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Research BRIEF

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Using Psychology-Informed Strategies to Promote Self-Sufficiency:
A Review of Innovative Programs

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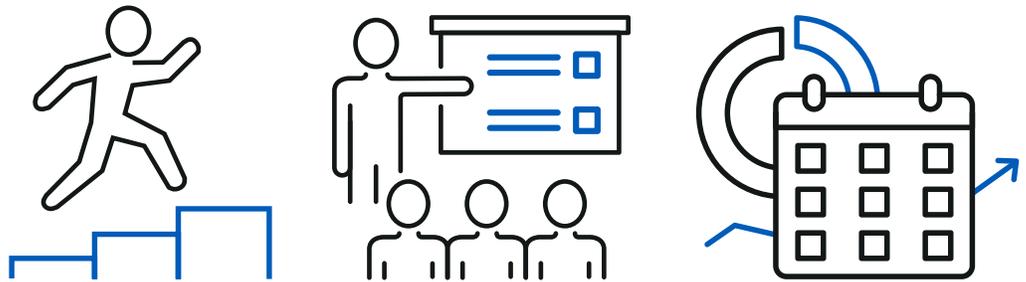
INTRODUCTION

Workforce development and human services program providers and policymakers are continually looking for new strategies to promote employment and enhance self-sufficiency for low-income adults and their families. Traditionally, programs designed to help low-income adults find and keep jobs have focused on building participants' job search skills and work experience, providing education or training, and addressing logistical barriers to employment such as lack of transportation and child care or poor physical health. In recent years, however, some programs have started looking at new ways to improve people's employment outcomes by implementing approaches informed by the science behind self-regulation.

Self-regulation refers to a set of skills and personality-related factors that allow people to intentionally control their thoughts, emotions, and behavior (Blair and Raver 2012; Murray et al. 2015; Cavadel et al. 2017). The following are self-regulation skills that can help people find, get, and keep jobs:

- **Executive function** helps people (1) stop automatic or inadvisable actions in favor of more appropriate behaviors (through a specific skill called inhibitory control), (2) remember critical information while conducting complex tasks or activities (through a specific skill called working memory), and (3) hold multiple ideas at a time and switch between them as necessary (through a specific skill called cognitive flexibility) (Zelazo and Muller 2002; Alvarez and Emory 2006).

- **Selective attention** helps people focus or hone in on a particular activity in the face of other thoughts, information, and actions that may distract them (Zelazo et al. 1997).

- **Metacognition** allows people to reflect on their own thinking and actions (Flavell 1979).

- **Emotional understanding** allows people to recognize emotions in themselves and in others around them, which helps them form strategies or actions based on those feelings (Cole et al. 2009; Gross 2013; Murray et al. 2015).

- **Emotion regulation** helps people make emotions manageable or useful—for instance, when someone cools down after an argument, or revs themselves up before a big event (Gross and Thompson 2007; Giuliani et al. 2008).

- **Motivation** is what drives people to pursue, persevere, and accomplish tasks (Maslow 1943; Bandura 1986; Harackiewicz 2000; Ryan and Deci 2000).

- **Grit** refers to the perseverance and passion that helps people persist in striving toward long-term goals despite challenges (Duckworth et al. 2007).

- **Self-efficacy** describes people's belief in themselves that they can perform at a high level (Bandura 2012).

This brief, developed as part of the Goal-Oriented Adult Learning in Self-Sufficiency (GOALS) project (see box), illustrates how some employment programs are attempting to strengthen participants' self-regulation skills or make it easier for them to use their skills.

About the GOALS project

In 2014, the Office of Planning, Research and Evaluation at the U.S. Department of Health and Human Services, Administration for Children and Families awarded a contract to Mathematica Policy Research to conduct the Goal-Oriented Adult Learning in Self-Sufficiency (GOALS) project to explore how emerging insights from psychology, neuroscience, behavioral science, and the study of goal achievement can inform employment programs for adults. As part of the GOALS project, Mathematica conducted site visits to five programs that were implementing interventions to improve and support participants' self-regulation and goal attainment skills. We spent two days in each site interviewing program leadership and staff, partner organizations, and a small group of program participants. We identified the programs through a scan of the field, using published material, practitioner and expert input, and Internet searches. We identified 35 programs that (1) targeted low-income adults, (2) focused on employment or related outcomes, and (3) implemented interventions to improve participants' self-regulation. We conducted telephone interviews with 12 of these programs and among those we selected five that offered the most promise to the field and were receptive to our research goals. The information presented in this brief is based on these visits.

Strengthening self-regulation skills may be important because these skills interact to help people set and pursue goals. We hypothesize that striving toward and achieving employment-related goals would ultimately lead to increased economic self-sufficiency. (Attachment A illustrates the relationships between self-regulation, goals, and self-sufficiency outcomes. See Anderson and colleagues (2017) for a detailed explanation of these relationships). Several interventions have proven effective in strengthening self-regulation in other contexts and are promising for employment programs. Making it easier for participants to use their self-regulation skills is also important because psychologists have long argued that people have limited capacity or "bandwidth" for using their self-regulation skills (Muraven and Baumeister 2000; Mullainathan and Shafir 2013). Poverty—by placing high demands on self-regulation—uses or taxes some of that bandwidth. For example, juggling public transportation, childcare, changing job shifts, caring for family, and navigating public assistance applications requires a high degree of organization, multi-tasking, inhibition, and emotional control. Using so many self-regulation resources to attend to the daily tasks of living leaves fewer resources available for setting and pursuing longer-term employment goals. Easing participants' self-regulatory load can help them use their skills optimally.

Employment program administrators and practitioners may want to draw on the experiences of others and the lessons and recommendations offered in this brief to implement new approaches to strengthen and support participants' self-regulation skills. The programs highlighted in the brief illustrate how strategies are currently being implemented in a range of contexts and incorporated into existing interventions. Details on the efficacy of various strategies are presented in Cavadel and colleagues (2017), but the programs highlighted in this brief have not been rigorously evaluated. They are profiled here to help practitioners understand how research-informed practices to support self-regulation are being used in the field. The programs discussed in this brief are those operated by Economic Mobility Pathways (EMPath); the New Haven Mental Health Outreach for Mothers Partnership (MOMS); the Northside Achievement Zone (NAZ); Roca; and Transforming Impossible into Possible (TIP). After providing summaries of each, the brief offers lessons based on implementation successes and challenges as well as next steps other programs could take when considering implementing these strategies.

SUMMARY OF STRATEGIES ACROSS PROGRAMS

Each of the programs we visited implemented strategies that aimed to both strengthen participants' self-regulation skills and create a program environment that helps participants use their skills (see Table 1). The former correspond to the interventions pointing to the self-regulation segment of the pyramid in Attachment A; the latter correspond to the interventions pointing to the program context box surrounding the pyramid.[1] The intervention components implemented to strengthen self-regulation skills are all evidence-based, meaning that they have been rigorously tested in circumstances other than employment programs for low-income adults and have been shown to improve self-regulation skills.[2] These interventions include the following:

- **Cognitive behavioral therapy (CBT).** A psychotherapeutic technique focused on changing a person's pattern of thoughts, beliefs, or attitudes in order to change his or her behavior and emotions (Beck 2005; Heller et al. 2013).

- **Mindfulness.** Interventions that teach people to purposefully direct attention to what is happening in the moment and to be non-judgmental, instead of defaulting to automatic or negative thoughts and behaviors (Brantley 2005). Mindfulness interventions are also intended to prevent people from reacting or behaving automatically or without forethought (Kristeller et al. 2006; Caldwell et al. 2012).

