



HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

Improving delivery of the social safety net: The role of stigma

Faculty Research Working Paper Series

Jessica Lasky-Fink

Goldman School of Public Policy, University of California, Berkeley

Elizabeth Linos

Harvard Kennedy School

November 2022 (Updated September 2023)

RWP22-022

Visit the **HKS Faculty Research Working Paper Series** at: <https://ken.sc/faculty-research-working-paper-series>

The views expressed in the **HKS Faculty Research Working Paper Series** are those of the author(s) and do not necessarily reflect those of the John F. Kennedy School of Government or of Harvard University. Faculty Research Working Papers have not undergone formal review and approval. Such papers are included in this series to elicit feedback and to encourage debate on important public policy challenges. Copyright belongs to the author(s). Papers may be downloaded for personal use only.

Improving delivery of the social safety net: The role of stigma

Jessica Lasky-Fink^{1*} & Elizabeth Linos¹

¹ Harvard Kennedy School, 79 JFK St., Cambridge, MA 02138, United States
Emails: jessica_lasky-fink@hks.harvard.edu, elizabeth_linos@hks.harvard.edu

*Corresponding author

Abstract

Many low-income households in the US miss out on social safety net benefits because of the information, compliance, and psychological costs associated with take-up of government assistance. Yet, the empirical evidence on the impact of learning and psychological costs on take-up, and how to reduce them, is mixed. Leaning on an administrative burden framework, this paper measures the role of reducing learning costs and stigma on demand for rental assistance in two field experiments ($N = 117,073$) conducted in two US cities. We find that providing information about emergency rental assistance increased program application requests by 52% compared to a no-communication control group. Moreover, subtle framing changes aimed at destigmatizing rental assistance increased engagement with the communication by 36% and increased application requests by about 18% relative to an information-only group, with potentially larger effects for renters of color. In two subsequent online experiments ($N = 1,258$), we document that the destigmatizing framing reduces internalized stigma, without affecting perceptions of the program itself.

Introduction

Means-tested government programs lift millions of Americans out of poverty and have been shown to have long-term economic and health benefits (Bailey et al., 2020; CBPP, 2016). Yet, despite clear evidence of net benefits for those who participate, 20 to over 50 percent of households do not utilize programs for which they are eligible (Bhargava & Manoli, 2015; Blumenthal et al., 2005; FNS, 2020; Giannarelli, 2019). A growing literature on administrative burden documents learning, compliance, and psychological costs that can contribute to these so-called “take-up gaps” across the social safety net, especially among the most vulnerable (e.g., Barnes, 2020; Christensen et al., 2020; Currie, 2004; Heinrich, 2016; Herd & Moynihan, 2019; Ray et al., 2022).

This article reports results from two randomized field experiments ($N = 117,073$) and two subsequent online studies, examining the role of learning costs and psychological costs as barriers to participation in emergency rental assistance programs. In Study 1, conducted in Denver, CO, we found that mail-based outreach to residents about the county’s rental assistance program increased application requests by 52% compared to a no-communication control. Meanwhile, mail-based outreach that included subtle framing changes to destigmatize assistance increased application requests by 79% compared to a no-communication control, and by 18% compared to providing information alone, although this latter difference was not quite significant by conventional levels. The same patterns emerge with downstream take-up outcomes: households that received the destigmatizing outreach were significantly more likely to submit their application and receive assistance than households in the control group, and directionally more likely than households receiving information alone. Study 2, conducted in Austin, TX, conceptually replicates our findings using a email-based intervention and also further disentangles the difference between destigmatizing outreach and information alone: destigmatizing outreach delivered via email significantly increased engagement with the city’s rental assistance application by 36% relative to providing information alone.

Taken together, the results from both field experiments confirm the existence of large learning costs associated with take-up and point toward the role of stigma as a psychological hurdle over and above learning costs. In an analysis of heterogeneous effects, we find suggestive evidence that stigma may be a more consequential barrier for renters of color. In two subsequent online experiments ($N = 1,258$) to test mechanisms, we document that the destigmatizing language reduces the internalized stigma felt by low-income residents, without shifting beliefs about the program as a whole.

