

APPENDIX B: SUPPLEMENTARY FIGURES AND TABLES

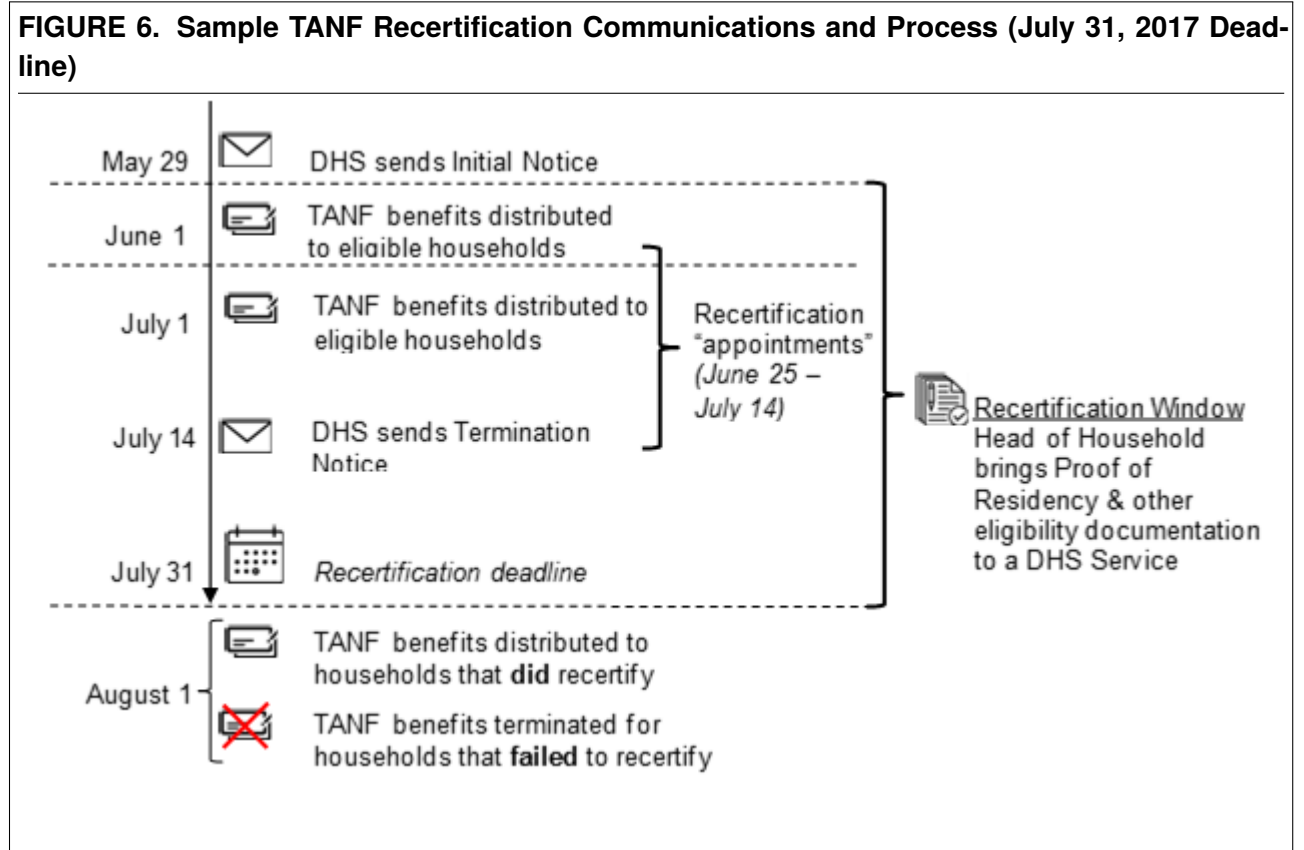


TABLE 1. Sample Composition and Timing

	July	August	September	October	November
Random Assignment Sample					
No Letter	242	257	242	177	259
Specific Date	243	258	242	178	260
Open Date	241	259	242	178	261
Total	726	774	726	533	780
Timelines					
Initial Notices mailed	5/31	7/1	7/30	8/30	9/30
Data pulled for sample	6/12	7/10	8/15	9/12	10/6
Reminder letters mailed (if applicable)	6/19	7/18	8/18	9/15	10/13
Suggested appointment dates	6/26-7/14 (not 7/4)	7/25-8/14	8/25-9/14 (not 9/4)	9/25-10/13 (not 10/9)	10/25-11/14 (not 11/10)
Deadline to Recertify	7/31	8/31	9/29	10/31	11/30