- **Motivational interviewing.** A counseling method that takes a goal-oriented, client-centered approach to help clients overcome obstacles to achieve positive behavior change, usually in the context of some specific problem or challenge the client is facing. Counselors use conversational tactics—such as reflective listening, open-ended questions, empathy, and affirmations or reinforcements of a client's statements—to help clients generate motivation to change and achieve goals (Rollnick and Miller 1995).

- **Mental Contrasting with Implementation Intentions (MCII).** A behavioral strategy to help people commit to and achieve goals through a two-step process: (1) mental contrasting and (2) forming an implementation intention (Oettingen and Gollwitzer 2010; Kirk et al. 2013). Mental contrasting is a process in which people consider all the reasons why their current situation does not match their desired future and why they have not yet achieved their goal (that is, the barriers and challenges blocking them from achieving the goal). An implementation intention takes the form of an if-then statement that links a challenge an individual may encounter during pursuit of a goal with the planned response to that challenge—for instance, if X occurs, then I will do Y.[3]

The programs that we visited also explicitly designed their program environments in ways to help participants make better use of their self-regulation skills. Although these approaches enjoy support in the research literature (Babcock 2014), they do not have the same base of rigorous evidence that the interventions to improve self-regulation skills do. These approaches include the following:

- **Fostering positive relationships.** Building good relationships between program staff and participants as well as among the participants is an important way to foster trust and participants' sense of belonging and sense of self. During childhood, caregivers act as "co-regulators," who provide support, coaching, and modeling to help children understand, express, and regulate their thoughts, feelings, and behavior (Murray et al. 2015). "Co-regulation" in adulthood, which program staff can provide in the context of trusting relationships, can be valuable in supporting emotion regulation in particular (Butler and Randall 2012). Positive relationships that convey mutual respect can also lessen stress and thereby support the use of other self-regulation skills (Center on the Developing Child 2016). Moreover, comradery among participants and between participants and staff can guard against a phenomenon called stereotype threat and thereby promote self-efficacy.[4]

- **Reducing logistical challenges.** People with limited incomes typically have considerable constraints on other resources, including their time and access to transportation. Reducing logistical challenges in these areas may reduce demand on participants' executive function skills. For example, programs might have staff travel to locations convenient to participants to deliver services; set up mobile offices in neighborhoods where the participants live; or provide online tools that participants can access from their homes or other places that are convenient to them.

- **Creating a welcoming environment.** Welcoming environments that are clean, organized, and free from distraction and noise are thought to be calming and to promote better comprehension and focus among program participants (Babcock 2014; Friedman 2014; Prochansky 1987). Creating a welcoming environment may reduce demand on participants' selective attention.

- **Providing clear information.** Taking steps to ensure that program information is clear and easy to understand can help participants remember and act on critical information (Bertrand and Morse 2011). Providing clear information may reduce demand on participants' working memory, inhibitory control, and selective attention (Glosser et al. 2016).

Many employment programs for low-income adults apply these approaches as standard practice based on common wisdom about how to best support participants. The programs we visited, however, drew specifically on self-regulation research to more intentionally ease the demand on participants' self-regulation skills.

In the remainder of this brief, we profile each program and compare and contrast implementation experiences across them. We do not summarize every aspect of the programs but rather highlight how the programs target participants' self-regulation. The descriptions and findings may help other administrators and practitioners who are designing new approaches to plan ahead with respect to staff and resource allocation, staff training, duration and modes of service delivery, and other implementation considerations.

Table 1:
Program approaches to improving and/or supporting the use of self-regulation skills

	Evidence-based interventions to improve self-regulation				Intentional approaches to creating environments that support use of self-regulation skills			
	CBT	Mindfulness	Motivational Interviewing	MCII	Fostering positive relationships	Reducing logistical challenges	Creating a welcoming environment	Providing clear information
EMPath			✓		✓	✓	✓	✓
MOMS	✓	✓	✓		✓	✓		
NAZ	✓[a]	✓	✓		✓			
Roca	✓	✓	✓		✓			
TIP		✓		✓[b]	✓			

[a] NAZ does not offer CBT in full but rather a curriculum that includes cognitive restructuring, a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts that is a core component of CBT (Hope et al. 2010).

[b] TIP does not offer traditional MCII but incorporates mental contrasting and a form of implementation intentions, two of the key aspects of the MCII intervention.

Economic Mobility Pathways (EMPath)

Target population, size, and community context. EMPath offers 10 distinct programs, mostly targeting residents of public and subsidized housing in the greater Boston, Massachusetts area. Its shelter-based programs are small, serving between 7 and 60 homeless families each. Nonresidential programs serve between 50 and 200 participants each. Across the programs, the majority of participants are African-American and/or Hispanic; over 90 percent are women. Eligibility criteria for each program varies, but most include an income cutoff for participants, such as earning at or less than 50 percent of the area median income.

Program objectives and rationale. The cornerstone of EMPath's model is the Bridge to Self-Sufficiency (the Bridge), a theory of change that suggests that to be self-sufficient (defined as attaining a livable wage) an individual must attain explicitly defined objectives in five areas—(1) family stability, (2) health and social well-being, (3) education and training, (4) financial management, and (5) employment and career management. Each of these areas represents a "pillar" of the Bridge, which identifies milestones for achieving each area's ultimate objective (see the Bridge in Attachment B). Staff use the Bridge as an assessment tool to score a participant's progress in achieving the different objectives set forth. Each of EMPath's programs uses some form of the Bridge along with its Mobility Mentoring model, in which staff (called mentors) meet with participants face-to-face at least once per month to develop and review milestones and the participant's action plans to achieve them. Mentors help participants practice using executive function skills and repeatedly reinforce other self-regulation skills to help participants better set, pursue, and achieve their goals.

Core program components relevant to self-regulation. The core components of EMPath's program that are relevant to self-regulation include the following:

- **Motivational interviewing.** Mentors use motivational interviewing to facilitate behavior change among participants that originates from the participants themselves (rather than directed by the mentors). Mentors use this technique to encourage participants to question their thoughts and assumptions about aspects of their lives that have been challenging but where they have felt resistant or ambivalent to change. Mentors then use it to help participants recognize goals they have already achieved and identify milestones on the Bridge they want to accomplish.

- **Ensuring a welcoming environment.** Mentors try to cultivate atmospheres that are relaxing and promote participants' comprehension and attention. The objective is to help participants retain focus and avoid increasing their stress levels. For example, mentors silence their phones and email alerts during their meetings with participants and encourage the participants to do the same. Meetings take place in spaces that offer privacy (that is, out of sight and earshot of other conversations) yet are not completely enclosed so that participants do not feel trapped. To both inspire participants and put them at ease, EMPath offices prominently display artwork and wall decorations, including success stories from other participants.

- **Fostering positive relationships.** EMPath trains its mentors to cultivate warm and trusting relationships with participants. The Mobility Mentoring model defines these relationships as one-on-one partnerships through which the mentor models and supports the development of self-regulation skills and goal-related behaviors for the participant. Mentors use a process called scaffolding, in which they work with participants to break down a task into manageable steps, encourage participants to focus on one step at a time, model desirable behavior, and provide help as needed. As participants become more adept, mentors slowly withdraw assistance, allowing participants to practice their skills more independently while still providing feedback (Babcock 2012; Guare 2014). EMPath expects mentors to believe that every person has the potential for growth and to have "unconditional positive regard" for all participants. If a participant experiences a setback, the mentor must continue demonstrating respect for and work collaboratively with the participant. During our site visit, one former program participant emphasized the depth of her relationship with her mentor, saying that she felt emotionally connected to her mentor because of the support she provided and the personal stories she shared. The participant said that she never felt judged and that her mentor was always understanding when she needed to reschedule a meeting or take time off from program activities to address personal challenges.

