

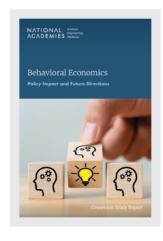
This PDF is available at http://nap.nationalacademies.org/26874











Behavioral Economics: Policy Impact and Future Directions (2023)

DETAILS

246 pages | 6 x 9 | PAPERBACK ISBN 978-0-309-69983-9 | DOI 10.17226/26874

CONTRIBUTORS

Robert Moffitt, Alison Buttenheim, and Alexandra Beatty, Editors; Committee on Future Directions for Applying Behavioral Economics to Policy; Board on Behavioral, Cognitive, and Sensory Sciences; Division of Behavioral and Social Sciences and Education; National Academies of Sciences, Engineering, and Medicine

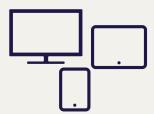
SUGGESTED CITATION

National Academies of Sciences, Engineering, and Medicine. 2023. Behavioral Economics: Policy Impact and Future Directions. Washington, DC: The National Academies Press. https://doi.org/10.17226/26874.



Visit the National Academies Press at nap.edu and login or register to get:

- Access to free PDF downloads of thousands of publications
- 10% off the price of print publications
- Email or social media notifications of new titles related to your interests
- Special offers and discounts



All downloadable National Academies titles are free to be used for personal and/or non-commercial academic use. Users may also freely post links to our titles on this website; non-commercial academic users are encouraged to link to the version on this website rather than distribute a downloaded PDF to ensure that all users are accessing the latest authoritative version of the work. All other uses require written permission. (Request Permission)

This PDF is protected by copyright and owned by the National Academy of Sciences; unless otherwise indicated, the National Academy of Sciences retains copyright to all materials in this PDF with all rights reserved.

7

Social Safety Net Benefits

In 2021, 37.9 million people, or 11.6 percent of the U.S. population, lived in poverty, defined as having an income of less than \$27,740 for a family of four or \$13,788 for an individual. It has been estimated that the poverty rate would be twice as high in the absence of the government's social safety net programs; by one estimate these programs kept 37 million people out of poverty in 2019 (Trisi & Saenz, 2019; Fox & Burns, 2021). The primary safety net programs are the Supplemental Nutrition Assistance Program (SNAP, also known as food stamps); subsidized housing programs; the Medicaid program (which provides health insurance to the poor); the Temporary Assistance to Needy Families (TANF) program (which provides cash assistance for low-income families with children, primarily those with a single parent); and a variety of subsidized housing programs. The federal government also provides major assistance through income tax programs, particularly the Earned Income Tax Credit (EITC), which provides for significant tax credits to low-income families with earnings, with most support going to families with children. The government spent about \$261 billion on the nonhealth safety net programs in 2018 and an additional \$596 billion on Medicaid.

¹The government defines the poverty line as the minimum income needed to purchase the basic necessities of life.

LOW PARTICIPATION

A long-standing puzzle for policy makers and researchers has been that not all individuals and families who appear to be eligible to receive benefits apply for them. Calculations of eligibility are based on household surveys of the population that collect information on the variables used by the government to determine eligibility, so there is some degree of error in estimates of how many people are eligible for a given program. Nevertheless, the take-up rate among eligible families in safety net programs—the estimated percent of eligible families who actually receive benefits—is in many cases so low that small errors in the estimation of who is eligible cannot plausibly explain the gap.

Not only are take-up rates low in general, research has shown that sometimes those most in need are the least likely to participate (Falk, 2017). However, these take-up rates are not very different from those in other industrialized countries, where take-up rates vary widely both across and within countries for different programs (Ko & Moffitt, 2022). The take-up rates are different among the programs and for different reasons.

SNAP

Take-up rates for SNAP are relatively high (about 82%); however, the 16 percent who are estimated to be eligible to receive benefits from the program but do not receive them constitutes seven million individuals (U.S. Department of Agriculture, 2022).