This research makes three main contributions. First, it contributes to the evidence base on the causal impact of stigma on decision-making. In other policy areas, stigma has been associated with a range of behaviors, including medication adherence (Rao et al., 2007; Rintamaki et al., 2006), motivation to exercise (Vartanian & Novak, 2011; Vartanian & Shaprow, 2008), academic performance (Brown & Lee, 2005), financial decisions (Gladstone et al., 2021) and help-seeking (Eisenberg et al., 2009; Jennings et al., 2015). However, a majority

of research to date has been correlational. Second, this research directly contributes to a growing literature on the role of administrative burdens in understanding take-up gaps. A large body of work documents the existence of barriers to participation in means-tested programs (e.g., Bell et al., 2022b; Bhargava & Manoli, 2015; Herd et al., 2013; Herd & Moynihan, 2019; Smeeding et al., 2000). Yet, evidence from behavioral interventions aimed at reducing these barriers has been mixed, which has left many open questions about when, why, and for whom such interventions are effective (e.g., Bird et al., 2021; De La Rosa et al. 2021; Finkelstein & Notowidigdo, 2019; Linos et al., 2022). This research suggests that designing interventions aimed at reducing learning barriers may require a more conscious focus on relevant psychological barriers if they are to effectively improve delivery of stigmatized programs. Last, these findings contribute to the broader literature on housing policy and eviction prevention during Covid-19 and beyond (Benfer et al., 2022; Collinson et al., 2019; Keene et al., 2021). Ultimately, the findings reported in this paper have direct and timely implications for policymakers who face a dual challenge of increasing overall take-up of critical safety net programs, while also ensuring equity in access and delivery.

The rest of this paper proceeds as follows. Next, we present a theoretical framework for understanding the channels through which administrative burdens may affect take-up of means-tested programs, with a particular focus on the dimensions of stigma that may influence behavior. Then, we describe each field experiment in turn, including methods, analysis, and results. Thereafter, we present two results from two online studies exploring mechanisms. Finally, we conclude by addressing limitations and suggesting directions for future research.

Theoretical Framework

The administrative burden framework distinguishes between three types of barriers that may deter participation in government programs. Learning costs are those associated with learning about a program, its eligibility criteria, and relevant application requirements and processes. In the context of rental assistance, residents must first learn that the program exists and that they are eligible, and then must seek out information about application and enrollment requirements. Learning costs may be particularly relevant for residents who are newly eligible for assistance, and therefore have less experience navigating government systems, such as the millions of Americans who may have found themselves at risk of eviction for the first time due to consequences of the Covid-19 pandemic (Benfer et al., 2022). Some empirical studies have found that reducing learning costs through clear and simple communication about program benefits and eligibility can increase program enrollment across a range of policy areas, including health insurance (Remler & Glied, 2003), disability insurance (Armour, 2018), and SNAP (Finkelstein & Notowidigdo, 2019). Yet, other research has shown that information interventions are not enough to increase participation (Bird et al., 2021; Linos et al., 2022).

Compliance costs are those associated with applying for, enrolling in, and maintaining access to a program. This can involve lengthy and burdensome application processes, including

in-person interviews, extensive verification and documentation requirements, and even drug testing in some states. Such burdens impose a “time-tax” on prospective beneficiaries; those who lack the resources to overcome this tax may miss out on benefits for which they are eligible (Lowrey, 2021). Simplifying program requirements, pre-filling application materials, and providing assistance with application processes have been shown to effectively increase enrollment across a variety of programs including FAFSA (Bettinger et al., 2012), health insurance (Collins et al., 2016), Supplemental Security Income and Social Security Disability Insurance (Deshpande & Li, 2019), and SNAP (Finkelstein & Notowidigdo, 2019; Schanzenbach, 2009).

But investing in reducing learning and compliance barriers—while a critical component of any anti-poverty solution—has proven to be insufficient to fully close existing take-up gaps in most program and policy contexts (Linos et al., 2022). This suggests a need for a renewed focus on other barriers, especially psychological costs, that may impose obstacles to program enrollment even for individuals who are able to overcome learning barriers and compliance hurdles and may place the highest burdens on systemically marginalized populations.