- **Reducing logistical challenges.** EMPath structures its services so that it is not burdensome for participants to engage. For example, mentors may hold meetings in places convenient to the participants, such as coffee shops or other venues near participants' workplaces or homes. They also schedule phone meetings, especially when participants have been engaged in mentoring for a while. Educational opportunities, such as financial literacy training, are available online or on a drop-in basis so that participants can more readily fit classes into their schedules.

- **Providing clear information.** The Bridge is intended to very clearly show—on just one page—where participants are in their journey to self-sufficiency and what goals they will work toward to achieve self-sufficiency. Staff emphasized that the Bridge, which provides a clear framework for action toward goals, is helpful for participants who are confused about how to move forward or who are "stuck." In addition, mentors often provide participants with meeting summaries to ensure that the mentor and participant agree about what they discussed and to remind participants about next steps. Mentors encourage and model the use of other tools—such as calendars, planners, to-do lists, and alerts on smartphones—to create information that reduces the burden on participants' selective attention and working memory. This in turn can help participants initiate and remain on task, stay organized, prioritize, and manage their time.

Staffing infrastructure. Program services are delivered primarily by mentors, who are supervised by staff who are typically former mentors themselves. EMPath seeks to hire mentors who have the following qualities: (1) experience working with the systems that participants must work with, such as public housing authorities; (2) an orientation toward the future; (3) a desire to help others; (4) an ability to work with people from

various cultural backgrounds; and (5) an innate belief in the value of all participants. All mentors go through training to understand self-regulation and how trauma and stress may impact participants' skills.

Funding and program costs. Mobility Mentoring costs include staff training and, for some programs, monetary incentives.[5] One of the first programs to use Mobility Mentoring served 50 individuals in South Boston who were deemed ready to participate in an intensive, multiyear program and capable of achieving self-sufficiency in five years; costs averaged $5,000 to $7,000 per participant per year. Private donations and foundations support EMPath's nonresidential programs. Its residential programs are state-funded.

Outcomes. There has been no rigorous evaluation of Mobility Mentoring and there are no data on outcomes related to changes in self-regulation skills. However, EMPath estimates that, among all participants in EMPath programs, the average employment rate is 35 percent at program entry and 55 percent at exit. According to its 2017 annual report, graduates of one of the more intensive programs earned $45,411 at program exit (up from $23,558 at program entry), and 97 percent were employed at program exit (compared to 65 percent at program entry).[6] More rigorous research would be needed in order to determine whether these outcomes are caused by participation in EMPath programs.

New Haven Mental Health Outreach for Mothers (MOMS) Partnership

Target population, size, and community context. MOMS Partnership is a Yale University–affiliated program that targets low-income female caregivers of children under the age of 18 in the New Haven, Connecticut community. Most of the caregivers are single mothers, but about a fifth are grandparents. To be eligible, the caregivers must exhibit depressive symptoms.[7] Participants are primarily African American or Hispanic; the average age is 27; and most participants receive some sort of public assistance. Approximately 230 participants are served by the program at any given time.

Program objectives and rationale. MOMS Partnership strives to improve the emotional well-being and mental health of caregivers in order to improve the well-being of their children. The design is based on research showing that elevated stress in low-income caregivers—caused by lack of basic needs, social isolation, and threats of violence—leads to mental health problems and interferes with executive functioning. In turn, these problems interfere with effective parenting, which can contribute to a higher prevalence of cognitive and behavioral problems in children.[8]

Core program components relevant to self-regulation. The core components of the MOMS Partnership program that are relevant to self-regulation include the following:

- **Classes that draw on CBT techniques and mindfulness.** Most participants begin the program with a stress management course, which integrates CBT techniques and consists of eight weekly 90-minute group sessions. The course teaches practical skills for managing life stress and improving mood, relaxation techniques, problem solving, and communication skills. After completing the stress management course, some participants opt to take a course on personal skills for work success, which also draws on CBT techniques and involves a 90-minute class twice per week for five weeks. Topics include setting SMART goals,[9] workplace rules, communication skills, and an approach called "Slow Down and Think," which entails breathing exercises and other mindfulness strategies that participants can practice to manage stress and conflict in the workplace. All of these topics are intended to help participants obtain and retain their jobs. About 90 participants take at least one of the courses each year.

- **Fostering positive relationships.** The program encourages participants to provide social support to each other in order to promote their self-efficacy and combat social isolation. Participants in each class typically develop friendships with each other; they can also connect on a smartphone application targeted to participants who are new mothers. The app teaches participants about healthy mother-infant interaction, fosters social connections, and promotes community engagement through instant chat messaging features and a virtual information center. The app also suggests activities, called "challenges," related to health, having a healthy pregnancy, motherhood, and connecting with others that participants can complete to receive virtual tokens which they can exchange for gift cards (or donate to other mothers).[10] MOMS Partnership also employs staff who live in the same community as the participants, rather than employing staff who may be viewed as outsiders. These staff, called community mental health ambassadors (CMHAs), are well-equipped to build trust with participants because of their shared experiences as members of the same community.

- **Reducing logistical challenges.** MOMS Partnership tries to make it easy for parents to participate in the program by offering services at "hubs" throughout the New Haven area. The hubs are neighborhood-based spaces near where the target families live, work, socialize, and already receive services—for example, grocery stores, schools, the local health department, and community and employment service centers. At the hubs, participants can take part in courses on stress management, personal skills for work success, and financial education; receive individualized coaching (support for behavior change and the development and pursuit of goals); and receive resources, such as diapers and other basic-need items, mental wellness supports, and employment-related supports.

Staffing infrastructure. Mental health clinicians with master's degrees or doctorates facilitate the CBT-informed classes. CMHAs recruit mothers, co-facilitate classes with the mental health clinicians, and provide one-on-one coaching and support to participants.

Funding and program costs. MOMS Partnership has received state, federal, and foundation funding. The cost per participant for all programming ranges between $3,000 and $8,900, depending upon the amount of services that participants receive. In 2016, the White House Office of Social Innovation and Civic Participation identified MOMS Partnership as a fit for its Pay for Success model, which can help exceptional service providers expand by sourcing private capital for upfront costs and, if outcomes targets are achieved, tapping public or other dollars to reimburse and reward any investors.

Outcomes. According to MOMS Partnerships' internal outcome data, depressive symptoms among a cohort of program participants had decreased 56 percent eight weeks after program enrollment and 71 percent 12 months after program enrollment compared to pre-enrollment levels (Smith et al. forthcoming). Over the 12 months, participants also experienced improvements in inhibitory control, mental flexibility, and planning, but no changes in working memory or other measures of executive functioning, based on self-reported data and a hands-on test conducted in a computer lab.[11]

Northside Achievement Zone (NAZ)

Target population, size, and community context. NAZ targets families with children under 18 who live in North Minneapolis. Approximately 60 percent of families served by NAZ are African American, and most others are Latino or Hmong. Adult family members generally do not have a high school diploma and approximately one-fifth are public assistance recipients. Other common barriers include involvement with the justice system, lack of child care and transportation, lack of employment opportunities in the neighborhood, and unstable housing. In 2016, NAZ served 694 families.