FIGURE 7. View of “Envelope” (Front and Back)

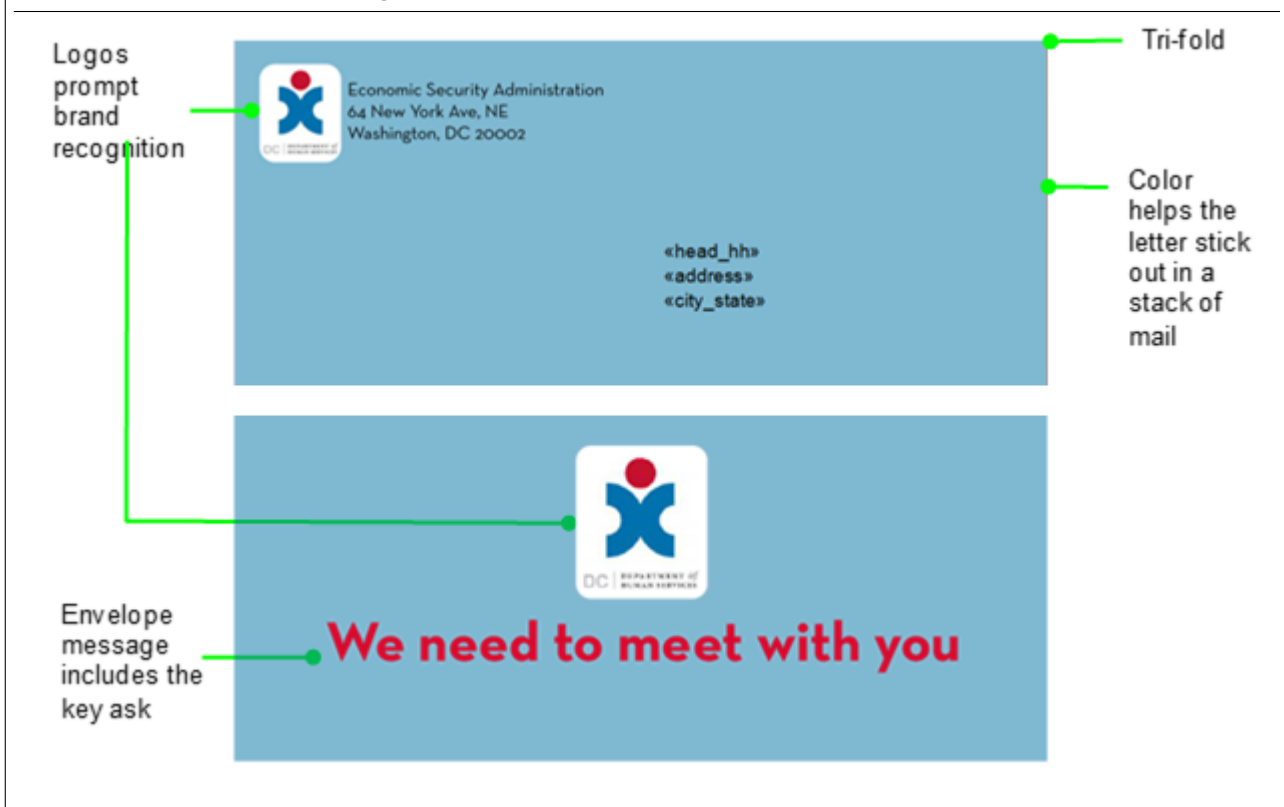


FIGURE 8. Participant Flow

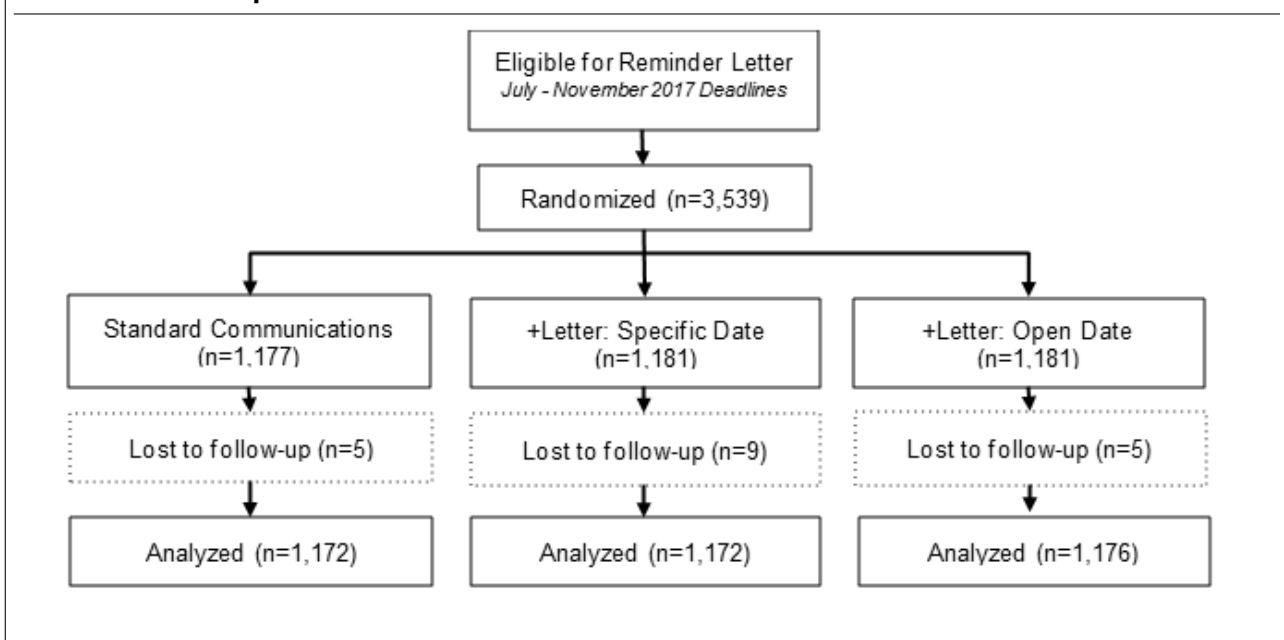


TABLE 2. Percentage Achieving Each Outcome, by Experimental Condition (no letter vs. any letter)

	No Letter <i>n</i> = 1172	Any Letter <i>n</i> = 2348	Difference (95% CI)
Started Recertification	41.8%	47.4%	5.6pp* (2.1, 9.0pp)
Complied with Requirements	40.7	45.9	5.2pp* (1.7, 8.7pp)
Successful Recertification	40.1	45.6	5.5pp* (2.1, 9.0pp)

Note: * Statistically significant at the $\alpha = 0.05$ level.
All percentages listed are from the total number assigned to that condition.

TABLE 3. Percentage Achieving Each Outcome, by Experimental Condition (specific date vs. open date)

	Letter: Specific Date <i>n</i> = 1172	Letter: Open Date <i>n</i> = 1176	Difference (95% CI)
Started Recertification	46.8%	48.0%	1.2pp (-2.8, 5.2pp)
Complied with Requirements	45.1	46.7	1.5pp (-2.5, 5.6pp)
Successful Recertification	44.8	46.4	1.6pp (-2.4, 5.7pp)

Note: All percentages listed are from the total number assigned to that condition.

FIGURE 9. Relative to Calendar Day, Number of Recertifications Daily, by experimental condition

