akerlof and Rachel Kranton, identity economics proposes that people not only make choices based on monetary factors, but also on their identities. An individual's sense of self is derived from the different social categories to which he or she belongs, as noted above, and is associated with how people in these different social categories are expected to behave. Individuals tend to decide and behave in ways that align with the norms of the

social groups to which they belong. Identity economics, as well as behavioral economics, helps explain how individuals make choices in different social situations and the role identity can play in motivating various behaviors and actions.[26] According to Akerlof, "People's identity defines who they are – their social category. Their identities will influence their decisions, because different norms for behavior are associated with different social categories."[27]

For many low-income individuals, one of their identities may be associated with living in poverty. Their identities may include welfare recipient, public housing resident, unemployed, or homeless. Those identities may spur feelings of social exclusion. Research shows that the stigma and stereotyping of those in poverty can lead low-income individuals to feel shunned, disrespected, or incompetent. Those in poverty may feel they are viewed as lazy or unmotivated as well.[28] The impact of poverty on identity can start at a young age.

Focus groups of individuals who grew up in generational poverty have revealed how exposure to poverty as a child can contribute to an individual's identities and outlook. According to Donna Beegle, "Because of money constraints, respondents thought that personal, educational, and social opportunities were unattainable."[29] Focus group participants also reported feelings of humiliation, embarrassment, shame, and a lack of belonging because of their poverty; the physical appearance (e.g. "ragged clothes") of their family members or themselves; their home or housing situation; and their hunger and use of food stamps. Participants reported that they lacked career and job goals growing up and were not exposed to professional career and job concepts or opportunities as children. Early experiences with education "had little or no meaning," little value was placed on education in the home, few had long-term education goals, and most were unaware a college education could lead to better jobs and incomes.[30]

> "From birth, children from generational poverty learn that their families are not 'normal,' but rather that they are deficient because they do not have the 'right' appearance, food, house, job, or communication style. Such messages place blame on those in poverty and reinforce their alienation from middle-class society."

These feelings of exclusion and stereotyping of people in poverty may lead to feelings of failure and shame in adulthood as well. Amartya Sen, a Nobel Prize-winning economist, has argued that shame lies at the core of poverty.[31] Indeed, research conducted by Robert Walker, Professor of Social Policy at Oxford, and his colleagues across seven countries showed feelings of shame were associated with poverty across continents:[32]

> "Though socially and culturally nuanced, shame was found to be associated with poverty in each location, variably leading to pretense, withdrawal, self-loathing, 'othering', despair, depression, thoughts of suicide and generally to reductions in personal efficacy."[33]

Authors of the research explain that these feelings of shame are "socially constructed and imposed" by people not in poverty through their communication and interactions with low-income individuals. Media can further impose these feelings through their discourse, while government's structuring, framing, and implementation of welfare policies can further shame or stigmatize those in poverty. Walker and his colleagues draw on their research to highlight how these feelings of shame and other negative self-perceptions are a factor in increasing the persistence of poverty as it can decrease self-confidence and cause some to withdraw from social life.[34]

Some individuals who experience poverty use their experiences as a motivator to go to college or get a good job. For many others, however, poverty can have the opposite effect. Poverty can decrease confidence, self-esteem, and shape individuals' view of what they can achieve in their education or what careers are possible. For the workforce development field, helping low-income individuals to shed any negative perceptions of self and assisting them to associate with one of their more positive identities could be helpful. The concept of identity, how it can vary in different situations, and how that can influence behaviors is important to facilitating motivation, creating friendly learning and service environments, using peer supports, and developing confidence. As we discuss in the next section, identity may play a role in determining how individuals perceive their ability to learn.

## POVERTY AND MINDSET

Recent research in psychology lies at the intersection of identity and motivation. The concept of fixed versus growth mindsets, developed in large part by Carol Dweck at Stanford University, also has implications for how workforce development initiatives are designed.

Individuals with a fixed mindset believe their level of intelligence is fixed and unchangeable. Mistakes and failures are viewed as confirmation that they lack intelligence or ability.[35] Those with a growth mindset, on the other hand, believe intelligence can increase and improve through practice and hard work. Failures and mistakes are seen as a part of the learning process.[36] As a result, an individual's mindset influences their behaviors and performance in the classroom and workplace.

While research on the likelihood an individual in poverty will have a fixed or growth mindset has yet to be conducted, research on the impacts of poverty on self-esteem, confidence, and feelings of self-worth suggests that those in poverty *may* be more susceptible to having a fixed mindset. In the previous section, we discussed how poverty can create feelings of shame that result in decreased levels of both confidence and feelings of self-efficacy. Other research builds on these notions. Many studies have shown that those living on low or insecure incomes experience declines in their self-esteem.[37] Research on

disadvantaged individuals in the U.K. showed many viewed themselves as "not clever."[38] Diane Reay argues, "Class is deeply embedded in everyday interactions, in institutional processes, in struggles over identity, validity, self-worth and integrity even when it is not acknowledged."[39]

While we cannot confirm the association, it would not be a big leap to say that poverty, and its effects on confidence and esteem, could play a role in determining whether an individual develops a fixed or growth mindset. We must also keep in mind that many low-income individuals have had bad experiences with education and the classroom. Individuals with these experiences may come to believe that they are unintelligent and that they cannot learn. Helping individuals overcome these negative perceptions of their ability and the belief that the ability to learn is innate is, thus, also important.

Identity and our views of ourselves can change in different social situations and in periods of uncertainty. While not all low-income individuals have fixed mindsets, many likely do. Helping workers and students understand these concepts and their brains prior to an educational or training engagement or problem solving task is thus worthy of consideration for any educational initiative and could be particularly valuable for initiatives serving individuals with low confidence or negative experiences with education. Similarly, building an understanding of the rules, systems, and frameworks that shape all of our choices regardless of income level is also necessary, and is discussed in the next section.


## RULES OF THUMB AND COGNITIVE BIASES

Though poverty can shape our decisions and actions, other factors can as well. Everyone has strategies – rules of thumb or heuristics – to guide their decisions and behaviors. We often rely on these rules of thumb during periods of uncertainty. People can, however, over rely on heuristics, which can elicit cognitive biases that can shape our choices or actions in ways that seem irrational.[40] Understanding these biases is also important to the workforce field. Numerous cognitive biases exist and we encourage readers to learn more about how these shape decisions. In this section, we highlight a few prominent biases.

One common strategy or rule of thumb individuals often use in making choices or estimates is to rely on an initial piece of information as an anchor or reference point.[41] These anchor or reference points provide individuals with a point of comparison upon which to evaluate choices and make decisions.[42] Past experiences or small bits of contextual information can serve as reference points. We often use the information most easily available to us such as information from the media or past experiences as reference points. Using this information too much can result in availability bias. Many people, for example, develop an irrational fear of flying because of the media's heavy focus on airplane crashes even though traveling by car is exponentially more dangerous. Some research has shown, for example,

that individuals greatly over-estimate the costs of tuition at least in part because their reference point is the large tuition rates that often get cited in the media for expensive private institutions rather than the average net tuition costs after financial aid is considered.[43] Individuals who have had a negative educational experience previously may use this as their anchor for future educational decisions.