Program objectives and rationale. NAZ is a two-generation program designed to end intergenerational poverty by offering educational services for youth and wraparound services for families. Family coaches coordinate programming for adult family members in (1) career and finance, (2) behavioral health, (3) housing, and (4) education. In the area of education, NAZ uses a curriculum to teach self-regulation skills that Twin Cities R!SE (TCR), one of its employment services providers, developed. Staff at TCR designed this curriculum after observing that a large proportion of its clients lose jobs due to problems such as arriving late to work and communicating poorly with their supervisors. The TCR staff realized that clients needed to learn self-regulation skills—in addition to skills such as job training, resume writing, and job search—to succeed in the workplace. Family coaches refer participants to NAZ and other staff housed at contracted service organizations for services in the other three areas.

Core program components relevant to self-regulation. The core components of the NAZ program that are relevant to self-regulation include the following:

- **Classes that draw on CBT techniques and mindfulness.** NAZ offers adults a foundational course using the TCR curriculum, which is based on evidence that building skills such as self-awareness, self-motivation, empathy, and relationship management can lead to better outcomes in employment, education, and other life circumstances. The course, which is held three hours per week for eight weeks, integrates mindfulness and cognitive restructuring techniques to help participants regulate their emotions and practice inhibitory control, metacognition, and self-efficacy in ways that can help them maintain employment.[12] The course expects participants to achieve specific behavioral competencies in different areas of self-regulation and teaches techniques that participants can use to react to adverse situations differently. For example, after learning about inhibitory control, participants are expected to manage impulsive feelings and stay on task even in stressful situations. If participants experience an upsetting event, they learn to ask themselves what they think and feel about the situation and why, acknowledge any negative thoughts or feelings they have, and then replace them with positive ones. They also practice techniques such as affirmation (that is, saying statements to provide emotional support and encouragement to themselves) and breathing exercises to promote self-control rather than reacting automatically or negatively to the situation.

- **Motivational interviewing.** Family coaches use motivational interviewing to elicit from adult participants the types of goals they want to achieve within the NAZ programmatic areas. The coaches typically start with a higher-level goal and then use motivational interviewing to work backwards and parse that goal into smaller action steps that represent interim goals.[13] One family coach said motivational interviewing is important because it encourages participants to engage in "change talk" (that is, discussing their commitment, desire, ability, reasons, and need to change their own behavior) and helps participants perceive situations or events differently from their initial impressions.

- **Fostering positive relationships.** Relationships between families and their coaches are fundamental to NAZ's intervention. Coaches are intended to be peer mentors and reflect the population served by NAZ—they are typically African American and about half are members of the North Minneapolis community, with most others having lived in similar communities in terms of socioeconomic and demographic characteristics. Approximately 25 percent are former NAZ participants. NAZ coaches recruit, enroll, and work with youth and adult family members to obtain services and are responsible for helping them find the motivation and inspiration to change their behaviors and set and meet goals.

Staffing infrastructure. In addition to coaches, key staff working with adults include those who teach the foundational course and other education classes[14] and specialists who are housed at the contracted service organizations that provide individualized services in housing, career and finance, and behavioral health.

Funding and program costs. The NAZ model costs about $1.1 million to fully implement with 60-120 families. The youth education component constitutes about one-third of the total budget; the career and finance, housing, and health services for adult participants constitute about 10 percent of the budget, and education for adult participants constitutes about 7 percent. These figures suggest that the portion of the program dedicated to specifically to adult services is roughly between $1,500 and 3,000 per family.

Outcomes. NAZ has not undergone rigorous evaluation. However, according to performance management data, 15 percent of NAZ families in 2016 included an adult who completed the foundational course (Gehrig et al. 2016). NAZ has found that families with a parent who completes the course are more likely to be engaged in other program components and to complete goals (Gehrig et al. 2015). Through the foundational course, NAZ explicitly intends to positively affect emotion regulation and other aspects of self-regulation, including inhibitory control, metacognition, and self-efficacy among adult participants. However, the program does not measure these outcomes. NAZ has not observed improvement in career and finance outcomes for adults based on the data it has collected to date.

Roca

Target population, size, and community context. Roca serves at-risk youth and young adults from 21 cities out of four locations in Massachusetts: Chelsea, Boston, Lynn, and Springfield. Eligible men are ages 17–24 and must be involved with the criminal justice system and at risk for re-incarceration. They generally do not have a high school diploma or work history, and most are involved with gangs. Eligible women are ages 16–24 and pregnant or parenting; most are receiving services from the Massachusetts Department of Children and Families or from Child Protective Services. Roca serves about 600 young men and 130 young mothers on an ongoing basis in intensive programming slots. Perhaps most important, Roca targets participants who are not ready, willing or able to participate in traditional employment programs for low-income populations.

Program objectives and rationale. Roca's ultimate objective for participants is to reduce recidivism; increase employment and employment retention, improve levels of education; and, for young mothers, delay future pregnancies. Its model entails three phases of program participation—(1) intensive engagement (a period of outreach which typically lasts about 4 to 6 months), (2) intensive behavior change (which typically lasts 6 to 24 months), and (3) maintenance of behavior change (which also typically lasts 6 to 24 months).[15] According to this model, progress through a series of stages is part of changing behavior. In Roca's model, these stages are the following:

1. **Precontemplation.** The individual is not ready to change and is unaware that his or her actions are problematic.

2. **Contemplation.** The participant is thinking about making a change and recognizes that his or her actions are problematic.

3. **Planning.** The participant is making plans to implement a change.

4. **Action.** The participant takes steps geared toward behavior change.

5. **Sustaining.** The participant actively maintains new and healthy behaviors.

Roca explicitly intends to move participants through these stages of change by improving their emotion regulation and other aspects of self-regulation, including inhibitory control, metacognition, motivation, and self-efficacy. Roca understands that as part of the change process participants will have setbacks; its model allows for setbacks to occur and program staff are trained on how to address them.

Core program components relevant to self-regulation. The core components of Roca's program that are relevant to self-regulation include the following:

- **Motivational interviewing.** Roca staff use motivational interviewing to encourage behavior change that originates from the participant. They rely heavily on this technique when attempting to initially engage participants in the program. Roca targets individuals who are in the pre-contemplation or contemplation stage and typically take up to six months to move to the second stage of the model (intensive behavior change). During the model's first phase, staff conduct "relentless outreach" by meeting and using motivational interviewing techniques with recruits several times per week. Staff continue to use motivational interviewing after enrollment to help participants set and pursue explicit, incremental, SMART goals related to the larger-scale program outcomes and to facilitate participants' ongoing engagement and progress in program services (including classes, employment and training services, and various types of counseling).

- **Classes that draw on CBT techniques and mindfulness.** Roca partnered with Massachusetts General Hospital (MGH) to design a curriculum based on CBT and mindfulness techniques that would help participants process their emotions so that they would be better able to engage in behavior change. The curriculum focuses on ten different skills, which program staff teach in separate lessons either in small classroom settings or via one-on-one conversations. The ten skills are (1) labeling feelings; (2) feeling, instead of avoiding, feelings; (3) pursuing joy in positive ways; (4) identifying progress to date toward accomplishing goals; (5) accepting and owning up to mistakes; (6) acting in line with personal values; (7) making plans to approach problems; (8) thinking in a non-extreme manner; (9) problem solving with a focus on values, and (10) practicing conflict resolution techniques. In addition to the CBT course, Roca offers a prevocational soft skills training course (which seeks to prepare participants for employment by discussing topics such as time management, arranging childcare, and how to dress for work) as well as GED, financial literacy, parenting, life skills, pre-vocational training, and healthy relationships courses.