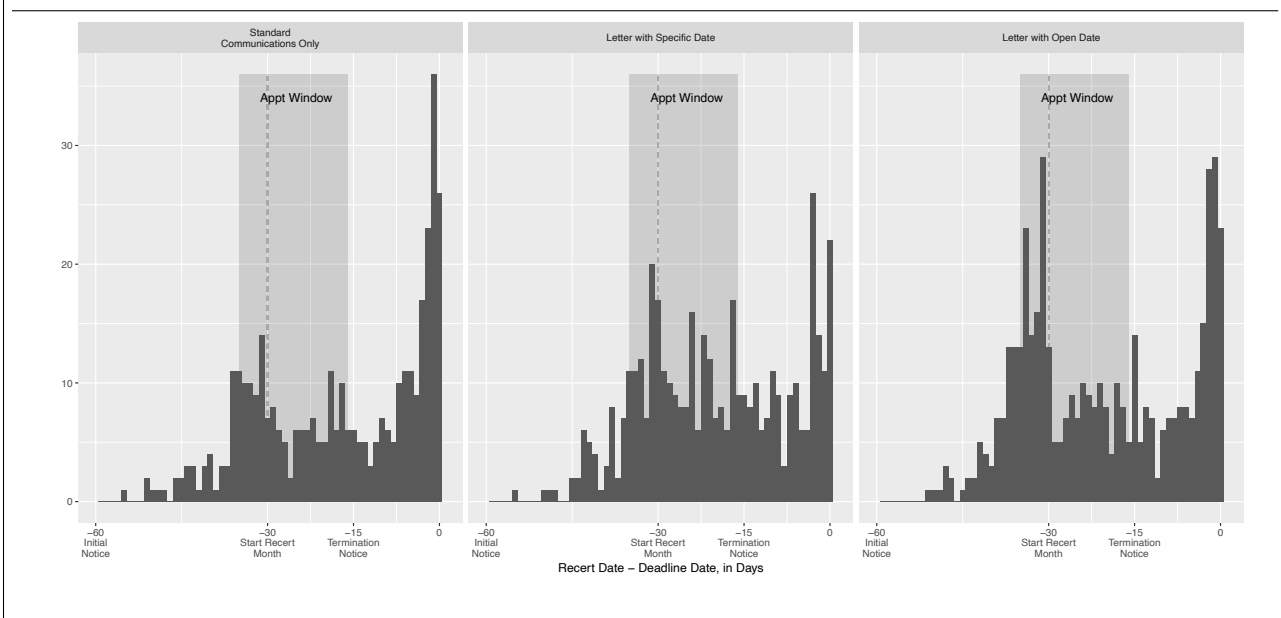
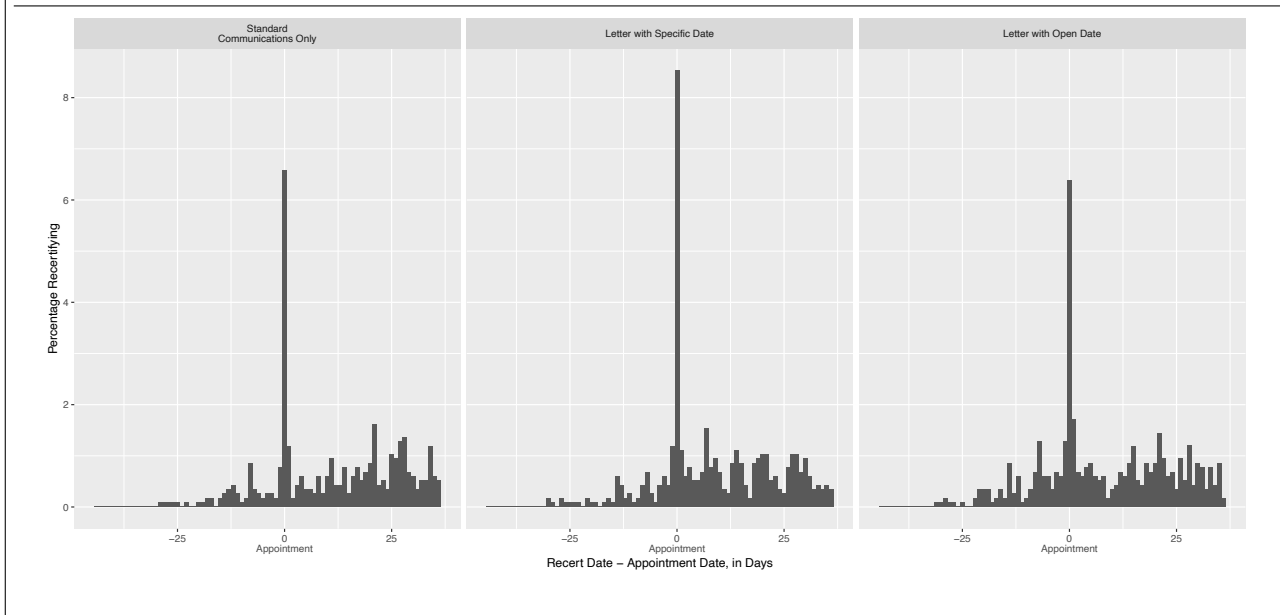


FIGURE 10. Relative to “Appointment Day”, Percentage of Households that Recertify Daily, by experimental condition



APPENDIX C: INITIAL NOTICE

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF HUMAN SERVICES



Notice Date: 10/29/2016

Account ID: [REDACTED]

Person ID: [REDACTED]

[REDACTED]
WASHINGTON, DC [REDACTED]

FORT DAVIS SERVICE CENTER(671)
3851, Alabama Avenue, SE
Washington, DC 20020
Phone number: (202) 645-4500
Fax Number: (202) 645-6205

Subject: Cash Assistance Renewal

Dear [REDACTED],

Your eligibility for Temporary Assistance for Needy Families needs to be reviewed. Without this review your benefits will be terminated. We need the information listed below so that we can determine whether you are still eligible to get benefits:

- We need proof that you are still a District resident
- We need to verify school attendance for 18 and 19 year old household members.
- We need to verify if anyone moved-in to your household.