Medicaid

Take-up rates among families eligible for Medicaid are less than 50 percent for adults and about 65 percent for children (Decker, Abdus, & Lipton, 2022). Since only people who do not have other health insurance coverage are eligible for Medicaid, these take-up rates imply that millions of low-income families do not have any health insurance.

Subsidized Housing

Only about 21 percent of eligible families are estimated to receive housing subsidies for which they are eligible. However, this is largely because housing agencies offer only a fixed number of public housing units and housing vouchers, and demand far exceeds the supply; there are long waiting lists for these programs, sometimes as long as five years (Kingsley, 2017). The low rate in subsidized housing is therefore explainable.

TANF

Only about 28 percent of families financially eligible for the TANF program receive benefits (Falk, 2017). To some extent this is because benefits are very low, so that even small barriers to application are likely to make applying not worth it, but there are other reasons as well, noted below.

EITC

The EITC is somewhat different from the other programs because receipt of the credit requires a household to file a tax return, and not all households do so. Low-income households often do not file returns because their incomes are too low to incur any significant tax liability, but many would be eligible for a tax credit if they did. The vast majority of those who file taxes and are eligible for a credit do request and receive the credit. Overall, it has been estimated that 77 percent of all families eligible for the EITC file their taxes and request a credit (Jones, 2013). But the 23 percent who do not constitute a major fraction of the low-income population, many of whom would be lifted out of poverty by the additional income.

POSSIBLE EXPLANATIONS FOR LOW PARTICIPATION

Traditional economic models would predict that all eligible individuals should be interested in participating in these programs because doing so would increase their level of economic resources, and that participation rates would be very high for people who have few resources in the absence of the available government assistance. A number of hypotheses from behavioral economics have been suggested for low take-up rates, including psychological predispositions, people's ability to acquire and process information, perceptions of perceived benefits that do not reflect actual ones, and people's ability to cope with the often onerous bureaucratic requirements. Although bureaucratic requirements may be accurately perceived and hence consistent with the traditional economic model, several behavioral factors may affect participation. Those factors include high demands on attention and cognitive load, the framing of offers to apply, and the context in which those offers are made. Present bias and the failure to recognize the long-run benefits of making an effort to overcome current barriers to participation are also present (see Chapter 3).

One factor that is not recognized in traditional economic analysis might be characterized as psychological dispositions. The most prominent finding from research is that many low-income families feel stigmatized by being a "welfare" recipient: they have internalized what they see as society's stereotyped characterization and negative perceptions of welfare recipients

(Moffitt, 1983; Stuber & Kronebusch, 2004; Stuber & Schlesinger, 2006). These negative psychological dispositions, it has been suggested, may be especially significant when very few other families in the geographic area are receiving government benefits. Thus, social norms operate against receiving assistance (Besley & Coate, 1992; Lindbeck, Nyberg, & Weibull, 1999).

In addition, many eligible individuals are not aware of their eligibility because they do not have access to, or know how to process, information about eligibility (this is an example of limited attention and cognitive limitations). For example, a randomized controlled trial conducted in Pittsburgh showed that offering information to families eligible for SNAP who were not participating increased the participation rate from 62 percent to 81 percent (Daponte, Sanders, & Taylor, 1999). A positive effect was also shown in a randomized controlled trial in which information about how to apply for SNAP was offered to a group of nonparticipating but eligible 60-year-old people who were receiving Medicaid, a five percentage point gain (Finkelstein & Notowidigdo, 2019). Even larger effects (a 12 percentage point gain) resulted if the individuals were offered actual assistance in the application process. However, the study also showed that those who were induced to apply were the less needy individuals among all nonparticipating eligible individuals. This finding suggests that overcoming barriers to participation may be most difficult with the most needy populations, an issue we return to below.