- **Developing personal relationships.** Fundamental to Roca's intervention is the use of "transformational relationships" (intensive, long-term relationships) between participants and their key staff contacts, who function as intensive caseworkers. The underlying theories behind transformational relationships are that (1) shared experience and a sense of responsibility to self and others can prompt behavior change and (2) real change only occurs within the context of a relationship. Caseworkers are available 24 hours a day to those on their caseload. They are typically in contact with each participant in the first or second stage of the model several times per week, if not every day. Caseloads are 25 participants to 1 caseworker for those in the first or second stage of the model and 60 to 1 for those in the third stage. For some participants, their relationships with caseworkers were among the first healthy relationships they had experienced with an adult. Roca expects participants to "relapse" by returning to unhealthy behaviors and rejecting services, even after being engaged in services for a while. When relapses occur, staff members maintain respect for participants and do not give up on them, but instead conduct intensive re-engagement. After demonstrating consistent engagement with a caseworker (typically, through 10 in-person contacts), participants are eligible for a work experience placement through which they can earn money, receive on the job training, and access permanent job development services.

- Roca also uses Circles, which are based on Native American talking and healing practices, to encourage healthy peer relationships and communication among participants. Circles are small group meetings in which participants sit or stand in a physical circle formation. They vary in length and focus, and the agenda is typically driven by Roca staff. Participants in work experience, for example, may engage in a Circle to share challenges they face on the job and to brainstorm solutions, while new participants may engage in a Circle to share hopes and dreams as a precursor to goal setting.

Staffing infrastructure. Roca direct service staff conduct outreach, provide case management, and facilitate CBT classes—the same staff fulfill all of these functions, though some specialized staff focus on outreach with exceptionally hard-to-recruit participants. Roca also employs educators, a workforce readiness coordinator (who oversees prevocational training, work experience, and other employment-related offerings), work experience supervisors, and job developers. Clinicians are available on-site to meet with participants several days a week through contracts between Roca and mental health service providers. Roca also hosts substance abuse counseling and Alcoholics Anonymous meetings. In addition, Roca offers child care for mothers while they are participating in programming. An estimated 80 percent of participants receive social services from other agencies; caseworkers help them enroll in and maintain these services, which often involves communication and collaboration with staff outside of Roca.

Funding and program costs. The Roca model costs about $25,500 per participant for four years of service, the intended duration of the program. About 45 percent of its funding comes from private foundations, about 40 percent of its funding comes from government contracts, and about 15 percent comes from earned revenue. Roca

runs the nation's largest Pay of Success project, which supports one-third of its work with young men.

Outcomes. MGH is evaluating the CBT curriculum, specifically focusing on how outcomes vary with dosage (that is, time spent delivering the curriculum) and delivery (that is, one-on-one versus classroom or a combination of both). It is also focusing on whether change in emotion regulation is related to change in employment, education, and recidivism outcomes and whether the curriculum works differently for subgroups of participants.[16] In partnership with MGH and Roca, the Arnold Foundation plans to test the curriculum in other program sites. In addition, Roca is participating in a randomized-controlled trial to assess the impacts of its model as well as a separate evaluation of its services for young men. An evaluation of its services for young women is in development. Long-term outcomes on recidivism, employment, education, and pregnancy based on Roca's own performance management data are available at http://rocainc.org/impact/outcomes/.

Transforming Impossible into Possible (TIP)

Target population, size, and community context. TIP is an evidence-based social work practice model that may be used in employment programs for low-income adults. Since 2014, TIP has been introduced to ten employment or other social service organizations for low-income populations throughout Chicago.[17] These organizations vary widely by target populations, service delivery models, and eligibility requirements. For instance, Growing Home is a farm-based job training program for individuals with employment barriers (such as homelessness, incarceration and substance abuse) that serves an average of 60 participants per year. Heartland Alliance Human Care, which serves an average of 750 participants per month, provides job readiness and training services to TANF and SNAP recipients, WIOA customers, and public housing residents. Both incorporated TIP into existing program activities in 2016.

Program objectives and rationale. The TIP curriculum (Hong, 2016a) grew out of work conducted by researchers at the Center for Research on Self-Sufficiency (CROSS) within the School of Social Work at Loyola University Chicago, using data from approximately 7,000 surveys of workforce development professionals and low-income program participants around Chicago (Hong, 2016b). Using two scales they developed and validated—the Perceived Employment Barrier Scale, or PBES (Hong, Polanin, Key, & Choi, 2014), and the Employment Hope Scale, or EHS (Hong, Polanin, & Pigott, 2012)—the researchers used the surveys of participants to measure their perceptions of their employment barriers (such as those related to physical and mental health, child care, human capital, and soft skills) and their level of "employment hope." Similar to self-efficacy, the researchers define employment hope as a person's belief in his or her ability to achieve goals related to job and career attainment and advancement, particularly in the face of perceived barriers. The research

team followed people's career pathways over four years and found that the relationship between their employment hope and their perceived barriers influenced their economic self-sufficiency (Hong, Choi, & Key, 2018). Based on these results, the researchers developed the concept of psychological self-sufficiency (PSS), which is a measure of an individual's score on the EHS minus an individual's score on the PEBS. The TIP curriculum is designed to be incorporated into existing job readiness programs or implemented on its own to increase participants' PSS and ultimately, economic self-sufficiency (Hong, 2016b; 2016c).

The TIP curriculum is composed of 15 sessions that last three hours each. A trained facilitator delivers the curriculum in group settings. The sessions address a variety of themes, including (1) identity and purpose, (2) forgiveness, (3) barriers, (4) sources of strength, (5) self-worth, (6) self-perceived capability, (7) self-motivation, (8) the possible future, (9) the processes of inventorying skills and resources and setting and committing to goals, (10) unresolved triggers of stress, (11) gratitude, (12) social support and compassion, and (13) goal orientation (Hong, 2016a; 2016b; 2016c).

The curriculum draws on two key theoretical principles: (1) "possible selves," which helps people become ready for change by asking them to envision who they could or hope to become in the future as well as the steps they could take to become that person and (2) "growth mind-set," which describes a person's belief that his or her most basic abilities (such as intelligence or talent) are not fixed but can be improved through dedication and hard work.

Core program components relevant to self-regulation. TIP adopts the concept of mental imagery from MCII by asking participants at the start of each session to think about and then write on a red slip one barrier they have experienced. At the end of the session, participants write on green slips two "hope actions" that represent things they will commit to doing to combat the barriers and thereby replace their thoughts about what seems impossible with action steps that are possible. Although different from MCII's if-then statement, participants are identifying actions they can take in response to barriers they experience. Participants place slips into transparent jars, and by the end of the class, they see hope (green slips) growing greater than the barriers (red slips). The objective of this strategy is to help participants recognize that barriers can be conquered and that they can gain the motivation and drive to get credentials, apply for jobs, and stay in jobs. TIP also incorporates mindfulness practice into each session. Through visualization exercises, facilitators help participants become aware of bodily sensations, feelings, and thoughts so that they can better engage in self-reflection, contribute to group discussion, and meaningfully participate in TIP tasks.