Please bring the information to FORT DAVIS SERVICE CENTER(671) on [REDACTED]/2016. If you cannot go to this Service Center you may go to any of the Service Centers on the attached Service Center Address sheet.

If You Cannot Keep the Appointment

If you cannot keep the appointment, please contact (202) 727-5355 or before 12/2016 or you may go to any of the Service Centers listed on the attached form. If you fail to keep your scheduled appointment, we cannot determine if you are eligible for benefits. Without this review your benefits may be terminated.

ESA Manual Citation: Part II, Chapter 2, Section 2.3

If You Think We Made a Mistake

If you do not agree with the decision we made, the household may request a fair hearing within 90 days of the date of this notice. Read the attached Hearing Rights to learn how to request a hearing and for a list of organizations that may provide free legal representation. You may request a hearing orally or in writing.

If you have questions, please call (202) 727-5355. If you are Hearing Impaired, you may call TTY/TDD 711 (855) 532-5465.

APPENDIX D: TERMINATION NOTICE

**GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF HUMAN SERVICES**



Subject: Cash Assistance Termination

Dear [REDACTED]

Your Temporary Assistance for Needy Families (TANF) benefits will terminate [REDACTED] because <Insert reason>.

Condition:	Reason:
Disqualified Recipient for IPV	you were found to have committed public assistance fraud and this is your third offense, so your needs will be permanently removed from your household's TANF benefit. (D.C. Official Code § 4-218.01(c))
Institutionalized	your benefits have been terminated because you are in a hospital, group home, or nursing home and no longer meet the standard to be included in the TANF assistance unit because you are not living in the same household as the dependent child. (45 C.F.R. § 260.20(a); 42 U.S.C.S. § 608(a)(1); D.C. Official Code § 4-205.15)
No longer living in the same household as the dependent child	Your benefits have been terminated because you no longer meet the standard to be included in the TANF assistance unit because you are not living in the same household as the dependent child. (45 C.F.R. § 260.20(a); 42 U.S.C.S. § 608(a)(1); D.C. Official Code § 4-205.15)
[if gross income exceeds max allowable]	your gross income exceeds the maximum allowable limit. (D.C. Official Code § 4-205.10(a))
[if not a d.c. resident]	you are no longer a District resident. (D.C. Official Code §§ 4-205.03-.04, 4-205.53)
[if disqualified misrepresented residency]	you were found to have misrepresented your residency to get benefits from two or more States, so your needs are removed from your household's TANF benefit for ten (10) years. (D.C. Official Code § 4-205.69)
[if loss of contact / no response from client]	we could not establish contact with you. 7 CFR 273.13
Verifications not provided	part of the application process is providing requested information and we did not receive the information we requested from you (for example: living with statement(s), proof of citizenship status, income, etc.) ESA Policy Manual Part III, Chapter 1, Section 1.1 and Part III, Chapter 2, Section 2.1 and D.C. Official Code §§ 4-205.19(a), and .31(a).
[Failure to provide requested information]	you have not provided of all the information we requested from you. ESA Policy Manual Part III, Chapter 1, Section 1.1 and Part III, Chapter 2, Section 2.1 and D.C. Official Code §§ 4-205.05a, .19(a), and .31(a)

If You Think We Made a Mistake

If you do not agree with the decision we made, the household may request a fair hearing within 90 days of the date of this notice. Read the attached Hearing Rights to learn how to request a hearing and for a list of organizations that may provide free legal representation. You may request a hearing orally or in writing.