Anchor points can also contribute to a preference for the status quo. Status quo bias rejects change in favor of the current situation. Individuals forced to choose among various options will often stick with the current state of affairs as a change is perceived as a loss. Status quo bias has been seen to rise as the number of alternatives increase. Status quo bias is also intertwined with an individual's previous experiences and psychological commitments. For example, an individual may remember an instance where steering away from the status quo led to negative consequences, and now he or she fears similar regrets when presented a new choice. One may also prefer the status quo as a way of justifying his or her previous choices and actions, even if those choices lead to undesirable outcomes. Or one simply may prefer the status quo in an effort to maintain consistency, reduce mental stress or discomfort, and increase feelings of control.[44]

Status quo bias reflects another prominent cognitive bias we often have, which is our preference to avoid losses. Loss aversion theory proposes that individuals prefer avoiding losses to obtaining gains.[45] According to Tversky and Kahneman, "[l]osses loom larger than corresponding gains."[46]

Our choices are also shaped by a preference for short-term gains. We often discount future outcomes relative to present rewards. In other words, we have a strong preference for immediate payoffs or rewards compared to those that are in the future. The resulting lapse in willpower from discounting can impact a variety of long-term outcomes related to our health and finances.[47]

Finally, individuals also rely on other people and groups to inform their choices. Sometimes referred to as "following the herd," people may choose based on what they see the majority of others doing or in response to input or pressure from a larger group.[48] Whether we like a person or organization also determines whether we will respond positively to their suggestions, product or service, or requests for us to make a change. As a result, we may be biased to deciding or acting in ways depending how likeable we believe the people who request us to choose or behave in a certain way are.[49] In the next section, we discuss how such biases, as well as issues with scarcity and identity, can be addressed to help guide individuals' choices and actions.

# IV. BEHAVIORAL AND PSYCHOLOGICAL INTERVENTIONS TO CONSIDER IN DESIGNING EDUCATION AND EMPLOYMENT SERVICES

The potential impacts of poverty and cognitive biases on an individual's choices and actions can have considerable consequences. Mitigating these impacts, however, can sometimes be achieved through relatively small and inexpensive interventions. Below are described some of these interventions to provide some insight for how the workforce development field may improve services to help individuals make better decisions, follow through on their choices with appropriate actions, and even improve their performance in the classroom or workplace. While the focus of this report is on improving services for those in poverty, many of the interventions we discuss in this section can be applied in a wide variety of settings and with all individuals, regardless of socioeconomic status.

The strategies and interventions discussed below are offered more as food for thought rather than as prescriptions for improving workforce strategies. The interventions a workforce initiative decides to employ will ultimately depend on the unique context and circumstances of the initiative and what problems its participants are encountering that are harming their participation or chances of success (*Appendix A*

*does provide some guidance on what interventions may be appropriate in specific circumstances*). The section discusses the following interventions and strategies:

- **Providing decision-making, goal setting and planning support**

- **Removing hassle and using reminders**

- **Using public and private commitments**

- **Choice architecture: Structuring and framing choices**

- **Identity priming**

- **Using social proof and social influence**

- **Encouraging growth mindsets**

## PROVIDING DECISION-MAKING, GOAL SETTING & PLANNING SUPPORTS

Regardless of how many choices are offered, or how they are offered, individuals often benefit from some guided decision-making support. Most of us ask for advice when we face a tough decision. The advice becomes even more important when the decision is complicated, important, has long-term implications, or if the decision needs to be made quickly. Making important decisions when we are tired, stressed, or pre-occupied with other things can also be difficult.

Many workforce development initiatives already offer decision-making, goal setting, and planning supports through case management, career navigation, and other forms of one-on-one assistance, but we include it here to underscore its importance. Decision-making assistance offered when education, employment, and career choices are present for those in poverty can be critical. Related decisions about how to handle child care, transportation, and other issues may also deserve attention and support. Workforce initiatives should also consider how they provide feedback to individuals on these decisions. According to Behavioral Interventions to Advance Self-Sufficiency (BIAS) project, "[p]roviding feedback at regular intervals makes it easier for individuals to monitor and regulate their behavior."[50]

Helping individuals to develop short- and long-term goals and plans can also be helpful, especially to those low-income individuals who are consumed by the instability and the worries and stresses of the moment. Low-income individuals may "spend much of their time reacting to crises and can feel there is little value in trying to think ahead since their plans never work out."[51] Helping individuals develop and identify goals, detailed step-by-step plans for meeting those goals, interim milestones, potential barriers that could arise to derail progress, and potential strategies for addressing those obstacles should be components of any workforce or educational strategy. Again, mechanisms and communication that offers feedback on individuals' planning and progress toward those goals should also be strongly considered.

**REMOVING HASSLES AND USING REMINDERS**

Individuals with reduced mental bandwidth may struggle to navigate overly complex processes and systems. Processes that include many different steps and tasks may not only discourage participation among those who are low-income, but also those who are experiencing scarcity of time. Those in poverty may also be distracted by more immediate concerns or tasks, which could lead them to forget or neglect other responsibilities. Workforce development initiatives should consider how removing hassle and using reminders with their participants may improve their services and programs:

- **Removing Hassles**
  Simplifying processes and procedures in workforce development activities holds promise for improving the uptake of services. Relatively minor factors that unnecessarily lengthen or complicate a process or activity can dissuade participation. These minor situational details, which are often perceived as trivial and sometimes referred to as hassle factors, can make certain tasks harder to complete.[52] Hassle may encourage individuals to procrastinate or delay a decision or action.[53] Filling out extra paperwork or forms, locating and providing additional documentation, traveling to several locations to complete one task, or even an extended waiting period may un-necessarily add extra hassle to what should be a streamlined or straightforward process. According to Crittenton Women's Union, "Any design efforts that decrease the time needed to apply for, maintain, travel to, or participate in programs or services should increase the likelihood of successful client participation and improved outcomes."[54]

- **Using Channel Factors**

  While small situational details or hassles can derail decisions and actions as noted above, they can also be used in a positive manner. Pyschologist Kurt Lewin called these small situational details "channel factors", and believed they could be used to encourage particular behaviors.[55] One study showed that informational materials about vaccinations that also included a map of where to get the vaccination increased the likelihood that someone would go to get a tetanus shot.[56] SJI's dance steps brochures follows a similar logic to help potential college students navigate enrollment processes at Seattle Colleges.