Staffing infrastructure. Staff at organizations that implement the curriculum facilitate the sessions. Facilitators learn TIP through first taking the course themselves. This approach is designed to help facilitators understand firsthand the program participant experience in completing the session exercises. Certified TIP trainers then lead training sessions for facilitators. These last two days and are designed to provide facilitators with hands-on experience running the sessions. Trainers encourage facilitators to share their own experiences as part of the class, rather than simply teaching it.

Funding and program costs. TIP costs are difficult to estimate. All organizations that have implemented the curriculum to date have received it for free. In addition, the developers have donated their time to train facilitators. All of the organizations are relying on existing staff and facilities to provide the TIP sessions.

Outcomes. Through a Social Innovation Challenge grant by the University of Chicago's Urban Labs, TIP is being evaluated by the Urban Poverty Lab using a randomized-controlled trial design.[18] This evaluation is focusing on participant employment outcomes and attempting to identify key characteristics of an effective TIP facilitator. A CROSS study of TIP implementation in two programs (Greater West Town Training Partnership and Growing Home) showed an increase in PSS, employment and retention, economic self-sufficiency, grit, resilience, and executive functioning among TIP participants compared to others in the programs who did not go through TIP (Hong & Fittin, 2017).
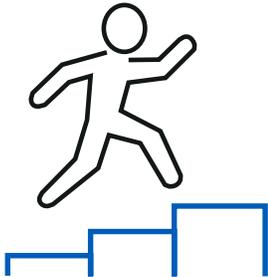
LESSONS FROM IMPLEMENTATION SUCCESSES

Staff training is critical. Across the five programs, frontline staff received not only intensive training on how to implement the approaches but also on the science behind self-regulation and why these skills are important to consider when working with low-income adults toward employment outcomes. Staff who interact with program participants were generally conversant in what self-regulation is, how and why people experience challenges using self-regulation, and how their specific program has targeted self-regulation as a means to improving participant outcomes. For example, EMPath mandates that all core staff receive several days of classroom training, including specific training in motivational interviewing and coaching techniques, and several months of job shadowing before they meet individually with participants. At Roca, direct service staff receive training up front, shadow other staff for several months, and practice CBT and motivational interviewing with their supervisors so that usage of these techniques is pervasive throughout the organization. TIP facilitators receive training in part through experiencing the curriculum themselves as participants.

Hiring staff with similar backgrounds to the community being served can be helpful. MOMS Partnership, NAZ, and Roca all hired staff (especially direct service staff who interact with participants) who came from similar socioeconomic backgrounds or even the same neighborhoods as the participants. These programs found that staff with backgrounds similar to participants could more quickly and effectively build trust and create the warm and welcoming relationships that can foster the use of self-regulation skills. Each of these programs viewed this practice as critical to its success.

Programs can integrate CBT and mindfulness interventions to promote behavior change. All of the programs that offer CBT also integrate a mindfulness component into the intervention. In clinical settings, CBT and mindfulness can be combined to help people become aware of their thoughts and feelings and to separate

those feelings from behaviors so that several action steps might be considered with a longer-term goal or outcome in mind (Hofmann et al. 2010).[19] Similarly, the curricula used at MOMS Partnership, NAZ, and Roca all focus on emotion regulation and use cognitive restructuring (a core component of CBT) and mindfulness techniques to help participants change their thought and belief patterns in order to be nonjudgmental and avoid automatic negative reactions—skills that can be important in workplace settings and in achieving employment-related goals, such as finding a job.

Increased program engagement may be the most immediate outcome when implementing these approaches. Given the intensity and very personalized nature of interventions that address self-regulation, they tend to resonate with program participants more than other strategies do. Participants find value in the deep conversations staff facilitate about real-life challenges and emotional reactions and develop strong bonds with staff and with each other, making them want to return both for their own benefit and out of a sense of responsibility to others. For example, staff at a workforce center piloting TIP remarked that the curriculum appeared to be more engaging, client-centered, and motivational than the center's typical job readiness training. Roca retains three-quarters of participants in the program. Similarly, among those who start a CBT course at MOMS Partnership, 75 percent complete the course. Sustained program engagement in and of itself may be an important outcome of these interventions, since stable employment and long-term self-sufficiency outcomes may take time to realize.

Fostering relationships between participants can combat social isolation and promote self-efficacy and motivation. Research indicates that residents of high-poverty areas tend to have fewer social ties than others (Wacquant and Wilson 1989). Some programs include a peer support or networking component to foster relationships between participants. For example, MOMS Partnership encourages classmates to develop close relationships with each other and promotes use of a smartphone app designed to cultivate a sense of community. EMPath also requires its program participants to attend monthly community meetings, and encourages them to join affinity groups based on common interests. These meetings and groups are intended to help participants combat the isolation that can occur in the context of poverty and build a more positive sense of self that will support self-efficacy and motivation. According to EMPath's own performance data, 53 percent of adults exiting its programs report an increase in their social network as a result of their participation in an EMPath program.[20] Promoting self-efficacy by reducing social isolation may also combat stereotype threat.
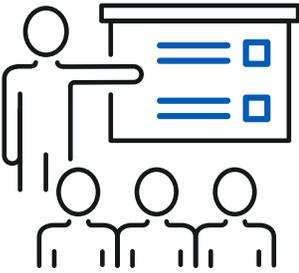
LESSONS FROM IMPLEMENTATION CHALLENGES

It may take time to adapt existing curricula to meet the needs of a program's target population. Interventions focused on self-regulation should be tailored to the population the program targets. In addition to being low-income, participants in different programs may face different stressors and challenges to their self-regulation skills. Designing or adapting curricula that speaks to their specific needs can be tricky. Both Roca and MOMS Partnership initially tried implementing CBT curricula that outside developers created for different target populations (i.e. adults and youth in criminal justice settings or formerly incarcerated individuals). However, both organizations had to revise the curricula and test several iterations before the lessons were applicable to their unique populations. MOMS Partnership regularly requests input and feedback from its participants in order to continually hone its services. On the other hand, NAZ easily adapted a curriculum for its participants that one of its employment services partners had developed for a similar population. Programs should consider content of existing curricula as well as the complexity of the material, length and number of sessions required, and mode of service delivery.

A one-size-fits-all approach may be difficult for staff to implement across programs with different populations. EMPath first launched Mobility Mentoring and the Bridge to Self-Sufficiency in 2009 in a program designed to serve individuals who are ready to participate in an intensive, multiyear program and who are deemed capable of achieving self-sufficiency in five years. It has since expanded the use of the Bridge and Mobility Mentoring to other programs by customizing it to the participant population in each. Although the Bridge is the same across all programs, it is adaptable to different program objectives and populations. For example, the salary goal in EMPath's original program is equivalent to the amount that would keep the participant off of cash assistance ($62,000 annually for a family of two in Massachusetts), while the salary goal in residential programs is $35,000. Still, however, staff report challenges implementing the model with participants in shorter-term, shelter-based programs. Some staff see the model and the motivational interviewing used to implement it as incongruent with the needs of participants, who they say are often dealing with crises and need to attend to day-to-day issues rather than long-term self-sufficiency goals, and with the requirements of participants that shelters often dictate. In these programs, staff tend to default to providing typical case management services in lieu of focusing on self-regulation interventions. EMPath has been addressing this issue through additional training for staff on how goal-setting that includes identification of intermediate action steps and milestones can actually help alleviate day-to-day crises and how the requirements and outcomes that shelters mandate align with the milestones and objectives on the Bridge. The organization has also been making staffing adjustments to ensure that managers, supervisors, and staff within its housing programs are all committed to the Mobility Mentoring model and appreciate its application for shelter-based populations.