If you have any questions please call (202)724-5506. If you are Hearing Impaired, you may call TTY/TDD 711 (855) 532 5465

REFERENCES

- Angrist, Joshua D. , Guido W. Imbens, and Donald B. Rubin (1996). Identification of causal effects using instrumental variables. *Journal of the American statistical Association* 91(434), 444–455.
- Anzelone, Caitlin , Jonathan Timm, and Yana Kusayeva (2018, February). Dates and deadlines: Behavioral strategies to increase engagement in child support. pp. 1–13. <https://files.eric.ed.gov/fulltext/ED581586.pdf>.
- Ariely, Dan and Klaus Wertenbroch (2002, May). Procrastination, deadlines, and performance: Self-control by precommitment. *Psychological Science* 13 (3), 219–224. <https://doi.org/10.1111/1467-9280.00441>.
- Baumeister, Roy F. , Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology* 74(5), 1252–1265.
- Behavioral Insights Team (2016). Behavioral insights for cities. *What Works Cities Resource*, 10–11. <http://38r8om2xjhhl25mw24492dir.wpengine.netdna-cdn.com/wp-content/uploads/2016/10/Behavioral-Insights-for-Cities-2.pdf>.
- Bertrand, Marianne , Sendhil Mullainathan, and Eldar Shafir (2004). A behavioral economics view of poverty. *American Economic Review* 94(1), 419–23.
- Beshears, John , James Choi, David Laibson, and Brigitte Madrian (2008). The importance of default options for retirement saving outcomes: Evidence from the United States. In S. J. Kay and T. Sinha (Eds.), *Lessons from Pension Reform in the Americas*, pp. 59–87. Oxford University Press.
- Bhargava, Saurabh and Dayanand Manoli (2015, November). Psychological frictions and the incomplete take-up of social benefits: Evidence from an IRS field experiment. *American Economic Review* 105(11), 3489–3529.
- Blumenstock, Joshua , Michael Callen, and Tarek Ghani (2018, October). Why do defaults affect behavior? experimental evidence from afghanistan. *American Economic Review* 108(10), 2868–2901.
- Brodkin, Evelyn Z. and Malay Majmundar (2010). Administrative exclusion: Organizations and the hidden costs of welfare claiming. *Journal of Public Administration Research and Theory* 20(4), 827–848. <https://doi.org/10.1093/jopart/mup046>.
- Burden, Barry C. , David T. Canon, Kenneth R. Mayer, and Donald P. Moynihan (2012). The effect of administrative burden on bureaucratic perception of policies: Evidence from election administration. *Public Administration Review* 72(5), 741–751. <https://doi.org/10.1111/j.1540-6210.2012.02600.x>.
- Choi, James J. , David Laibson, and Brigitte C. Madrian (2005). \$100 bills on the sidewalk: Suboptimal investment in 401(k) plans. *NBER Working Paper 11554*, 1–42.
- Christensen, Julian , Lene Aarøe, Martin Baekgaard, Pamela Herd, and Donald P. Moynihan (2020). Human capital and administrative burden: The role of cognitive resources in citizen-state interactions. *Public Administration Review* 80(1), 127–136.
- CONSORT, Transparent Reporting of Trials (2016). CONSORT transparent reporting of trials. <http://www.consort-statement.org/consort-2010>. Accessed 30 June 2016.
- Currie, Janet (2004, May). The take up of social benefits. *NBER Working Paper* (10488). <https://www.nber.org/papers/w10488>.