Psychological costs include the stigma, loss of autonomy, and threat to one’s self-worth or identity that can be associated with applying for or participating in benefit programs. We define stigma as a social construct that can result in social rejection, devaluation, and discrimination based on a given attribute, identity, or behavior (Dovidio et al., 2000; Goffman, 1963; Major & O’Brien, 2005). An extensive literature documents a pervasive stigma around poverty and the use of government assistance in the US (Barnes et al., 2023; Baumberg, 2016; Celhay et al., 2022; Gilens, 1999). There are widespread stereotypes that people living in poverty are lazy, undeserving, lacking ambition and a work ethic, and even morally inferior (Lauter, 2016; Mead, 2019). This stigma originates from societal beliefs about the causes of poverty and norms of deservingness, and is also highly racialized and gendered (Baekgaard et al., 2022; Brown-Iannuzzi et al., 2016; Federico, 2004; Kluegel & Smith, 1986; Moffit, 1983; Watkins-Hayes & Kovalsky, 2016). Counterproductively, participation in the very programs that aim to lift people out of poverty is often stigmatized over and above poverty itself (Stuber & Schlesinger, 2006; Williamson, 1974). For example, poor people who receive government assistance are more likely to be seen as lazy and undeserving of help than poor people who do not participate in benefit programs (Cook & Barrett, 1992; Iyengar, 1990). But although the existence of “welfare stigma” has been well-documented, there is little empirical evidence on whether and how it causally affects participation in means-tested programs, nor on effective methods for reducing it.

Efforts to measure the causal impact of stigma on take-up require a more in-depth understanding of the mechanisms through which stigma influences behavior. Drawing on literature from other policy areas, including public health, sociology, and psychology, we distinguish between three distinct, but interrelated, constructs of welfare stigma that may affect behavior (Baumberg, 2016; Bos et al., 2013; Fox et al., 2018; Pescosolido & Martin, 2015). *Societal stigma* is the negative beliefs, attitudes, and stereotypes society holds about beneficiaries

or prospective beneficiaries of public benefit programs (Pescosolido, 2013). *Anticipated stigma* refers to expectations of being the target of prejudice, discrimination, or negative stereotypes because of one's association with a public benefits program (Gabbidon et al., 2013; Moore & Tangney, 2017). Anticipated stigma may be driven by direct experiences of stigmatization or discrimination, but it can also stem from beliefs about how society treats individuals on government assistance, regardless of any direct experience. *Internalized stigma* is the process through which beneficiaries or prospective beneficiaries of government assistance internalize the negative stereotypes and beliefs held by society, which can manifest as shame, poor self-efficacy, low self-esteem and self-worth, or disempowerment (Gladstone et al., 2021; Jahn et al., 2020; Palar et al., 2018).

We propose that each of these constructs of stigma can affect access to and take-up of means-tested programs through three channels. First, stigma may directly impact access to and take-up of benefits by affecting willingness to participate in programs. Prospective beneficiaries may not apply for programs if they anticipate being discriminated against (*anticipated stigma*) or if they feel a sense of shame (*internalized stigma*) from being associated with a stigmatized group (Gladstone et al., 2021; Bartlett et al., 2004; Hall et al., 2014). Second, *societal stigma* may affect the nature of interactions between prospective beneficiaries and those responsible for delivering benefits. On the one hand, this may directly affect prospective beneficiaries' ability or willingness to persist through application and re-enrollment processes by causally impacting anticipated stigma and internalized stigma. On the other hand, this may indirectly affect *who* benefits from programs if stigma influences the discretionary decision-making of those responsible for delivering services. Finally, *societal stigma* may indirectly affect take-up by influencing society's willingness to support broader learning and compliance burdens that have been shown to negatively impact participation (Keiser & Miller, 2020; Nicholson-Crotty et al., 2021). The studies presented in this paper focus on anticipated and internalized stigma as two potential psychological costs that may affect take-up of government assistance, within a context of pervasive societal stigma.

Disentangling the role of anticipated and internalized stigma from other administrative burdens is difficult, even in experimental research, in part because compliance costs can generate and exacerbate psychological burdens in ways that mask the relative importance of stigma (Baekgaard et al., 2021). For example, burdensome enrollment procedures can induce stress and frustration, especially for those who lack the resources to navigate them, and the invasive nature of application processes and verification procedures can fuel stigma and a sense of loss of autonomy (Soss, 2005). Despite these challenges, a few notable studies have attempted to experimentally test the role of stigma as a barrier to participation in benefits programs, with mixed results. Bhargava and Manoli (2015) found that adjusting how the Earned Income Tax Credit (EITC) was framed in government letters to target one potential source of stigma did not meaningfully increase take-up, although the authors acknowledge that the EITC is not a highly stigmatized government program. In fact, some research suggests the EITC is not typically seen as "welfare" (Halpern-Meehin et al., 2015). Meanwhile, two other studies find more promising

results. Schanzenbach (2009) found some evidence that reframing the Supplemental Nutrition Assistance Program (SNAP) impacted engagement: individuals were about 30% more likely to express interest in learning about the program when it was called a “benefit transfer” as opposed to when it was called “food stamps,” the stigmatized status quo. Similarly, De La Rosa et al. (2021) found that reframing informational outreach to induce psychological ownership (e.g., “your stimulus payment” instead of “a stimulus payment”) increased interest in benefits programs including SNAP and the EITC. In both cases, however, it is unknown whether these interventions increased actual benefits take-up, nor whether these effects were driven by a reduction in stigma or by some other mechanism, such as beliefs about the nature of the program, who it was intended for, or the likelihood and ease of receiving benefits. The studies reported in this article extend the existing evidence base by testing the impact of reducing learning and psychological barriers in the context of housing assistance.