It may be important to reinforce skills taught in classroom settings or through coaching sessions in real life. In the programs that we visited, staff typically delivered CBT and mindfulness interventions in self-contained group classes. It was unclear how much participants practiced these skills in between sessions or used them outside the classroom. Although group classes may be cost-effective and efficient to administer, program populations may need individualized support to effectively apply self-regulation techniques in daily life. EMPath provides such support through scaffolding, in which mentors slowly withdraw support as participants repeatedly practice the skills and behaviors and are increasingly able to exercise them on their own. NAZ's employment services partner, which developed the curriculum used in the program's foundational course for adults, works with participants for up to two years after a job placement to continually reinforce emotion regulation and other self-regulation skills to help participants keep their jobs.

Services can take a long time to deliver and can be resource-intensive. Participation in most of the programs lasted multiple years. In addition, the services designed to improve self-regulation were often high-intensity, meaning that participants could receive services one-on-one or in small groups up to several times per week for several hours at a time. Roca typically engages participants for three to four years, with a full six months dedicated to recruitment because the target populations (young men involved in the criminal justice system and pregnant or parenting young women typically involved in the child welfare system) are extremely at risk and wary of programs. EMPath designed its original service model to be delivered over five years, with the frequency and intensity of services gradually diminishing over time. The length and intensity of the intervention allowed EMPath staff to withdraw support in the later stages as participants became more independent and self-sufficient, while also allowing for and providing time to push through potential setbacks. As such, programs can be expensive to deliver on a per participant basis.

NEXT STEPS
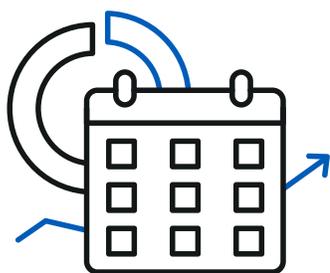
Our program data collection through the GOALS project uncovered innovative strategies employment programs are currently using to improve low-income adults' employment situations and help them achieve long-term self-sufficiency. These strategies focus on directly improving or supporting the use of self-regulation skills as a way to help participants achieve employment goals. Administrator and staff experiences implementing these approaches can offer lessons and help other programs replicate perceived strengths, anticipate potential challenges, and avoid pitfalls. However, none of the strategies have been rigorously evaluated in an employment program context, so it is unclear what outcomes programs might expect. There are several steps that programs implementing new strategies can take to increase knowledge about whether and how such strategies produce anticipated outcomes and whether they yield unintended results and why:

- **Articulate a theory of change.** An important precursor to implementing a new intervention is defining what the program expects to happen as a result of the

intervention and why. Programs seeking to implement interventions focused on self-regulation can do this by answering a few basic questions: What are the program's ultimate objectives related to participants' employment and self-sufficiency? What is the program trying to accomplish with respect to participants' self-regulation or goal-related skills and why might the program expect changes in participants' use of these skills to influence the program's ultimate objectives? How does the program plan to accomplish these things—that is, what services, activities, or resources will the program use to accomplish what it intends with respect to participants' self-regulation and goal-related skills? How and for whom does the program expect this intervention to work? The last question is important because different interventions may work for different people. For example, an intervention designed to help participants set and pursue goals around long-term economic self-sufficiency might not work for people who are in crisis or who are otherwise not ready for change. Similarly, an intervention designed to increase emotion regulation might not be valuable to those who already have strong skills in this area. By clearly identifying what a program is trying to change, for whom, and what outcomes it intends to achieve, programs will be in a better position to understand if the intervention is working as intended.

- **Experiment with variations on strategies.** Because no data exist on the effectiveness of the strategies presented in this brief for participants of employment programs for low-income adults, how to implement the strategies in ways that maximize the likelihood of their success is unclear. To learn what approaches might work best within a specific program context, programs might implement variations of an intervention and gather feedback from participants and staff about the benefits and challenges of each. For instance, a program might deliver CBT in a group setting with some participants and in individual sessions with others to determine which approach is more feasible and poised to yield the desired outcomes given the program's structure and resources, staff competencies, and participant population.

- **Collect outcome data.** Data are necessary to assess the effectiveness of program strategies. To assess effectiveness, programs will need (1) baseline data—that is, data collected before participants first receive program services—on participant characteristics and the outcomes of interest and (2) follow-up data—that is, data collected after the program delivers services—on the outcomes of interest. Experimental evaluation consisting of a comparison between randomly assigned treatment and control groups provides the most rigorous evidence of effectiveness. Organizations implementing new strategies, however, could benefit from piloting them on a small scale, gathering and observing outcome data on participant experiences, and possibly refining the strategies before conducting a larger-scale experimental evaluation of the program. Piloting programs in this way can provide insight into whether the intervention may be helping participants progress toward and achieve intended outcomes. Comparisons of outcomes among participants with different baseline characteristics may provide insight into implementation challenges for certain types of participants. A separate document we produced under the GOALS project provides more information on measuring outcomes related to self-regulation strategies (Cavadel et al. 2018).

- **Clearly document interventions.** Not all of the organizations that we visited have documented the model and the steps required to implement the program in detail. Lack of documentation may make it difficult to train staff to implement the model as intended and to assess the extent to which they are implementing it as intended. It also presents a challenge for other programs that intend to replicate proven interventions. Clearly specifying the processes and procedures involved in implementing a specific intervention can help organizations understand if their program models are being implemented appropriately by their own staff or by others, and if not, what changes are necessary to ensure that they are.

ENDNOTES

[1] Some of the programs also implemented interventions to directly facilitate goal setting and goal pursuit (that is, interventions pointing to the green segment of the pyramid in Attachment A). We discuss these interventions within the relevant program summaries, but focus on interventions to improve and support the use of self-regulation skills.

[2] The research literature documents one other intervention, attention bias modification, which has proven effective in improving self-regulation skills. However, we did not observe this intervention during our visits to the programs. This intervention uses self-administered, typically computer-based training modules to direct a person's attention away from distracting or negative stimuli (for example, images of snakes could be used with people who fear snakes) to more positive or adaptive behaviors (Bar-Haim 2010).

[3] See http://woopmylife.org/.

[4] Self-efficacy can be threatened by a phenomenon called stereotype threat, in which culturally shared stereotypes suggesting poor performance by members of certain groups can, when made salient, disrupt the performance of an individual who identifies with that group (Steele and Aronson 1995). For instance, one seminal study demonstrated that African American students scored lower on tests when they were primed with negative stereotypes about their race than when they were not. Another study found that women performed worse on a math examination when the women first answered questions that made them think about being women, cuing them about their gender (Shih et al. 1999). This type of stereotype threat has been linked to performance differences across diverse settings and groups in math and reading, standardized tests, sports, supervisor-employee relations, and employment (Aronson et al. 2002; Steele et al. 2002; Roberson et al. 2003; Schmader et al. 2008; Carr and Steele 2010). Many assistance programs for low-income people continually highlight a person's social identity as someone who needs assistance, which may trigger a stereotype threat (Blair and Raver 2015). Facilitation of relationships within the program setting may reshape participants' thoughts and feelings about their association with the program from negative ones to positive ones and thereby change their perceptions about their value and abilities.

[5] Some EMPath programs reward participants with monetary incentives according to the level of effort various goals require. For example, two of EMPath's nonresidential programs that engage participants for up to five years provide those who complete a first-time homebuyer's course with a $100 reward and those who buy a first home with a $1,000 reward. Other programs that have less funding and serve needier populations have less structured incentives but may offer gift cards or nonmonetary incentives, such as leave from a shelter to visit family or public recognition of accomplishments. These types of incentives may increase persistence in the pursuit of goals.