- Damgaard, Mette Trier and Christina Gravert (2017, February). Now or never! the effect of deadlines on charitable giving: Evidence from a natural field experiment. *Journal of Behavioral and Experimental Economics* 66(C), 78–87.
- DC Action for Children (2016, April). Policy snapshot: TANF reform in DC. *Policy Snapshot*. https://www.dcactionforchildren.org/sites/default/files/TANF%20Snapshot%20FINAL_APRIL%202016.pdf.
- D.C. Department of Human Services, Economic Security Administration (2015, December). Combined application for DC Food Stamps, Cash Assistance, Medicaid, and Healthcare Alliance/Immigrant Child Program. <https://dhs.dc.gov/publication/combined-application-benefits>.
- D.C. Department of Human Services, Economic Security Administration (2017, October). District of Columbia state plan for administration of the block grant for temporary assistance for needy families (TANF). https://dhs.dc.gov/sites/default/files/dc/sites/dhs/release_content/attachments/DRAFT%20DC%20State%20Plan%20for%20TANF%2011.06.17.pdf.
- Dechausay, Nadine and Caitlin Anzelone (2016). Cutting through complexity: Using behavioral science to improve Indiana's child care subsidy program. OPRE Report. https://www.mdrc.org/sites/default/files/Cutting_through_Complexity_FR.pdf.
- DellaVigna, Stefano and Elizabeth Linos (2020, July). RCTs to Scale: Comprehensive Evidence from Two Nudge Units. Working Paper 27594, National Bureau of Economic Research.
- Falk, Gene (2017, January). Temporary assistance for needy families (TANF): Size of the population eligible for and receiving cash assistance. *Congressional Research Service Report*. <https://fas.org/sgp/crs/misc/R44724.pdf>.
- Farrell, Mary , Jared Smith, Leigh Reardon, and Emmi Obara (2016, March). Framing the message: Using behavioral economics to engage TANF recipients. *OPRE Report 2*. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Feld, Sebastian, Heiko Frenzen , Manfred Krafft, Kay Peters, and Peter Verhoef (2013). The effect of mailing design characteristics on direct mail campaign performance. *International Journal of Research in Marketing* 30(2), 143–59.
- Finkelstein, Amy , Nathaniel Hendren, and Erzo FP Luttmer (2019). The value of medicaid: Interpreting results from the oregon health insurance experiment. *Journal of Political Economy* 127(6), 2836–2874.
- Finkelstein, Amy and Matthew J. Notowidigdo (2019). Take-up and targeting: Experimental evidence from SNAP. *The Quarterly Journal of Economics* 134(3), 1505–1556.
- Finkelstein, Amy , Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P Newhouse, Heidi Allen, Katherine Baicker, and Oregon Health Study Group (2012). The oregon health insurance experiment: evidence from the first year. *The Quarterly journal of economics* 127(3), 1057–1106.
- Fox, Ashley M. , Wenhui Feng, and Edmund C. Stazyk (2020). Administrative easing: Rule reduction and medicaid enrollment. *Public Administration Review* 80(1), 104–117.
- Furnham, Adrian and Hua Chu Boo (2011, February). A literature review of the anchoring effect. *The Journal of Socio-Economics* 40(1), 35–42. <https://doi.org/10.1016/j.socec.2010.10.008>.
- George, Bert , Sanjay K. Pandey, Bram Steijn, Adeliën Decramer, and Mieke Audenaert (2021, July/August). Red Tape, Organizational Performance, and Employee Outcomes: Meta-analysis, Meta-regression, and Research Agenda. *Public Administration Review* 81(4), 638–651.

- Gerber, Alan S. and Donald P. Green (2012). *Field Experiments: Design, Analysis, and Interpretation*. New York, NY: W.W. Norton & Company.
- Gollwitzer, Peter (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist* 54(7), 493–503.
- Gonzalez-Barrera, Ana , Mark Hugo Lopez, Jeffrey S. Passel, and Paul Taylor (2013). The path not taken. *Pew Hispanic Center, February 4*.
- Hattke, Fabian , David Hensel, and Janne Kalucza (2020). Emotional responses to bureaucratic red tape. *Public Administration Review* 80(1), 53–63.
- Herd, Pamela , Thomas DeLeire, Hope Harvey, and Donald P. Moynihan (2013). Shifting administrative burden to the state: The case of Medicaid take-up. *Public Administration Review* 73(s1), S69–S81. <https://doi.org/10.1111/puar.12114>.
- Herd, Pamela and Donald P. Moynihan (2019). *Administrative Burden: Policymaking by Other Means*. New York, NY: Russell Sage Foundation.
- Hernanz, Virginia , Franck Malherbet, and Michele Pellizzari (2004). Take-up of welfare benefits in OECD countries: A review of the evidence. *OECD Social, Employment and Migration Working Papers*. <http://www.oecd-ilibrary.org/docserver/download/525815265414.pdf>.
- Hoffmann, Robert , Marie-Anne Cam, and Adrian R. Camilleri (2019). Deciding to invest responsibly: Choice architecture and demographics in an incentivised retirement savings experiment. *Journal of Behavioral and Experimental Economics* 80, 219–230.
- Homonoff, Tatiana and Jason Somerville (2020, June). Program Recertification Costs: Evidence from SNAP. Working Paper 27311, National Bureau of Economic Research.
- Johnson, Eric J. , Ran Hassin, Tom Baker, Allison T. Bajger, and Galen Treuer (2013, 12). Can consumers make affordable care affordable? the value of choice architecture. *PLOS ONE* 8(12), 1–6.
- Kahneman, Daniel (2011). *Thinking Fast and Slow*. New York City, NY: Farrar, Straus and Giroux.
- Lassiter, Linnea (2017, July). What’s in the fiscal year 2018 budget for Temporary Assistance for Needy Families (TANF)? *DC Fiscal Policy Institute, Budget Toolkit*. <https://www.dcfpi.org/wp-content/uploads/2017/08/TANF-Toolkit-FY-2018-Approved.pdf>.
- Linos, Elizabeth and Nefara Riesch (2020). Thick red tape and the thin blue line: A field study on reducing administrative burden in police recruitment. *Public Administration Review* 80(1), 92–103.
- Lopoo, Leonard M. , Colleen Heflin, and Joseph Boskovski (2020). Testing behavioral interventions designed to improve on-time snap recertification. *Journal of Behavioral Public Administration* 3(2).
- Madrian, Brigitte C. and Dennis F. Shea (2001). The power of suggestion: Inertia in 401 (k) participation and savings behavior. *The Quarterly Journal of Economics* 116(4), 1149–1187.
- McLean, Sionnadh Mairi , Andrew Booth, Melanie Gee, Sarah Salway, Mark Cobb, Sadiq Bhanbhro, and Susan A. Nancarrow (2016, April). Appointment reminder systems are effective but not optimal: Results of a systematic review and evidence synthesis employing realist principles. *Patient Preference and Adherence* 10, 479—99. <https://doi.org/10.2147/PPA.S93046>.
- Moore, Ryan T. (2012, Autumn). Multivariate continuous blocking to improve political science experiments. *Political Analysis* 20(4), 460–479.