The application requirements for most programs require significant effort as a result of what Herd & Moynihan (2018) call "administrative burden" (see Chapter 13). Travel time to agencies is a problem, especially when a job constrains the time available, and that travel may also involve monetary costs. But even more burdensome are the time and paperwork requirements needed to establish eligibility, which may entail submission of pay stubs, verification of assets and bank balances, reports and verification of the composition of the family and who pays for what, documentation of child care costs and rent, and many other items. While these rules and their consequent compliance burden may stem from an effort to determine eligibility as accurately as possible and to prevent fraud by requiring documentation of income and assets, research on low-income people has shown that these administrative burdens loom large in discouraging application, especially because behavioral factors, such as the cognitive barriers, are particularly prevalent among low-income people (Mullainathan & Shafir, 2013). The problem can be particularly severe for applicants with low levels of education and literacy, who may have difficulty understanding and complying with relatively complex tasks.

There is a significant body of evidence that documents these barriers (e.g., Kleven & Kopczuk, 2011). For example, one study showed that jurisdictions in the United States that offered electronic tax filing had levels of

EITC take-up about one percentage point higher than those that required traditional paper copies of tax returns (Kopczuk & Pop-Eleches, 2007). Another has shown that reductions in the burdens of applying for Medicaid in one state increased participation by about 1,371 enrollees per month (Herd et al., 2013). Geographic access to clinics for the Special Supplemental Nutrition Program for Women, Infants, and Children has been found to increase benefit take-up by six percent (Rossin-Slater, 2013).

A program offering benefits for children of low-income parents had positive effects on take-up if defaults for opt-in were used, regular monthly checks were disbursed, predictable notifications for needed actions with low levels of hassle and compliance effort were used, and easy-to-use debit cards were issued. We note, however, that opt-in defaults are rarely possible for social safety net programs, for which benefits generally are not paid without an explicit opt-in (Gennetian et al., 2013). Bertrand, Mullainathan, and Shafir, (2006) describe the same informational and hassle factors referred to previously in affecting benefit take-up, along with procrastination: they found that offering moving assistance to new recipients of housing vouchers, coupled with landlord outreach and cash payments, increased moving to high-opportunity areas by 23 percentage points. The study also found that only providing information had very little effect, contrary to some of the other interventions discussed above for safety net programs (Bertrand, Mullainathan, & Shafir, 2006).

Further evidence of administrative barriers comes from research on SNAP. In the 2000s, the federal government allowed states to adopt policies to reduce application costs, including online application and management, electronic debit cards, simplified reporting, and longer recertification intervals. Cross-state comparisons show that these policies significantly increased participation, with a 37 percent increase over a 16-year period (Ganong & Liebman, 2018; Dickert-Conlin et al., 2021). The introduction of an online management program in one state also reduced program exit rates (Gray, 2019).

Considerable research has also examined recertification. One study showed that large numbers of eligible families did not recertify for the SNAP program because of the paperwork burdens involved in recertification, while another study showed that longer recertification intervals increased SNAP participation by 11 percentage points (Ribar, Edelhoch, & Liu, 2008; Gray, 2019; Bergman et al., 2023). And another study showed that individuals who were notified of the need for recertification in SNAP later than others were 22 percent less likely to reenroll than those who received the earlier notification. This study also showed that people who did not reenroll were as needy as the average participant, contrary to the suggestion that less needy individuals are less likely to reenroll (Homonoff & Somerville, 2021). The authors suggested that inattention and lack of awareness of the time requirements may be responsible for the results.

Some research has shown that administrative burdens lead those who are most in need not to apply, as might be expected on the basis of the theoretical work discussed in Chapter 3. For example, although the fraction of eligible families who participate in TANF has significantly increased over time, from 18 percent in 1996 to 72 percent in 2012, the trend has been that those in greatest need—people who are not working, are without earnings, and have the lowest incomes—have become an increasingly large percentage of those not participating (Falk, 2017).