Background & Context

Prior to the Covid-19 outbreak, many cities across the US were already facing unprecedented rates of homelessness and displacement. Through its impact on unemployment and financial insecurity, the Covid-19 pandemic further exacerbated the housing crisis, putting an estimated 30 to 40 million Americans at risk of homelessness, and disproportionately impacting low-income communities and racial minorities (Benfer et al., 2020).

Emergency rental assistance (ERA) programs are one of a number of government housing programs to support low-income renters. ERA programs aim to prevent eviction among residents who are facing financial hardship and unable to pay their rent. Low-income residents whose household income is at or below a certain threshold, typically 80% of the Area Median Income (AMI), are eligible to apply. Generally, applicants must provide proof of income and residency, proof of rent or utilities due, and their landlord’s information in order to receive assistance. Eligible applicants can receive assistance for a limited number of months, with payments made directly to their landlord or utility company.

The demand for rental assistance traditionally far exceeds supply. But rental assistance programs saw an unprecedented influx of pandemic-relief funds in early 2021 (CRS, 2021). Despite the fact that the number of renters who were behind on rent skyrocketed as a result of the pandemic, a large take-up gap emerged whereby many states and counties found it difficult to get assistance to the renters who needed it most (Benfer et al., 2020; Dougherty, 2020; Narayanswamy et al., 2021). This created a unique opportunity to examine the role of administrative barriers in the context of rental assistance.

Previous anecdotal evidence suggests that many residents who were eligible for rental assistance during this time were experiencing economic and housing insecurity for the first time due to the pandemic; they had not previously been in a position of being eligible for or needing to seek out government assistance. Thus, they may have lacked awareness of the programs, as well as an understanding of how to navigate the eligibility screening and application processes

associated with benefits enrollment. This lack of understanding may also hold true even for low-income households who have interacted with other government programs, as the process and requirements for each are unique and change over time.

Ex ante, the role of psychological costs as a barrier to take-up in this setting was unclear. On the one hand, stigma-related psychological costs may have been relatively unlikely to emerge because of the unique pandemic context. Extant literature suggests stigma and beliefs about deservingness are closely related to attributions for poverty, namely whether a low-income person is perceived to be “at fault” for their situation (see e.g., Cozzarelli et al., 2001; Hunt & Bullock, 2016; Piff et al., 2020). Thus, stigma may have been less likely to materialize in the pandemic context where millions of people were facing unexpected financial hardship because of a circumstance entirely outside their control. On the other hand, many of the prospective beneficiaries likely had little or no experience interacting with government assistance programs. As such, they may have been particularly susceptible to stigma based on broader societal beliefs about those who enroll in government assistance programs.

Outside of the pandemic context, some evidence suggests that housing assistance may be highly stigmatized (see e.g., Briggs et al., 2010; Jackson, 2018; Joseph, 2010). Moreover, in a pre-registered (<https://osf.io/surhm>) online pilot study of low-income Americans ($N = 490$), we found that the stigma associated with participation in rental assistance is significantly higher than Medicaid, for instance, and is similar to the level of stigma associated with having a mental illness—a highly stigmatized attribute that is the subject of much of the existing literature on stigma (see Table S1). We acknowledge that an MTurk sample of low-income Americans may not be representative of the broader low-income population. Yet, these results, in combination with existing rich qualitative literature on the existence of stigma around housing, make plausible the hypothesis that stigma may pose a barrier to take-up of rental assistance benefits – over and above learning costs – for eligible low-income individuals.