  An example brochure is available here: http://www.seattlejobsinitiative.com/wp-content/uploads/SJI_insert_SSCC_May2012_v2.pdf

- **Providing Reminders**

  One of the easier interventions program designers can use to help encourage low-income individuals to participate in job training and workforce programs is simply to provide reminders of scheduled appointments, deadlines, and other important activities. Participants in workforce development initiatives have a variety of meetings and classes to attend and deadlines to meet. Program or college orientations, testing and assessment sessions, meeting with case managers and career navigators, registration and financial aid deadlines, job interviews, and other participant requirements can comprise what can be a burdensome set of requirements. Staying on top of all of these commitments, as noted earlier, can be complicated by individuals with depleted attention, cognition or self-control.

  Workforce development initiatives may consider experimenting with email, mail, text, phone, and in-person reminders when important deadlines loom or when a scheduled event draws near. Providing participants with task checklists or a calendar of important activities and deadlines and encouraging them to place it on the refrigerator or another visible part of their home may also be helpful. IN FOCUS 1 (on the following page) discusses how reminders and the removal of hassle have been used to encourage college students to complete the Free Application for Federal Student Aid (FAFSA).

## IN FOCUS 1: ENCOURAGING COMPLETION OF THE FAFSA

Applying for financial aid to attend college is full of pitfalls and headaches for many individuals. Financial aid, however, is critical for many individuals, and the lack of it can lead many to cease their pursuit of a post-secondary education. Research has shown that millions of low- and moderate-income undergraduates miss the opportunity to receive financial aid each year because they do not complete the Free Application for Federal Student Aid (FAFSA).[57] Some individuals are unaware that they need to complete it to receive government aid and others are put off by the hassle of the long process of completing the FAFSA. These issues have led to many calls to simplify the form and to provide more assistance to students to complete it.

Recent experiments have shown that low- and moderate-income individuals will complete the FAFSA in higher numbers if they are aware of the need to complete the form and if the process is made easier. In one study, low- and moderate-income families receiving tax preparation assistance from H&R Block were also offered assistance with the FAFSA. Individuals who accepted the offer received a FASFA form that was partially pre-populated with information based on the tax information they had just provided, and received guided assistance in completing the rest of the form. Most families completed the FAFSA in less than 10 minutes with the assistance and pre-populated form. The intervention increased college enrollment rates by 30 percent among high school seniors and 20 percent for young adults out of high school. The largest impacts occurred for individuals with annual incomes of less than $22,000.[58]

College students also need to renew their Free Application for Federal Student Aid (FAFSA) each year to maintain their aid, but re-filing rates are often low for community college students and those enrolled in certificate programs.[59] Researchers recently examined how reminders about the FAFSA delivered through text messages could improve FAFSA renewal and college persistence. The research found that community college freshman who received a series of text messages that reminded them to re-file the FAFSA, provided information on where to obtain financial aid assistance, and offered assistance with financial aid were 12 percentage points more likely to persist into the fall of their sophomore year than a comparison group who did not receive the messages. The text message intervention cost approximately $5 per student.[60]

## USING PUBLIC AND PRIVATE COMMITMENTS

Individuals who receive services from a workforce organization may also be asked to make public or private commitments about behaving in a particular manner or achieving a particular goal. Research has shown that people who make promises to do something often complete the task. Individuals want to believe and appear that they are consistent and will act to maintain this belief and appearance in public or private.[61]

Many workforce organizations ask clients to commit to goals and actions. Capital IDEA, a workforce nonprofit organization in Austin, Texas, provides financial support and wrap-around supports to low-income adults to pursue higher education. Capital IDEA participants sign an agreement that asks them to commit to completing their education, reaching their goals, and giving back to the community. The document includes nearly 30 statements that participants must agree to, including the following:

- I am required weekly to communicate with my counselor.

- Arrive to appointments and classes early and stay through the entire appointment or class. In case of emergency, I will notify my counselor and/or instructor and will be responsible for making up the material or meeting I missed.

- I will seek and accept employment in the field I have trained for and I will meet with the Placement Coordinator once a week after graduation until I secure employment.

- I understand that my education is being funded by both public funds and private donors that have decided to invest in me and the community. I am expected to give back to the community. Some ways I can give back are by volunteering in the community, mentoring new students, tutoring, etc...[62]

## CHOICE ARCHITECTURE: STRUCTURING & FRAMING CHOICES

The culture of the United States highly values choice. From shopping at the grocery store to choosing a doctor to selecting a college major, our society is often structured around providing as many choices as possible. Analyzing the benefits and disadvantages of choice, researchers at Cornell University and Columbia University said, "The concept of choice is fundamental to people's sense of themselves and of their community, especially in independent societies, such as the United States, that cherish the values of autonomy, individuality, and self-determination."[63]

Certainly, choice has its upsides and some research has shown choice can increase an individual's perception of self-determination and intrinsic motivation, improve feelings of self-control, and foster competition.[64]

Too much choice, however, can be detrimental for decision-makers. More options can make it more likely that individuals refrain from making a choice at all, are dissatisfied with their choice, or are simply overwhelmed cognitively with the task of deciding.[65] "Behavioral economics suggests that too much choice is cognitively taxing, and giving people too many choices may actually overwhelm them."[66]

Individuals who are low-income, stressed, and/or emotionally unbalanced may be particularly vulnerable to making detrimental decisions when given too many choices, as their mental bandwidth, described earlier, is taxed. Research in India on the inter-relationships between poverty and decision-making conducted by Dean Spears concluded that "choosing under poverty could impair performance across the goal-seeking tasks for which cognitive control is important."[67] The cognition required to make difficult economic choices and decisions can be depleted by the stress and conditions of poverty.

As described in the previous section, individuals often also face cognitive biases when making choices. For workforce development and job training programs, choice and decision-making deserves careful attention:

> "Students have to choose between hundreds of majors, careers, courses, schedules, and electives, often with minimal guidance or counseling. Many times, students end up making choices that aren't in their best interest. For example, they may choose courses that don't allow them to progress through their program at an efficient pace or don't prepare them well for the workforce."[68]

Structuring options appropriately, while preserving choice and individuals' ability to plot their own future, can be critical in helping low-income individuals to pursue educational or employment opportunities. "Nudging" alters the way choices are presented to individuals:

> "A nudge is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic consequences. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level [to attract attention and hence increase likelihood of getting chosen] counts as a nudge. Banning junk food does not."[69]

Nudges and strategies for workforce development initiatives to consider to help individuals overcome the effects of scarcity and address cognitive biases such as status quo bias, loss aversion, and discounting include:

- **Default Options and Prompted Choices**
  A default option is the choice an individual receives if he or she does not opt out or change the selection.[70] At some companies, for example, individuals are automatically enrolled into participating in the company's 401(k) plan. They must explicitly choose to opt-out if they wish not to participate. Defaults can be used to remove the burden

of making a decision or to break the status quo. An organization providing workforce services may choose to automatically enroll participants who have signed up for services in a job search class, job club, or introduction to community college class. Defaults are most appropriate when individuals may prefer not to choose, when the choice occurs in a complex or unfamiliar area, and when needs and preferences are the same across the population of focus.[71]

In some cases, a prompted choice may be more appropriate. For example, an individual filling out paperwork to receive food stamps or subsidized housing may be asked whether they would like to also enroll in an introduction to community college class.