For Medicaid, evidence that the neediest families are discouraged by the program's paperwork requirements has also been documented in detail (Heinrich et al., 2022). One study showed that Medicaid take-up is about 25 percentage points lower for childless low-income families than for higher-income families (Kenney et al., 2012). In contrast, for SNAP, there were no differences in terms of potential earnings between eligible families who did not recertify for the program and those who did (Gray, 2019).²

INTERVENTIONS

There are a number of studies of interventions that take their cue directly from behavioral economics. Many are randomized controlled trials that test some type of nudge, such as a study showing that providing SNAP recipients a reminder text or a text plus a telephone call increased the likelihood of recertification by five percent, especially for people with relatively less education (Lopoo, Heflin, & Boskovski, 2020).

A study that directly addressed psychological dispositions related to stigma tested several interventions in which those eligible for the EITC or a government stimulus check were invited to apply using language expressing individuals' "ownership" of the benefit (as opposed to its perception as a handout; De La Rosa et al., 2021). The study showed positive effects of from 20 percent to 128 percent on decisions to visit the program website.³ Another source of evidence comes from a project of the Manpower Demonstration Research Corporation, funded by the Department of Health and Human Services, to test ways to encourage take-up in partnership with state social program administrators. Called the Behavioral Interventions to Advance Self-Sufficiency project, it involved 15 state and local agencies concerned with child support, child care, and work support programs that involved more than 100,000 clients. The behavioral interventions tested involved an initial phase of identifying bottlenecks and barriers in the

²The Office of Management and Budget has recognized this issue and recently issued a memo to all federal agencies on how to improve access to public benefit programs by reducing administrative burden: see https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-10.pdf

³The study did not collect data on actual applications.

application process, followed by a search for low-cost and inexpensive ways to reduce those bottlenecks and barriers by simplifying forms, clarifying forms and instructions in simpler language, using simple postcard reminders for appointment and form requirements, and a number of similar approaches. The results were generally successful both in application outcomes, with effect sizes of from three to five percentage points (and some larger), and in terms of giving program administrators tools to analyze problems in their own programs and to understand how to address those problems in a systematic fashion.⁴

A number of researchers have examined ways to increase participation in EITC, primarily focused on some type of nudge. The results from these studies are mixed. For example, one study showed a positive effect of 8–9 percentage points in response to a variety of letters mailed to seemingly eligible households that had not filed for the credit. However, in similar studies, postcard-style mailings to larger samples of eligible households yielded positive but very small effects (1% or less; Bhargava & Manoli, 2015; Guyton et al., 2017; Goldin, Homonoff, & Meckel, 2022). A possible reason for the discrepant findings could be that the first study tested the intervention only on families who had filed taxes at least once before and hence were in the administrative data system, while the second two studies tested the intervention on a larger sample of households, including those who had never filed taxes (Linos et al., 2022).

Other studies show larger effects for nudges that were tested on families who had already had some contact with the government than for nudges that were tested on more general populations (Linos et al., 2022). When varied types of nudges were tested on samples of families who had not had contact with the government, take-up of the EITC did not increase. These results suggest that the barriers for low-income households that do not file returns are so substantial that even well-designed low-touch nudges will not be effective. Consistent with the hypothesis that more than simple nudges are needed to increase program take-up by significant amounts, a study by Bergman et al. (2023) showed that providing information to families eligible for a housing subsidy to move to a better neighborhood had little effect on take-up, but a more substantial intervention that assisted families in searching for new housing had a very large effect. The cost of the more substantial intervention, approximately \$2,600 per family, while far smaller than the benefits of the intervention to the families, was much greater than the cost of a simple informational or similar nudge.

An issue with many interventions designed to reach those who might be eligible for a program but are not participating is the lack of a nationwide

⁴See https://www.acf.hhs.gov/opre/project/behavioral-interventions-advance-self-sufficiency-bias-2010-2016

administrative database that has contact information for all, or at least most, of the low-income population. Many other industrialized countries have such administrative databases and use them to contact eligible nonparticipants, particularly the most disadvantaged individuals and families (Ko & Moffitt, 2022). Many of the most disadvantaged families and individuals in the United States are not in any administrative data system, which makes them difficult to reach with many interventions. It is worth noting in this context that a default opt-in, such as the approach that has been so successful in increasing retirement savings (see Chapter 6), is not a realistic solution for program take-up. It is not currently feasible to automatically enroll families in social safety net programs and require them to actively opt out. In addition, establishing eligibility requires that income and other variables be checked by the government, and this necessarily requires that potential recipients voluntarily and actively participate.