In two field experiments conducted in two US cities, we tested the role of learning and psychological costs associated with emergency rental assistance. In both cities, even though some compliance burdens remained (such as having to provide proof of income), there had been significant efforts to reduce compliance costs for tenants as much as possible within federal guidelines. This effort paralleled broader efforts to reduce compliance burdens for other parts of the social safety net during the pandemic, through major shifts such as waiving physical presence requirements for WIC recertification (Moss et al., 2020), reducing SNAP interview requirements (USDA, 2021), or waiving job search requirements for unemployment insurance (“Coronavirus and Unemployment Benefits,” 2023). As such, there was little room to test the role of compliance hurdles or the impact of efforts to reduce them. Instead, both field experiments tested the impact of informational outreach that aimed to reduce learning costs versus outreach that aimed to reduce both learning and psychological costs (stigma). Subsequently, we conducted two online experiments using the same outreach materials to explore potential mechanisms that drive our behavioral results. See Table 1 for an overview.

Table 1. Overview of Studies

Study	Research questions	Setting and Intervention	Dependent Variables
1	Does outreach that targets learning and psychological costs (stigma) increase rental assistance applications?	Field experiment: Mail-based communication Intervention: Figures S1 and S2 Setting: Denver, CO N = 62,529	Requests for rental assistance applications Submissions of rental assistance applications Assistance received
2	Is there a differential impact of targeting stigma and learning costs vs. learning costs alone?	Field experiment: Email-based communication Intervention: Figure S3 Setting: Austin, TX N = 54,544	Total click-throughs on the embedded links to the rental assistance program application website Total click-throughs on any embedded link
3	Which dimensions of stigma, if any, are influenced by the intervention?	Online experiment Intervention: Figures S1 and S2 Setting: Amazon MTurk N = 622	Internalized stigma Anticipated stigma
4	Does the intervention affect behavior through other causal pathways?	Online experiment Intervention: Figures S1 and S2 Setting: Amazon Mturk N = 636	Perceived compliance costs Beliefs about the program Comprehension

Study 1: Denver, CO***Experimental Design and Data***

In a pre-registered randomized experiment conducted in partnership with Denver County’s Department of Housing Stability and Office of Social Equity and Innovation, we designed and evaluated a mail-based communication intervention that aimed to connect eligible

renters with the County's temporary rental assistance program. Study 1 was conducted in December 2020 and was determined to not constitute human subjects research by the University of California, Berkeley IRB.

Denver County is divided into 78 distinct neighborhoods and 144 census tracts. We identified 56 neighborhoods and 106 census tracts with populations at high risk of displacement through a four-step process described in the supplement (see Supplemental Methods).

The final sample universe included 106 census tracts in 56 neighborhoods. We then constructed our experimental universe using publicly available parcel data from Denver County, which included address information for every residence and building in the County. For all 56 neighborhoods in the final sample universe, we identified presumed renter households as addresses for which the parcel owner address did not match the parcel site address, suggesting that the owner was not living at his/her own property. All addresses were then validated using the US Postal Service's National Change of Address (NCOA) database (U.S. Postal Service, n.d.). All invalid addresses were excluded from the experimental universe prior to randomization. The final experimental universe consisted of 62,715 presumed renter households in the 56 sample neighborhoods.

In a stratified randomization, all renter addresses were randomly assigned to one of three experimental conditions. The *Control* group received no communication as part of this study, although they may have received information about the program through other channels. Renters assigned to the *Information Only* group were sent a postcard that provided clear and simple information about Denver County's rental assistance program and instructions for applying (see Figure S1). Renters assigned to the *Information + Stigma* group were sent the same postcard as in the *Information Only* group, but with subtle language changes to target potential sources of anticipated and internalized stigma associated with program participation (see Figure S2). Both postcards also include Spanish translations.

First, as shown in Figure S2, language targeted internalized stigma by emphasizing that it was no one's fault if they were struggling to pay their rent and, in fact, many Denver residents may have needed extra help because of the Covid-19 pandemic. Second, language in the *Information + Stigma* email highlighted that the program was intended to help all eligible Denver residents get the assistance they deserved, and minimized the salience of the selection process, placing more agency on the resident themselves to decide if they were eligible. This language targeted anticipated stigma by aiming to reduce prospective beneficiaries' fear or expectations of discrimination and prejudice. All information was provided in English and Spanish, and language tone aligned with the County's status quo communications.

The randomization was stratified by neighborhood and service area for the three nonprofit agencies that were responsible for administering the County's rental assistance program.¹ All outcome data used in this study came from the Denver County Department of

¹ At the time of this study, Denver County's rental assistance program was administered by three nonprofit agencies. Each nonprofit served a nonoverlapping group of zip codes within the county. Zip code boundaries do not align with neighborhood boundaries, making it possible to stratify on neighborhood-service area groups.