[6] See http://s3.amazonaws.com/empath-website/pdf/Annual_Reports/2017_Annual_Report_-_Final.pdf.

[7] As indicated by a screening score on the Center for Epidemiological Studies Depression Scale.

[8] See https://medicine.yale.edu/psychiatry/moms/haven/MOMS_Concept_Paper_Aug2014_154525_284_18352_v3.pdf.

[9] Appropriate goals are often described as those that are SMART: Specific, Measurable, Attainable, Realistic, and Time-bound (Locke and Latham 2006).

[10] For instance, challenges may encourage participants to play games or recite a nursery rhyme with their child, or to set up a playdate with another mother and her child.

[11] Self-reported data were obtained using the Behavior Rating Inventory of Executive Function—Adult Version. See Cavadel et al. (2018) for information about this and other measures of self-regulation skills.

[12] Cognitive restructuring is a core component of CBT. It is a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts. The process typically involves identifying, assessing, and challenging a person's thoughts in order to change his or her beliefs (Hope et al. 2010).

[13] NAZ uses a management information system called NAZ Connect to track data on participants' goals. NAZ Connect contains prewritten goals from which families may choose and offers coaches and staff a set of steps that families can take toward achieving those goals. These are not meant to discourage individualized goal setting, but rather to encourage a consistent and methodical approach to goal setting with greater specificity.

[14] NAZ offers three other key classes for adults: (1) one for parents of children from birth to age 3 that builds positive discipline skills and parents' abilities to contribute to their children's development of language, literacy, and numeracy; (2) one that supports parents of 4- and 5-year-olds in preparing their children for kindergarten; and (3) one that helps parents of elementary school-age children support their children's school success.

[15] This model is based on a modified version of the transtheoretical model of behavior change, also known as the Stages of Change Model (Velicer et al. 1998).

[16] Emotion regulation is being measured by the Level of Distress Inventory and the Difficulties in Emotion Regulation Scale. See Cavadel et al. (2018) for information about these and other measures of self-regulation skills.

[17] It also has been introduced to 25 programs in the Kyonggi province of the Republic of Korea.

[18] See The American Economic Association's Registry for Randomized Controlled Trials at https://www.socialscienceregistry.org/trials/2118.

[19] This practice is called mindfulness-based cognitive therapy.

[20] See https://www.empathways.org/our-work/research/evaluation.

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ATTACHMENT A: CONCEPTUAL FRAMEWORK

Interventions*

Focused on program context

- Ensuring a welcoming environment
- Providing clear information
- Reducing logistical challenges
- Developing personal relationships

Focused on goal achievement processes

- Discussing mind-set
- Envisioning future selves
- Transtheoretical model processes of change
- Scaffolding
- Incentives
- Reminders and messages
- Other behavioral strategies

Focused on self-regulation

- Cognitive behavioral therapy (CBT)
- Mental contrasting with implementation intentions (MCII)
- Mindfulness
- Attention bias modification (ABM)
- Motivational interviewing (MI)

Environment*

- Socioeconomic environment
- Interpersonal environment (relationships with caregivers and others)

Increased Well-Being and Self-Sufficiency

Program Context*

- Program policies and rules
- Physical office space
- Program materials
- Staff competencies, attitudes, values, and relationships with customers

Personal Employment-Related Goal Attainment*

- Addressing barriers to employment
- Obtaining a job
- Enrolling in/ completing education or training program
- Advancing in career

Goal Achievement Process*

Readiness for Change
- Growth mind-set
- Contemplation/preparation

Evaluation
- Monitoring
- Reflection
- Flexibility

Goal Setting
- Planning
- Reasoning
- Problem-solving

Goal Pursuit
- Task initiation
- Prioritization
- Organization
- Time management
- Persistence

Self-Regulation*

Personality-Related Factors
- Motivation
- Grit
- Self-efficacy

Emotional Skills
- Emotional understanding
- Emotion regulation

Cognitive Skills
- Executive function
- Selective attention
- Metacognition

*Bullets illustrate key examples of these constructs.

ATTACHMENT B: EMPATH'S BRIDGE TO SELF-SUFFICIENCY

EMPath — Economic Mobility Pathways

BRIDGE TO SELF-SUFFICIENCY®

Mobility Mentoring®

THINKING ABOUT THE FUTURE

FAMILY STABILITY		WELL-BEING		FINANCIAL MANAGEMENT		EDUCATION & TRAINING	EMPLOYMENT & CAREER
Housing	Family	Physical and Mental Health	Networks	Debts	Savings	Educational Attainment	Earnings Levels*
No subsidy, housing costs 1/3 or less of household gross pay	Fully able to engage in work, school, and family life; children or family needs don't get in the way (OR) No children or dependent family members	Fully able to engage in work, school, & family life; health and mental health needs don't get in the way	Can always rely on networks to provide useful advice, guidance, and support; advocates for others	No debt other than mortgage, education, and/or car loans, and current in all debts	Savings of 3 months' expenses or more	Bachelor's degree or higher complete	Earnings = 80%+ AMI (Family Sustaining Wage)\n\nHousehold Size of:\n2: $62,550+\n3: $70,350+\n4: $78,150+
No subsidy, housing costs exceed 1/3 household gross pay	Mostly able to engage in work, school, and family life; children or family needs rarely get in the way	Mostly able to engage in work, school, & family life; health or mental health needs rarely get in the way	Can often rely on networks to provide useful advice, guidance, and support	Current in all debts and making more than minimum payments on one or more debts	Savings of more than 2 months' expenses, but less than 3 months' expenses	Associate's degree or professional certification complete	Earnings = 50% - 79% AMI\n\nHousehold Size of:\n2: $41,400 - $62,549\n3: $46,550 - $70,349\n4: $51,700 - $78,149
Subsidized Housing - pays $300+ towards rent	Somewhat able to engage in work, school, and family life because of children or family needs	Somewhat able to engage in work, school, & family life because of health or mental health needs	Can sometimes rely on networks to provide useful advice, guidance, and support	Making minimum payments on all debts	Savings of at least one month's and up to 2 months' expenses	Job training or certificate complete (beyond high school)	Earnings = 30% - 49% AMI\n\nHousehold Size of:\n2: $24,800 - $41,399\n3: $27,900 - $46,549\n4: $31,000 - $51,699
Subsidized Housing - pays $0 - $299 towards rent	Barely able to engage in work, school, and family life because of children or family needs	Barely able to engage in work, school, & family life because of health or mental health needs	Can rarely rely on networks to provide useful advice, guidance, and support	Behind in payments of 1 or more debts and making payments on at least 1 debt	Savings of less than one month's expenses	High School Diploma or GED/HiSET complete	Earnings = < 30% AMI\n\nHousehold Size of:\n2: <$24,800\n3: <$27,900\n4: <$31,000
Not permanently housed	Not able to engage in work, school, and family life because of children or family needs	Not able to engage in work, school, & family life because of health or mental health needs	Can never rely on networks to provide useful advice, guidance, and support	Has debts; currently not making any payments	No savings	Less than High School Diploma or GED/HiSET	Not currently employed\n\n*Income ranges are for Suffolk County, MA. Data from HUD's 5/14/17 AMI tables

MAKING DECISIONS IN CONTEXT

For more information, please visit www.empathways.org