- **Categorizing or Grouping Choices**
  Another technique to consider when many options exist is to bucket or reduce the options available to individuals. Sometimes too many choices can simply overwhelm an individual and providing more options can make it less likely that an individual will choose.[72] To prevent this from happening, workforce development initiatives may consider putting choices in to buckets or groups so they are more easily understood.

- **Setting Appropriate Anchoring and Reference Points**
  Poor or inaccurate reference points or overreliance on past experience as a predictor for future outcomes such can discourage positive behaviors and actions. Reference points, however, can also encourage more positive behaviors. One study showed that a college testing service that offered to send students' scores to four colleges instead of three led to students applying to more colleges.[73] Workforce initiatives should consider what myths, falsehoods, negative experiences, or inaccurate information individuals may encounter that could be serving as poor reference points. Organizations should ensure quality, accurate information is provided to individuals early on in the decision-making process to help them form appropriate anchors. Organizations may also have to work to improve confidence, self-esteem, and expectations among individuals whose previous negative experiences in school, work, or training are shaping their expectations.

- **Focusing on Gains or Reframing Choices Around Loss**
  Focusing on the positive gains of a particular decision or action can help avoid loss aversion. Individuals may not respond, however, to opportunities to gain skills, obtain employment, or secure an education. If a workforce initiative is struggling to enroll individuals or participants are not following up on opportunities presented to them, the initiative may want to test different ways of communicating and framing the opportunity around gains and losses. Loss aversion theory, noted earlier, suggests individuals may sometimes react more strongly if programs or opportunities are framed around

a potential loss (e.g. "Don't lose the chance at a college education") versus a gain (e.g."Obtain a college education").

- **Provide an Early Reward**

  Status quo bias and our preference for short-term gains over long-term outcomes can impede individuals' participation and progress in a variety of areas. To break the status quo, and take advantage of people's bias for short-term gains, workforce organizations should consider how early wins or early rewards can be provided to engage individuals and set them on a path towards change. The design of the rewards must be considered as individuals have different preferences (e.g. material reward, recognition or praise, security, power, etc.)[74]

## IN FOCUS 2: BEHAVIORAL ECONOMICS IS RESHAPING COMMUNITY COLLEGES

Many community college leaders and researchers are now beginning to call for changes to college processes and systems, and many of these changes are the result of what we're learning from behavioral economics. According to Thomas Bailey at the Community College Research Center, "One of the fundamental insights in the last 20 years has been that nobody does that well if they're faced with a confusing array of options."[75] Bailey extrapolates this to the community college setting:

> "Community college students have a plethora of courses, majors, degrees, and certificate options to choose from. Many are first-generation, low-income students from families that don't have a lot of experience with higher education. Colleges, meanwhile, don't have the resources to provide them much guidance. All of that leads to confusion, discouragement, and wasted resources. There are services available to students, but they are pretty much on their own figuring out which to use and how to access them. The basic idea for guided pathways is that we'd like to have simpler, more coherent programs of study. We need to do a better job of helping students decide which path they want to be on."[76]

Stella & Charles Guttman Community College in New York City, founded in 2011, is one such initiative using more structured choices, mandated activities, and decision-making support to students. The college's primary aim is to "prove the educational outcomes of a diverse population of first-generation and low-income students historically underserved by primary, secondary, and postsecondary educational systems."[77] Behind this effort is a "new structure and new curriculum that it hopes will

greatly improve students' chances of earning an associate degree and transferring to a four-year college."[78] Some of the college's key design decisions include:

- The college offers only five associate degree options. The options include business administration, human services, information technology, liberal arts and sciences, and urban studies.

- Students are automatically enrolled and must participate in a summer orientation and preparatory classes. The summer bridge program includes an introduction to college-level reading, writing, and math; opportunities to set and identify college and career goals; and a group research project that helps students begin to build a peer support network.

- A common core curriculum that emphasizes hands-on learning and building skills in reading and writing, math and statistics, and science. Classes also contextualize learning around the culture, history, current circumstances, and future of New York City.

- Required full-time enrollment for the first year.

- Mandated meetings with advisors, study groups, and peer mentors.

- Required participation in weekly advisement seminars that focus on the skills development in time management, financial literacy, and other skill areas that are critical to college and career success.[79]

Social influence and peer support are other important concepts related to behavioral economics. Guttman's peer mentoring program has peer mentors devoted to academic success, admissions and access, and leadership and service to help students successfully transition to the college and coach and motivate students throughout their education at Guttman.[80] Guttman reports a one-year retention rate of 74 percent for students who began in Fall 2012.[81] Early signs are that the college's set goal of a 35 percent graduation rate after three years will be surpassed.[82]

Other community colleges are also adopting strategies that align with concepts from behavioral economics. Many colleges and their partners now offer more intensive career navigation assistance that helps individuals set goals, navigate the college system, and make educational and career decisions. Some colleges and their partners in the workforce system are also simplifying enrollment, registration, and financial aid processes to remove hassle, more carefully structuring degree and certificate options, and using cohort and learning community models to help students develop supportive social networks and a stronger sense of identity as a college student.

**IDENTITY PRIMING**

As discussed earlier, individuals have many different identities that are constructed based on the social groups to which they belong. These identities can cause certain emotions and feelings that can impact choices and actions. Identity priming strategies that encourage individuals to bring forth or recall identities that are linked to success and positive thinking can help improve motivation and behaviors.[83] In educational settings, "when positive identities are primed, there is real promise for impacting student performance for the better."[84]

One research study examined how individuals in poverty performed on tests of cognitive performance after being asked to either describe an experience that made them feel successful or to describe their daily meal routine. Individuals who related an experience that made them feel successful or proud outperformed those individuals who recalled their meal routine on the cognitive tests.[85] Identity priming, on the other hand, can also encourage the recall of negative identities and lead to poor performance.

A study in India, where the caste system is prominent, showed lower caste individuals whose identity was primed to bring forth their association with being lower caste performed more poorly on a cognitive task.[86] In another study, Asian-American women were primed with two identities before taking a math assessment. Women whose Asian identity (common stereotypes hold that Asians have superior math skills) was activated outperformed women whose gender identity (common stereotypes hold that women have inferior math skills) was activated.[87] IN FOCUS 3 (on the following page) focuses on how a workforce initiative in Virginia helps individuals create more positive identities.