Housing Stability, the three administering nonprofit agencies, and the Denver County Court. Our first outcome of interest, application requests, is defined as any request for a rental assistance application in the eight weeks after the mailing date (Dec. 10, 2020 to Feb. 5, 2021). In order to receive a rental assistance application, residents had to request an application by completing an online form or calling one of the three nonprofit organizations that were responsible for administering Denver County’s rental assistance program. The largest of the three nonprofits maintained a record of all application requests, including applicant address and date of inquiry. We discovered belatedly that the other two nonprofits were not systematically tracking application requests. In this manuscript we thus evaluate application requests for the subpopulation served by the largest of the three nonprofit organizations ($N = 25,229$). Because the randomization was stratified by nonprofit organization, limiting the sample in this way only affects statistical power—it does not affect the validity of our estimates. Results for the full analytic universe are presented in the Supplement (Table S3).

The second outcome of interest, submitted applications, is defined as submission of a rental assistance application to one of the three administering nonprofit agencies in the eight weeks following the mailing date (Dec. 10, 2020 to Feb. 5, 2021). Each nonprofit organization tracked all households that submitted a rental assistance application, including the date of submission.

Finally, the third outcome of interest, assistance received, is defined as receipt of rental assistance funds in the eight weeks following the mailing date (Dec. 10, 2020 to Feb. 5, 2021). These data were tracked at the address level and came from administrative records maintained by the Department of Housing Stability.

Empirical Strategy

In an intent-to-treat analysis, we first evaluated the average effect of treatment assignment via the following regression specification:

$$(1) Y_{is} = \alpha + \tau_1 T_{1is} + \tau_2 T_{2is} + X_s + \gamma_s + \delta_n + \varepsilon_{is}$$

where Y_{is} is the outcome of interest for household i in neighborhood s ; τ_1 and τ_2 are the coefficients of interest on the treatment indicators T_1 and T_2 , which correspond to *Information Only* and *Information + Stigma*, respectively; X_s is a vector of neighborhood-level covariates, including the poverty rate, percent non-White residents, percent of rent-burdened residents, and median gross rent; γ_s are neighborhood fixed effects; and δ_n are nonprofit agency fixed effects. The neighborhood-level covariates came from publicly available data from the Eviction Lab and the Urban Institute. The specification reports robust standard errors.

We report both logistic and linear estimates of equation (1), but we preference results from the linear specification. Because the outcomes of interest were relatively rare, six neighborhoods saw no positive outcomes, leading them to be excluded from the covariate-

adjusted logistic specification. In addition, we evaluated the impact of random assignment on each outcome of interest using randomization inference based on Fisher's exact test to test the sharp null hypothesis of no effect of assignment to treatment. These results are reported in the Supplement (see Table S8) and do not differ meaningfully from those reported in this manuscript.

Prior to obtaining any information on outcomes, we pre-registered an analysis plan at the Open Science Framework (<https://osf.io/5w7tj>). The final analytic universe excludes 186 addresses that were randomized, but later found to be duplicates due to discrepancies in the NCOA validation process. These addresses represent just 0.3% of our experimental universe and excluding them does not affect our final results. The final analytic universe is thus comprised of 62,529 unique renter households.

Results

Figure 1 and Table 2 show results on our first outcome of interest, requests for rental assistance applications in the eight weeks following outreach among the subset of the analytic universe associated with the largest administering nonprofit agency ($N = 25,229$). We find that random assignment to either treatment condition significantly increased application requests by 0.6 percentage points (pp) relative to the no-mailer *Control* condition ($p < .001$, 95% CI [0.28, 0.91]). On average, 0.9 percent of households in the *Control* condition requested an application during the eight weeks following the mail date (all means regression-adjusted; $SE = 0.14$), compared to 1.5 percent of households in the pooled treatment conditions ($SE = 0.09$), an increase of 65%.

Evaluating each condition separately, 1.4 percent of households in the *Information Only* group requested an application ($SE = 0.12$), reflecting an average treatment effect (ATE) of 0.47 pp (52%) relative to the *Control* group ($p = .008$, 95% CI [0.12, 0.82]). Meanwhile, 1.6 percent of households in the *Information + Stigma* group requested an application ($SE = 0.13$), reflecting an ATE of 0.72 pp (79%) relative to the *Control* group ($p < .001$, 95% CI [0.36, 1.08]), and an ATE of 0.25 pp (18%) relative to the *Information Only* group ($p = .15$, 95% CI [-0.09, 0.58]).