FINDINGS

There is a substantial body of high-quality evidence about low rates of participation in social safety net programs and the relatively high rates of eligible families who do not receive benefits for which they are entitled (ranging from 16 to 72% of eligible people for different programs). Several findings about the role of behavioral principles in this problem stand out:

- Because these programs are aimed at low-income families, the problem of cognitive barriers is particularly relevant: lower-thanaverage levels of education and literacy are common for this population, yet the administrative complexity of applying for the programs and continuing to receive benefits is significant.
- Low-income individuals and families often cope with significant daily life challenges, so limited attention is a significant factor for this population.
- Because of the challenges faced by this population in daily life, they may not have the attention necessary to accurately perceive the future benefits of program application, resulting in a form of present bias.
- Many eligible individuals and families lack information about complex program requirements, and low levels of education and literacy impede their capacity to acquire the information they need to accurately estimate how likely they are to receive benefits.
- At least some individuals and families perceive social stigma associated with participating in social safety net programs; this reflects the importance of social norms in their decision-making processes.

 Many of the behavioral barriers identified in the literature have particularly strong effects for the lowest-income and most disadvantaged members of the low-income population, which means they are often least likely to participate in programs for which they are eligible.

In the realm of interventions to address incomplete take-up, the research has yielded a few findings:

- The evidence on the effectiveness of low-cost nudges to encourage participation is mixed, with some interventions showing modest effects on take-up but others showing no significant effect or any effect at all unless the study population includes households that have already participated in the program in the past.
- A few costly large-scale interventions, particularly those implemented by the U.S. Department of Agriculture for SNAP, appear to have had positive effects on take-up with interventions that provided additional information, simplified application forms, and otherwise reduced the administrative burden of applying but were more costly. Interventions that assist families directly are also more expensive than simple nudges but may have large payoffs.

More research is needed on both the behavioral factors that discourage take-up of social safety net programs and the most effective interventions to increase take-up.

- The importance of stigma and social norms, relative to other factors such as information and administrative burden, needs more study.
- As noted above, many of the interventions in this area have increased participation by low-income families not receiving benefits for which they are eligible. Nevertheless, most studies have not attempted to identify whether take-up increases only for the somewhat better-off families in the low-income population or also for the most needy, worse-off families.
- Additional evidence on nudges is needed to better understand how effectiveness depends on the nature of the study population and contextual factors.
- Some research has suggested that interventions that provide more direct assistance with applying for benefits, rather than simple informational or framing nudges, have a greater effect, but too few tests of those types of interventions have been conducted to yield a clear finding.

More research is needed on how administrative burden in program application can be reduced while maintaining the need for accurate determination of eligibility to prevent errors and fraud.