An individual's identity and the emotions and feelings he or she derives from his or her identity in any moment is important for workforce initiatives and their staff to consider during various activities. An individual's success on tasks such as skills assessments, goal setting, learning in the classroom, and job interviews may be impacted by how that individual sees himself or herself at that moment. Identity priming can help individuals to develop positive identities and attitudes at critical moments:

- **Priming Positive Identities**
  People connect to various social identities, such as college student, father, carpenter, public housing resident, or American. People's feelings and actions depend in part on which of their social identities is active or salient at the given moment. Identity priming attempts to activate or highlight a specific social category to which an individual belongs in order to influence a targeted outcome or behavior. People reminded of an aspect of their identity often act in ways that align with internalized stereotypes and goals that are associated with that identity.[88] Both negative and positive identities can be primed.

  For workforce development initiatives serving low-income individuals, identity priming may be used to help individuals call forth more positive views of themselves instead of negative identities that societal stereotypes may have caused them to internalize, such as poor and dumb, high school dropout and unemployable, criminal and violent or untrustworthy, or welfare recipient and lazy. One simple strategy is to ask individuals to call forth positive identities through discussion or writing prompts that ask them to recall instances where they were successful or proud of an accomplishment. In some instances, individuals may be particularly proud of their role and success as a parent, which could serve as one identity to prime though it is important to note that positive identities will vary among individuals.

  Some individuals served by workforce development initiatives and community colleges may have difficulty associating themselves with an identity as a college student. Workforce programs should consider how communications with these individuals can reinforce that they are college students and that they belong in college to encourage them to build that identity.

## IN FOCUS 3: CREATING POSITIVE IDENTITIES AT TRAINING FUTURES

Training Futures is a six-month training program designed to prepare low-income individuals for careers in professional office settings. One hallmark of Training Future's approach is the use of a transformational learning model called Imaginal Education. The approach, initially developed by the Institute of Cultural Affairs and Training, Inc., grew out of the work of Kenneth Boulding, author of *The Image: Knowledge in Life and Society*. Boulding defined five principles for transformational learning including that people operate out of images, images cause behavior, messages create images, images can change, and behavior changes are a result of changes in images.[89]

Training Futures is structured around the belief that many of its participants initially have self-images that are negative. They see themselves as uneducated or unskilled, unable to learn, and unable to fit into professional work environments. These images lead to low confidence and a feeling of powerlessness over their own lives and opportunities.

To change these images and individuals' self-identities, Training Futures uses a number of approaches. First, training occurs in a professional office setting in a popular business district. The training immerses individuals in this setting to not only expose them to the business environment and culture they are being prepared for, but also to show them that the program believes in investing in their futures. Second, the curriculum teaches basic, business, and life skills simultaneously through a hands-on approach that Training Futures believes challenges and motivates participants to excel and grow. Third, Training Futures participants are enrolled in Toastmasters, a public speaking group, to improve their communication and self-esteem. Fourth, Training Futures' classes are exposed to over 500 motivational quotes while in training, which they dissect and discuss. Finally, participants earn college credit, which is important because many never associated themselves with the term "college student," and the awarding of credit and recognition that they are college students helps them integrate that image into their identities.[90]

Another critical component of Training Futures is the structured feedback the program provides to participants. As part of the program's immersive model that simulates the work environment, participants complete timesheets, must dress professionally, and follow discipline policies around punctuality, behavior, and attendance. Participants are given regular performance reviews just as they would receive in the workplace.[91]

**USING SOCIAL PROOF & SOCIAL INFLUENCE**

Different aspects of our environment and surroundings cue us to behave in certain ways. Individuals often make choices based on the input of their peers or observations of those in the same social group. Peers who belong to the same group as us influence our decisions, and in some cases, their disapproval, skepticism, or indifference about a particular choice or behavior can lead us to inaction.[92] The influence of peers and social networks, however, can also be leveraged in positive way. Some strategies for the workforce development field to consider include:

- **Social Proof**
  We often rely on information about how our peers act in helping us to determine what choices to make and how to behave. Ambiguous situations, in particular, provide instances where individuals look to their peers to determine their own behavior. Social proof, as an intervention, includes providing detailed and accurate information about how one's peers behave in the same situation.[83] For instance, a public housing authority that wants to promote the idea of work and employment among unemployed residents may highlight through its communications and direct interactions with residents that most residents do work.

- **Social Influence**
  Social influence is another intervention that is closely related to social proof. Instead of using information about one's larger circle of peers, however, social influence tries to use persuasion from an influential peer or authority figure to help promote a specific behavior.[84] Obviously, those designing an intervention must first understand who has a position of influence or authority that an individual would find persuasive. Many workforce initiatives develop and utilize alumni groups to conduct outreach and help encourage other individuals in their communities to participate in job training or education programs. IN FOCUS 4 discusses how a welfare-to-work project for public housing residents used social influence to build community support for employment.

IN FOCUS 4: DEVELOPING COMMUNITY SUPPORT FOR WORK USING SOCIAL INFLUENCE IN PUBLIC HOUSING

Jobs-Plus is a welfare-to-work project designed to improve the employment and earnings of public housing residents across six cities in the U.S. A key program element Jobs-Plus sites adopt is building support for work amongst public housing communities. The focus on developing community support for work was adopted because many housing residents live in low-income communities that are isolated from the professional networks individuals need to learn about job openings, and because some high-poverty communities lack an environment that actively supports or encourages work.[95]

Community coaches, who are public housing residents, promote work to their neighbors and conduct "resident-to-resident" outreach. Coaches are also known as community outreach workers, court captains, or community coaches depending on the Jobs-Plus site.

Though some variation in approach exists across the different Jobs-Plus sites, coaches generally provide information to their fellow residents about Jobs-Plus programs and job opportunities, and communicate the value of employment and careers to their peers. Coaches hand out flyers, go door-to- door to provide information, and organize events. They help publicize job and health fairs, provide information on the Earned Income Tax Credit, raise awareness about job openings, and help build community by organizing other events such as holiday or back-to-school celebrations. Coaches also serve as a feedback loop in capturing the concerns of residents about the Jobs-Plus initiative.[96]

**ENCOURAGING GROWTH MINDSETS**

How we view ourselves and our potential is also linked to the social groups to which we belong and our identity. Perceptions about our ability to learn are a function of whether we have a fixed or growth mindset. A growing body of research shows that mindsets can be changed, which can lead to changes in behaviors. Simply teaching individuals that their brains are malleable and that their intelligence is not fixed has demonstrated positive outcomes. In one experiment involving over 250,000 students learning math through the Khan Academy website, students who received a growth mindset statement above the math problems they were studying increased the number of math concepts mastered by three percent compared to a randomized control group. The growth mindset interventions included embedded statements such as "Remember, the more you practice the smarter you become," and "If you make a mistake, it's an opportunity to get smarter."[97]

Brief everyday interactions that provide verbal feedback and praise an individual's work and process, rather than their ability, can help individuals develop growth mindsets. More structured theory-based interventions such as classroom-based or internet workshops that occur over one or multiple class sessions and teach individuals about their brains and how brains can grow stronger have improved growth mindsets as well.[98]

A few prominent studies of community college and university students have shown growth mindset interventions have improved performance. One particular study of community college students showed that students who participated in a 30-minute online mindset intervention outperformed a control in a semester-long math class. Students who received the intervention read an article that described how students can become more intelligent through study and how the brain grows with practice. The intervention reinforced the study through a writing exercise. Students who received the intervention were more likely than control group students to earn a satisfactory grade in math.[99]

IN FOCUS 5 (on the following page) describes how Productive Persistence, a new model for teaching developmental math and statistics, incorporates a growth mindset intervention.