- Moore, Ryan T. , Katherine N. Gan, Karissa Minnich, and David Yokum (2022). Replication Data for: Anchor Management: A Field Experiment to Encourage Families to Meet Critical Program Deadlines. <https://doi.org/10.7910/DVN/5WTSUZ>, Harvard Dataverse, V1.
- Moore, Ryan T. and Keith Schnakenberg (2016, December). blocktools: Blocking, assignment, and diagnosing interference in randomized experiments. *R package version 0.6-3*. <http://www.ryanmoore.org/html/software.blockTools.html>.
- Moynihan, Donald , Pamela Herd, and Hope Harvey (2015, January). Administrative burden: Learning, psychological, and compliance costs in citizen-state interactions. *Journal of Public Administration Research and Theory* 25(1), 43–69.
- Mullainathan, Sendhil and Eldar Shafir (2014). *Scarcity: The New Science of Having Less and How It Defines Our Lives*. New York, NY: Picador. Reprint edition.
- R Core Team (2018). R: A language and environment for statistical computing. *R Foundation for Statistical Computing*. <https://www.R-project.org/>.
- Ratcliffe, Caroline , Signe-Mary McKernan, and Kenneth Finegold (2008). Effects of food stamp and TANF policies on Food Stamp receipt. *Social Service Review* 82(2), 291–334.
- Seymour, Anthea, Administrator to ESA Staff (2017, January). Memorandum: TANF, IDA, GC Renewal Policy.
- Tversky, Amos and Daniel Kahneman (1981, January). The framing of decisions and the psychology of choice. *Science, New Series* 211(4481), 453—458.
- U.S. Department of Health and Human Services, Office of Human Services Policy, Office of the Assistant Secretary for Planning and Evaluation (2017a, September). Fiscal year 2015 TANF financial data. <https://www.acf.hhs.gov/ofa/resource/tanf-financial-data-fy-2015>. Accessed May 1, 2018.
- U.S. Department of Health and Human Services, Office of Human Services Policy, Office of the Assistant Secretary for Planning and Evaluation (2017b, January). TANF caseload data 2016. <https://www.acf.hhs.gov/ofa/resource/tanf-financial-data-fy-2015>. TANF Caseload Data, accessed May 1, 2018.
- U.S. Department of Health and Human Services, Office of Human Services Policy, Office of the Assistant Secretary for Planning and Evaluation (2017c, September). Welfare indicators and risk factors. *Sixteenth Report to Congress*. <https://aspe.hhs.gov/system/files/pdf/257521/WelfareIndicators.pdf>, <https://aspe.hhs.gov/pdf-report/welfare-indicators-and-risk-factors-sixteenth-report-congress>.
- White House Office of Science and Technology Policy, Subcommittee on the Social & Behavioral Sciences Team (2015, September). Social and behavioral sciences team 2015 annual report. <https://sbst.gov/download/2015%20SBST%20Annual%20Report.pdf>.
- Zamir, Eyal , Daphna Lewinsohn-Zamir, and Ilana Ritov (2017). It's now or never! using deadlines as nudges. *Law & Social Inquiry* 42(3), 769–803. <https://doi.org/10.1111/lisi.12199>.