REFERENCES

- Bergman, P., Chetty, R., DeLuca, S., Hendren, N., Katz, L. F, & Palmer, P. (2023). Creating moves to opportunity: Experimental evidence on barriers to neighborhood choice. National Bureau of Economic Research. https://doi.org/10.3386/w26164
- Bertrand, M., Mullainathan, S., & Shafir, E. (2006). Behavioral economics and marketing in aid of decision making among the poor. *Journal of Public Policy & Marketing*, 25(1), 8–23. https://doi.org/10.1509/jppm.25.1.8
- Besley, T., & Coate, S. (1992). Workfare versus welfare: Incentive arguments for work requirements in poverty-alleviation programs. *The American Economic Review*, 82(1), 249–261. http://www.jstor.org/stable/2117613
- Bhargava, S., & Manoli, D. (2015). Psychological frictions and the incomplete take-up of social benefits: Evidence from an IRS field experiment. *American Economic Review*, 105(11), 3489–3529. https://doi.org/10.1257/aer.20121493
- Daponte, B. O., Sanders, S., & Taylor, L. (1999). Why do low-income households not use food stamps? Evidence from an experiment. *Journal of Human Resources*, 34(3), 612–628. https://doi.org/10.2307/146382
- Decker, S. L., Abdus, S., & Lipton, B. J. (2022). Eligibility for and enrollment in Medicaid among nonelderly adults after implementation of the Affordable Care Act. *Medical Care Research and Review*, 79(1), 125–132. https://doi.org/10.1177/1077558721996851
- De La Rosa, W., Sharma, E., Tully, S., Gianella, E., & Rino, G. (2021). Psychological ownership as an intervention: Addressing the government benefits participation gap. *NA—Advances in Consumer Research*, 318–319. Association for Consumer Research. http://www.acrwebsite.org/volumes/3000530/volumes/v49/NA-49
- Dickert-Conlin, S., Fitzpatrick, K., Stacy, B., & Tiehen, L. (2021). The downs and ups of the SNAP caseload: What matters? *Applied Economic Perspectives and Policy*, 43(3), 1026–1050. https://doi.org/10.1002/aepp.13076
- Falk, G. (2017). The Temporary Assistance for Needy Families (TANF) block grant: Subsidized employment demonstration proposal: In brief. Cornell University. https://hdl.handle.net/1813/79208
- Finkelstein, A., & Notowidigdo, M. J. (2019). Take-up and targeting: Experimental evidence from SNAP. *The Quarterly Journal of Economics*, 134(3), 1505–1556. https://doi.org/10.1093/qje/qjz013
- Fox, L., & Burns, K. (2021). *The supplemental poverty measure:* 2020. Current population reports. U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/publications/2021/demo/p60-275.pdf
- Ganong, P., & Liebman, J. B. (2018). The decline, rebound, and further rise in SNAP enrollment: Disentangling business cycle fluctuations and policy changes. *American Economic Journal: Economic Policy*, 10(4), 153–176. https://doi.org/10.1257/pol.20140016
- Gennetian, L. A., Ludwig, J., McDade, T., & Sanbonmatsu, L. (2013). Why concentrated poverty matters. *Pathways Spring*, 10–13. SSRN. https://ssrn.com/abstract=2326579
- Goldin, J., Homonoff, T., & Meckel, K. (2022). Issuance and incidence: SNAP benefit cycles and grocery prices. *American Economic Journal: Economic Policy*, 14(1), 152–178. https://10.1257/pol.20190777
- Gray, C. (2019). Leaving benefits on the table: Evidence from SNAP. *Journal of Public Economics*, 179, 104054. https://doi.org/10.1016/j.jpubeco.2019.104054