We suggest more workforce organizations develop and test strategies to encourage growth mindsets:

- **Communications, Workshops, or Tutorials on the Brain & Learning**
  Some low-income individuals served by workforce development initiatives may have come to believe they cannot learn. Previous educational experiences that were unsuccessful, and the stigma of those in poverty as unintelligent, may have led some individuals to internalize beliefs that they are unable to learn new information in the classroom or workplace. These internalized beliefs may foster a fixed mindset among these individuals. Workforce development initiatives should consider how they can counteract these feelings and lack of confidence through communications, workshops, or tutorials that encourage growth mindsets and inform these individuals about their brains, how brains can grow stronger, and how feelings of frustration and struggle during the learning process are normal and indications that the brain is growing in response to new information.

  To inform the design and delivery of growth mindset interventions, we suggest readers review the Mindset Kit developed by the Project for Education Research That Scales (PERTS) at Stanford University, available at https://www.mindsetkit.org/growth-mindset.

## IN FOCUS 5: GROWTH MINDSET & PRODUCTIVE PERSISTENCE

The Carnegie Foundation for the Advancement of Teaching and the Charles A. Dana Center at the University of Texas-Austin have partnered with 28 community colleges to reform how developmental mathematics is taught. Statway and Quantway, the two pathways developed, are year-long academic courses that integrate developmental and college-level math into the curriculum.[100]

A critical approach of the program is tackling the socio-emotional and psychological barriers students face. Many students hold preconceived notions that they are not "math people" or that they don't belong on a college campus.[101] The approach, known as productive persistence, helps students develop the "skills and tenacity that [they] need to succeed in an academic setting."[102] Productive persistence is based on five psychological principles including:

- Students have skills, habits and know-how to succeed in college setting.

- Students feel socially tied to peers, faculty and the course.

- Students believe the course has value.

- Students believe they are capable of learning math.

- Faculty and college support students' skills and mindsets.[103]

These central tenants are executed through a variety of activities and discussions, a few of which we summarize. During the first three weeks of class, students are engaged in activities and discussion designed to begin to shift their attitudes and self-perceptions of math skills. As part of this process, they may read and discuss an article on how the adult brain can grow, and in particular how it may grow as a result of learning new mathematic or statistical concepts.[104]

The culture of the classroom is also based on helping individuals adopt a growth mindset. Rather than the instructor serving as a sole source of knowledge where he/she constantly answers students' questions, productive persistence classrooms are designed to encourage students to struggle through the difficulties of learning math. Students are made aware that feelings of struggle and frustration are a natural part of the learning process, not an indication of their ability or knowledge. Students spend a great deal of time in the class in small groups and collaborating as a "learning team."  This encourages a sense of social belonging and may help improve motivation. Finally, the math and statistics are taught in a real-world context that links directly to students' life situations and experiences to illuminate the value of the content to the students.[105]

# V. TESTING BEHAVIORAL INTERVENTIONS

In the previous section, we discussed some of interventions and strategies workforce development initiatives may consider as options to improve their programs and services for those in poverty. These strategies, however, are not applicable to all workforce development organizations. As we have noted, people's experiences with poverty are not universal and being low-income impacts people in different ways. Some individuals may be more susceptible to its negative impacts on their cognition and identities than others. Other individuals may be immune from its impacts. Obviously, not all low-income individuals are the same. Their responses to the strategies outlined in the previous section may differ as a result. That is to say, context and environment matter a great deal in deciding what mix of interventions or strategies to use.

Before deciding on any changes to a workforce program or service, it is important to first understand this context, and in particular the problem or challenge that the change will be designed to address. The Behavioral Interventions to Advance Self-Sufficiency (BIAS) project, an initiative of the U.S. Department of Health and Human Services, has adapted a framework from Ideas42, an organization that uses principles from behavioral economics to tackle social problems, for diagnosing areas where a program or service may not be achieving positive outcomes and for testing an improvement to that program or service. The behavioral diagnosis and design process includes four phases:[106]

1. **DEFINE THE PROBLEM**

   The first step in the process is to define the problem in relation to a desired outcome without speculating as to its cause. At this stage, qualitative data from interviews or focus groups with staff and clients, and quantitative data about client outcomes, will likely be used to pinpoint what the problem is. The problem may be redefined as the diagnosis and design process proceeds through subsequent steps and more information is gathered. Some potential problems a workforce development initiative may encounter include clients:

   - Failing to enroll or follow up on services after an orientation session.

   - Missing advising or counseling sessions, classes, interviews, or other important appointments or deadlines.

   - Experiencing difficulty developing long-term goals or plans.

   - Dropping out of an education or training program.

   - Failing to participate in job search activities.

   - Quitting their job or being fired after being placed in employment.

2. **DIAGNOSE WHY THE PROBLEM IS OCCURRING**

   The second phase involves continued use of qualitative and quantitative data to hypothesize about what behavioral reasons are causing the problem. To uncover these reasons, also known as behavioral bottlenecks, the framework suggests first understanding and pinpointing where individuals' participation, behavior, or success seems to falter in the program or process. Once those drop off points are identified, the decision points and actions leading up to those drop off points are mapped with the goal to "see these actions through the eyes of the participants and staff to understand how these key actors in the process perceive their actions and the choices in front of them." Unique contextual and situational factors are also considered.[107] We provide an example in IN FOCUS 6 to illustrate the diagnosis process.

## 3. DESIGN THE INTERVENTIONS

After the problem has been defined and diagnosed, ideas for behavioral interventions are identified. A single intervention or multiple interventions such as the ones discussed in this report may be designed and used to address the perceived bottlenecks.[108]

IN FOCUS 6 also discusses some the interventions Ideas42 is testing with LaGuardia Community College.

## 4. TEST THE INTERVENTIONS

The final phase is to test and evaluate the proposed interventions. If possible and appropriate, rigorous evaluation methods such as random assignment with one group receiving the interventions and another group continuing without the new interventions will provide the strongest evidence as to whether an intervention is working.[109] Due to various constraints, random assignment is not always feasible or advised. In these instances, a comparison of participants who received services prior to the new interventions with those who receive services and the new interventions could still provide indication of whether the new strategies are working.