Next, we find that assignment to either treatment condition increased submitted applications for rental assistance by 0.16 pp relative to the no-mailer *Control* group ($p = .03$), an increase of 30%. As shown in Table 2, on average, 0.53 percent of households in the *Control* condition submitted an application in the six weeks following the mail date ($SE = 0.07$), compared to 0.66 percent of households in the *Information Only* group ($SE = 0.05$). This difference of 0.13 pp (24%) is not significant at standard levels ($p = .13$, 95% CI [-0.04, 0.29]). Meanwhile, 0.73 percent of households in the *Information + Stigma* condition ($SE = 0.05$) submitted an application during the outcome period, reflecting a significant ATE of 0.20 pp or 37% relative to the *Control* group ($p = .02$, 95% CI [0.03, 0.36]). Compared to the *Information Only* group, the *Information + Stigma* mailer yielded a 0.07 pp (11%) increase, although this difference was not significant ($p = .34$, 95% CI [-0.07, 0.21]).

Once renters submit an application for rental assistance, program staff must verify their information before approving the disbursement of assistance. We did not pre-register assistance received as a primary outcome due to initial uncertainty about whether data on this measure would be available. Ultimately, however, we did receive data on renters who received assistance between the start of our intervention in December 2020 and April 2021. We thus explore the impact of treatment on assistance received using equation (1).

As shown in the Supplement (Table S4), we find that the increase in take-up driven by the mailers also translated into an increase in funds received. Renters assigned to the *Information Only* group were 0.19 pp more likely to receive assistance between December 2020 and April 2021 than renters assigned to the *Control* group ($SE = 0.06, p = .004, 95\% \text{ CI } [0.06, 0.31]$). Renters assigned to the *Information + Stigma* group were 0.04 pp more likely to receive assistance than renters assigned to the *Information Only* group ($SE = 0.06, p = .51, 95\% \text{ CI } [-0.08, 0.16]$) and 0.23 pp more likely to receive assistance than renters assigned to the *Control* group ($SE = 0.07, p = .001, 95\% \text{ CI } [0.10, 0.36]$).

Table 2. Study 1: Treatment effect on application requests and submissions

VARIABLES	Application Requests		Submitted Applications	
	Logistic (1)	OLS (2)	Logistic (3)	OLS (4)
Information Only	0.4204 (0.1723) [0.0147]	0.0047 (0.0018) [0.0079]	0.2134 (0.1479) [0.1489]	0.0013 (0.0008) [0.1286]
Information + Stigma	0.5886 (0.1694) [0.0005]	0.0072 (0.0018) [0.0001]	0.3160 (0.1461) [0.0305]	0.0020 (0.0009) [0.0211]
Treatment pooled	0.5077 (0.1606) [0.0016]	0.0060 (0.0016) [0.0002]	0.2659 (0.1367) [0.0518]	0.0016 (0.0008) [0.0332]
Observations	24,564	25,229	60,395	62,529
Control mean	0.00944	0.00914	0.00550	0.00530

Notes: Estimates of the average effect of treatment assignment on application requests (Columns 1-2) and submitted applications (Columns 3-4) in the eight weeks following the mailing date. The sample for Columns 1-2 is all addresses associated with the administering nonprofit organization that tracked all incoming application requests ($N = 25,229$). The Supplement reports results for the full analytic universe (Table S3). Observations excluded from logistic models due to collinearity of neighborhoods and the outcome of interest. Controls include percent rent burdened, percent non-White, poverty rate, fixed effects for neighborhood, nonprofit organization, and an indicator for whether the address was part of an apartment building. Robust standard errors in parentheses; p -values in brackets.