- Guyton, J., Langetieg, P., Manoli, D., Payne, M., Schafer, B., & Sebastiani, M. (2017). Reminders and recidivism: Using administrative data to characterize nonfilers and conduct EITC outreach. American Economic Review, 107(5), 471–475. https://doi.org/10.1257/aer.p20171062
- Heinrich, C. J., Camacho, S., Henderson, S. C., Hernandez, M., & Joshi, E. (2022). Consequences of administrative burden for social safety nets that support the healthy development of children. *Journal of Policy Analysis and Management*, 41(1), 11–44.
- Herd, P., DeLeire, T., Harvey, H., & Moynihan, D. P. (2013). Shifting administrative burden to the state: The case of Medicaid take-up. *Public Administration Review*, 73(Suppl_1), S69–S81. https://doi.org/10.1111/puar.12114
- Herd, P., & Moynihan, D. P. (2018). Administrative burden: Policymaking by other means. Russell Sage Foundation.
- Homonoff, T., & Somerville, J. (2021). Program recertification costs: Evidence from SNAP. American Economic Journal: Economic Policy, 13(4), 271–298. https://doi.org/10.1257/pol.20190272
- Jones, M. R. (2013). The EITC and labor supply: Evidence from a regression kink design. Center for Administrative Records Research and Applications. U.S. Census Bureau.
- Kenney, G. M., Lynch, V., Haley, J., & Huntress, M. (2012). Variation in Medicaid eligibility and participation among adults: Implications for the Affordable Care Act. INQUIRY: The Journal of Health Care Organization, Provision, and Financing, 49(3), 231–253. https:// doi.org/10.5034/inquiryjrnl_49.03.08
- Kingsley, G. T. (2017). Trends in housing problems and federal housing assistance. Urban Institute. https://www.urban.org/sites/default/files/publication/94146/trends-in-housing-problems-and-federal-housing-assistance.pdf
- Kleven, H. J., & Kopczuk, W. (2011). Transfer program complexity and the take-up of social benefits. *American Economic Journal: Economic Policy*, 3(1), 54–90. https://doi.org/10.1257/pol.3.1.54
- Ko, W., & Moffitt, R. A. (2022). *Take-up of social benefits*. NBER Working Paper 30148. National Bureau of Economic Research. https://doi.org/10.3386/w30148
- Kopczuk, W., & Pop-Eleches, C. (2007). Electronic filing, tax preparers and participation in the Earned Income Tax Credit. *Journal of Public Economics*, 91(7–8), 1351–1367. https:// doi.org/10.1016/j.jpubeco.2006.11.003
- Lindbeck, A., Nyberg, S., & Weibull, J. W. (1999). Social norms and economic incentives in the welfare state. The Quarterly Journal of Economics, 114(1), 1–35. https://doi. org/10.1162/003355399555936
- Linos, E., Prohofsky, A., Ramesh, A., Rothstein, J., & Unrath, M. (2022). Can nudges increase take-up of the EITC? Evidence from multiple field experiments. *American Economic Journal: Economic Policy*, 14(4), 432–452. https://doi.org/10.1257/pol.20200603
- Lopoo, L. M., Heflin, C., & Boskovski, J. (2020). Testing behavioral interventions designed to improve on-time SNAP recertification. *Journal of Behavioral Public Administration*, 3(2). https://doi.org/10.30636/jbpa.32.183
- Moffitt, R. (1983). An economic model of welfare stigma. *The American Economic Review*, 73(5), 1023–1035. https://www.jstor.org/stable/1814669
- Mullainathan, S., & Shafir, E. (2013). Scarcity: Why having too little means so much. Macmillan.
- Ribar, D. C., Edelhoch, M., & Liu, Q. (2008). Watching the clocks: The role of food stamp recertification and TANF time limits in caseload dynamics. *Journal of Human Resources*, 43(1), 208–238. https://doi.org/10.3368/jhr.43.1.208
- Rossin-Slater, M. (2013). WIC in your neighborhood: New evidence on the impacts of geographic access to clinics. *Journal of Public Economics*, 102, 51–69. https://doi.org/10. 1016/j.jpubeco.2013.03.009

- Stuber, J., & Kronebusch, K. (2004). Stigma and other determinants of participation in TANF and Medicaid. *Journal of Policy Analysis and Management*, 23(3), 509–530. https://doi.org/10.1002/pam.20024
- Stuber, J., & Schlesinger, M. (2006). Sources of stigma for means-tested government programs. Social Science & Medicine, 63(4), 933–945. https://doi.org/10.1016/j.socscimed. 2006.01.012
- Trisi, D., & Saenz, M. (2019, November 26). *Economic security programs cut poverty nearly in half over last 50 years*. Center on Budget and Policy Priorities. https://www.cbpp.org/sites/default/files/atoms/files/9-14-18pov.pdf
- U.S. Department of Agriculture. (2022). Trends in USDA Supplemental Nutrition Assistance Program participation rates: Fiscal year 2016 to fiscal year 2019. https://fns-prod.azureedge.us/sites/default/files/resource-files/Trends2016-2019.pdf