### IN FOCUS 6: INCREASING ENROLLMENT AT LA GUARDIA COMMUNITY COLLEGE

Ideas 42, an organization that uses principles from behavioral economics to tackle social problems, has been working with LaGuardia Community College, which is part of the CUNY system of colleges, to increase the number of students who enroll in the college and begin classes. Ideas42 and LaGuardia defined the problem as being that many students were accepted into the college, but then did not enroll and begin classes.[110]

To diagnose the reasons behind this problem, Ideas42 visited the college to better understand the enrollment process from the students' perspective. They observed the testing and assessment process and the new student advising and registration sessions as these were the steps that mapped up to where the problem seemed to be occurring, which was at the point where students had to follow through and enroll. Ideas42 also looked at administrative data to pinpoint some of the drop off points and funneling of students that occurred during the enrollment process. They found that out of 44,000 students accepted to LaGuardia over a two-year period, 12,000 failed to take the initial tests and assessments. Out of the 32,000 remaining students, 19,000 did not register for

classes at any CUNY school. Of the remaining 13,000, 6,000 registered at another institution and 7,000 enrolled with LaGuardia.[111]

Through their research and observation, Ideas42 identified five bottlenecks. First, the enrollment process was full of many steps that could be confusing and present some unnecessary hassles. Second, Ideas42 hypothesized that potential students did not have a firm identity as a LaGuardia student. Third, Ideas42 believed many potential students saw their non-academic lives as the status quo or default, and entering LaGuardia may have represented a challenging shift away from the status quo. Fourth, the only positive step during the enrollment process was admission and aversive stimuli in the environment that included boring steps or negative feedback were seen as potentially discouraging. And fifth, Ideas42 found the admission to registration process to take on average 114 days, which was seen as quite long.[112]

LaGuardia and Ideas42 set forth the following goals and interventions:

- Capture the students' attention

- Simply the information students need to enroll

- Reduce the friction to action preventing students from taking the steps to enroll

- Induce the student self-concept

Specific interventions to accomplish these goals included revising email communications with students so that attending college is seen as the status quo, the most important information about enrolling is more concise and clear, and reminders about important dates and documents they would need to enroll are provided. To help students build develop identities as LaGuardia students, emails also include more inclusive language welcoming students to the "LaGuardia family", ask students to share why they're excited about attending the colleges, and encourage them to share the news that they are a LaGuardia student through social media.[113] Ideas42 and LaGuardia are currently evaluating the interventions previously discussed.

# VI. RECOMMENDATIONS

In this section, we present some recommendations for the workforce development system to consider in light of what we are learning from behavioral economics and psychology. We steer clear, however, of advising workforce organizations to use any prescribed set of interventions or strategies discussed in this report. Our view is that prescribing or dictating any exact strategy or mix of interventions without understanding the unique context and environment of a workforce initiative, the population it serves, or the problem(s) the workforce organization is trying to address would be ill- advised. Regardless of the interventions a workforce organization chooses, we also suggest, as discussed in our first recommendation, the workforce field strive to reduce the conditions of economic scarcity that impact choices and actions.

**WORK TO EXPAND SUPPORT AND FINANCIAL SERVICES**

Using the scarcity framework, we can hypothesize that the performance and chances of success for low-income individuals participating in job training and education activities is decreased due to their financial situation. Though many workforce development initiatives provide wrap-around support services including assistance with child care, transportation, housing, and educational costs, these services and resources are often insufficient and many individuals in job training programs still struggle with financial insecurity. These struggles lead many to drop out of school or training in order to work. For those who do remain in training, their economic scarcity can consume a great deal of their attention, self-control, and cognition, which are resources individuals need to succeed in the classroom and workplace.

For more individuals to be successful, the workforce development field must strive to find new resources and strategies that expand support services in order to minimize individuals' economic scarcity and financial insecurity. The workforce field should also work to integrate more financial education, coaching, and services into their services. Helping individuals build assets and savings can help them increase their monetary "slack" so they can better weather economic shocks such as a car breaking down, a high utility bill, or a medical expense.

**TAKE TIME TO UNDERSTAND AND DIAGNOSE THE PROBLEM**

As described in the previous section, the first step in designing an intervention using principles from behavioral economics is to understand and diagnose the problem the workforce initiative is facing. In order to diagnose the problem, workforce initiatives will need to have strong data systems that allow them to precisely identify where in the program or process their clients or potential clients are not meeting the program's desired outcomes. Workforce initiatives will also need the capacity to conduct interviews and focus groups with clients and other stakeholders to gather qualitative information about why the strategy being implemented is not working or producing the intended results.

Finally, not all problems with program and service design and delivery can be addressed using the strategies outlined in this report that aim to change individuals' choices and actions. Other programmatic challenges around issues such as employer engagement and systemic issues such as the employment barriers ex-offenders face in the labor market should also be weighed and considered in conjunction with any factors related to individuals' choices and actions.

**BUILD IN EVALUATION WHEN TESTING NEW INTERVENTIONS**

Not all interventions outlined in this report will work in all situations with all clients. The mix of strategies used will also vary depending on the problems being solved. Using these interventions will require a certain amount of trial and error and piloting of various approaches. Workforce initiatives must build systems and processes for evaluating what interventions are working and not working. In instances where workforce initiatives lack the capacity for evaluation, we encourage them to work with local academic institutions or evaluators to pilot and test any new strategies.

**USE COMMON SENSE APPROACHES TO IMPROVE DESIGN AND DELIVERY OF PROGRAMS AND SERVICES**

Though a lack of understanding about the unique issues and contexts of workforce initiatives prevents us from recommending precise interventions to use, we do suggest all workforce initiatives consider some of the general approaches outlined in this report. Removing hassles by simplifying forms and processes that participants must complete to receive services or enroll in a program is good practice in any professional environment that serves a customer or client. Providing help with decision-making, goal-setting and planning to support individuals in determining their education and career paths is rather innocuous and would benefit individuals at all income levels, but may be particularly helpful to those who are experiencing economic scarcity.

## CREATE FRIENDLY AND SUPPORTIVE SERVICE ENVIRONMENTS AND CLASSROOMS

Another common sense goal for the workforce field to aspire to is to create friendlier, more supportive, and professional learning and service environments at One-Stop Centers, community colleges, and other workforce organizations that help remove any stigmatization of those in poverty to minimize any feelings of shame and improve individuals' self-esteem and confidence. Too often, programs and organizations designed to serve those in poverty persistently remind their clients that they are poor or low-income. Some programs may reinforce negative stereotypes about those in poverty or are founded on distrust. Food stamp recipients, for example, are fingerprinted in some states or must endure home visits to ensure they are really low-income.[114] Actions such as this can prompt negative identities and feelings of alienation among those being served.

> "…welfare programs may benefit from triggering more positive attitudes. For example, evidence suggests that trust may help people feel worthier and typically encourages reciprocity. Instead, current programs often present an adversarial tone, accompanied by monitoring concerns and low expectations. Although money is being transferred, no goodwill is earned. Changes that earn goodwill have the potential to affect not only take-up, but also compliance with other aspects of program participation, such as job search, attendance, and further referrals."[115]

Bertrant, Mullainathan, and Shafir suggest strategies that build dignity:

> "…welfare policies that shame or stigmatize recipients are counterproductive… While dignity might not be the perfect antonym of shame or a complete antidote to shame induced by poverty, policies that dignify should help build self-esteem."[116]

Creating environments and places that promote positive identities and make people feel happy, excited, or inspired is not a lofty goal or unreasonable idea. In reality, positive service environments are just good customer service and serve to motivate individuals to be responsive to your product or idea.

**EQUIP FRONT-LINE STAFF AND INSTRUCTORS WITH APPROPRIATE FRAMEWORKS, LANGUAGE & TOOLS**

Front-line workers, such as case managers or career navigators, as well as instructors or faculty, should be taught about the new research and strategies emerging from behavioral economics and psychology. Many of those responsible for teaching, counseling, coaching, and providing services to low-income individuals have never experienced poverty themselves. For these staff, understanding poverty and its impacts is vital if they are to deliver instruction, advisement, and services effectively.

Many interventions require changes in the language and communication front-line workers use with clients. Front-line staff and instructors may find a variety of tools helpful in changing their own communications to improve participants' attitudes, outlook and performance. First, staff and instructors should be taught how to use identity priming at critical moments. Certain identities may encourage greater interest and willingness than other identities.[117] Asking participants to describe experiences where they were successful or proud of themselves at key moments either orally or in writing has been shown to be helpful for those in poverty. On the contrary, front-line workers may be trained to steer away from topics or stories that call forth negative identities or that reinforce the stigmas of those in poverty. Identity priming activities may be particularly helpful when individuals are faced with an important choice (e.g., continuing in college versus dropping out) or task (e.g., going on a job interview). Staff should also be trained and encouraged to explore how different language can lead to different results. Choices should be presented in ways that elicit positive emotions including enthusiasm and excitement.

Similarly, bringing fixed and growth mindset concepts and interventions into the classroom and case management sessions may help improve confidence and performance for some students. Again, we suggest readers use the Mindset Kit developed by the Project for Education Research That Scales (PERTS) at Stanford University as a resource to guide any growth mindset intervention. The kit is available at https://www.mindsetkit.org/growth-mindset.

Interventions outlined in this report about choice architecture, changing the status quo, using public or private commitments, using social proof, and removing hassles are other tools front-line staff and instructors should have in their repertoire to tackle the diagnosed behavioral or decision-making challenges they encounter.

## CREATE ORGANIZATIONAL AND COMMUNITY CONVERSATIONS THAT IMPROVE UNDERSTANDING OF HOW POVERTY CAN IMPACT DECISIONS AND ACTIONS

For some workforce organizations and systems, some of the research from behavioral economics and psychology may require a fundamental shift in how poverty is viewed. Many workforce organizations and communities are already using many of the principles and interventions described in this report while others may find what was discussed relatively new. Whether or not the research and interventions discussed in this report are new to your organization or your community, we hope it sparks fresh conversation about poverty and the consequences it has for the success of individuals in the classroom and workplace.

If we are to create more hospitable communities where poverty is no longer stigmatized and an individual's identity and self-worth are not influenced by income, this conversation needs to extend beyond community-based organizations to Workforce Investment Boards, community colleges, and other traditional workforce development institutions. Convenings and dialogue that explore poverty's impacts with other actors such as the K-12 system, public housing agencies, government, philanthropy, and employers are also desperately needed.

## ENGAGE THE BUSINESS COMMUNITY ON THE IMPACTS OF POVERTY

Economic scarcity can also impact people's workplace performance, particularly for individuals in low-wage work. For businesses, this may result in low worker productivity, high employee turnover, or poor customer service. Businesses that employ low-wage workers need a stronger understanding of lives of their employees and how choices and actions of their employees in the workplace may be caused in part by their financial situation. Some workforce organizations, such as WorkLife Partnership in Denver, Colorado, are beginning to engage employers around concepts of scarcity and the issues that poverty can cause in the workplace.[118] We encourage other workforce organizations to find opportunities to raise the issue of poverty and how it can impact a business's performance and bottom line with the relevant employer partners and members of the business community. We are cognizant of the difficulty in having these conversations, but believe this discourse can occur if framed appropriately around the workforce and bottom line challenges of businesses.

# VII. CONCLUSION

Research from behavioral economics and psychology can be useful in understanding human behavior and poverty, and point to some potential strategies that can be used to help individuals improve their participation and success in the classroom and workplace. Many other factors beyond the control, behaviors, and decisions of low-income individuals, however, must also be weighed.

The interventions discussed in this report cannot substitute for a poorly designed training curriculum or insufficient support services. Institutional silos among human services and workforce organizations, insufficient funding and resources for education and job training, limited transportation infrastructure, a regressive tax code, the high cost of childcare, unaffordable housing, and economic conditions that have led to a rapid and disproportional rise in low-wage work also impact an individual's ability to learn, work, and, escape poverty, and should not be ignored.

Developing a stronger understanding of poverty's impacts and using lessons from fields such as behavioral economics should not be seen as a silver bullet for the workforce field and those concerned with upward mobility, but rather a few additional tools in a larger toolbox to be used for creating more equitable systems and opportunities.

# APPENDIX A: BEHAVIORAL INTERVENTIONS BASED ON SPECIFIC DIAGNOSIS

| | | PROPOSED INTERVENTION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Change Choice Set | Reframe Choices | Reduce or Categorize Choices | Use Default | Force Choices | Use Reminders | Promote Plan-Making | Remove Hassle Factors | Change Comparison Group | Change Identity Priming Elements |
| HYPOTHESIZED BEHAVIORAL CONCEPT | Mental Accounting | X | | | | | | | | | |
| | Loss Aversion | | X | | | | | | | | |
| | Discounting | | X | | | | | | | | |
| | Choice Conflict | | | X | X | X | | | | | |
| | Procrastination | | | | X | X | X | X | | | |
| | Automaticity, Forgetting | | | | X | X | X | X | | | |
| | Hassle Factors | | | | X | X | | X | X | | |
| | Social Norms | | | | | | | | | X | |
| | Identity | | | | | | | | | | X |

SOURCE: This table is included in the Behavioral Economics and Social Policy report authored for the Administration of Children and Families, but was adapted from a graphic created by Ideas42.[119]

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