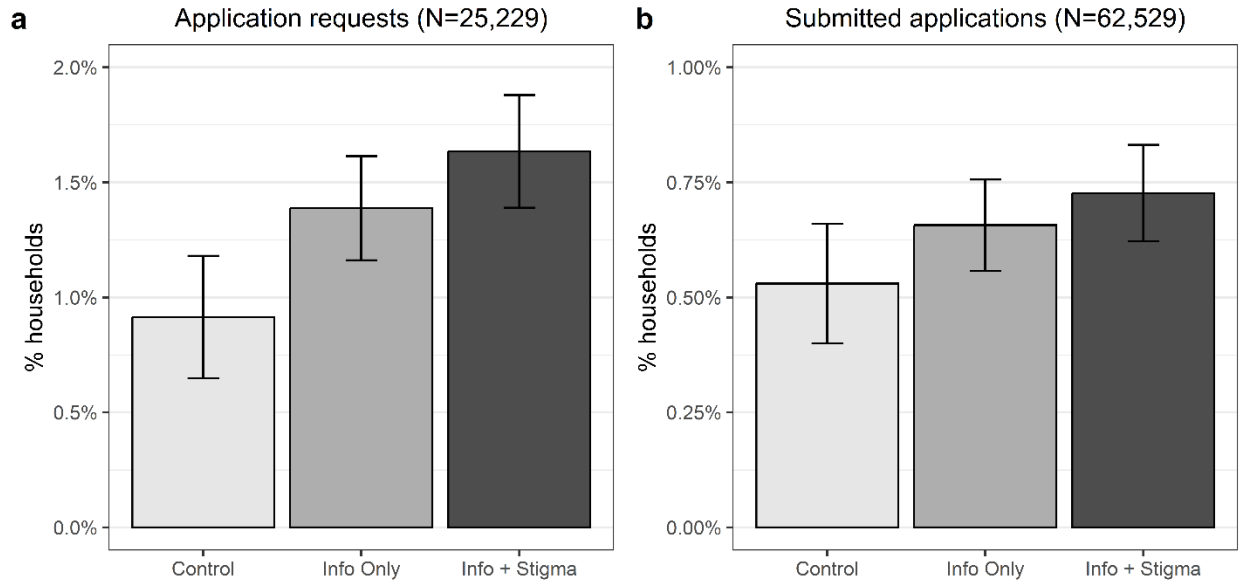


Figure 1. Study 1: Application requests and submissions, by experimental condition

Notes: Bars represent the percent of households that requested an application (a) and submitted an application (b) during the eight-week outcome period. Error bars reflect 95% confidence intervals.

Heterogeneous Effects

Given that psychological burdens may disproportionately affect some subsets of eligible households, we also explore whether the main treatment effect varies by socioeconomic status (SES) and by race and ethnicity.

Data availability on household-level socioeconomic characteristics is limited. However, we use data from the Eviction Lab to consider whether treatment effects differ by census tract-level SES. Specifically, in separate specifications, we interact household-level treatment assignment with continuous measures of census tract-level median household income, poverty rate, and the percentage of households that are rent burdened. We do not find evidence of heterogeneous treatment effects by any measure of SES.

Given the racialized nature of stigma associated with government assistance (see, e.g., Cohen-Cole & Zanella, 2006), we also explore effects by race and ethnicity in two ways. First, we test heterogeneous effects by census tract-level demographics, specifically the percent of the population that is Black/African-American or Hispanic. We find that the effect of assignment to the *Information + Stigma* mailer on requests for applications is significantly larger in census tracts with higher proportions of minority residents ($F(1,62461) = 5.85, p = .02$).² The effect of assignment to the *Information Only* condition on application requests does not differ by

² Because this analysis is exploratory, here we examine application requests across all three administering nonprofit agencies in order to increase power to detect interaction effects.

proportion of minority residents in the census tract ($F(1,62461) = 0.90, p = .34$), though the overall interaction between percent minority residents and treatment is significant ($F(2, 62461) = 3.10, p = .05$). On submitted applications, we do not find a significant difference in the effect of treatment by proportion of minority residents at the census tract level ($F(2, 62461) = 0.87, p = .42$).

Second, we explore variation in the raw distribution of completed applications in condition by race and ethnicity. Household-level demographic information is available for about one-third of renters who submitted applications. We cannot evaluate heterogeneous treatment effects since we do not have demographic data for non-applicants. By extension, we also cannot assess the extent to which applicants differ from non-applicants. However, we observe no statistically significant differences between treatment groups in the likelihood of reporting race and ethnicity (see Table S7). Thus, if the randomization effectively created groups that were statistically similar on race and ethnicity, which we can observe to be the case in our subsample, any differences in the proportions of applicants by race and ethnic groups likely reflect an impact of the intervention.

As shown in Figure 2, in the *Control* group, just 5% of submitted applications came from Black or African-American residents. In contrast, 17% of submitted applications from households that were sent the *Information Only* postcard and 26% of submitted applications from households that were sent the *Information + Stigma* postcard came from Black or African-American residents ($\chi^2(2) = 5.01, p = .08$). Similar, but smaller, differences can be seen in the proportion of submitted applications by ethnicity: 42% of submitted applications in the *Control* group came from Hispanic renters, compared to 46% in the *Information Only* condition and 52% in the *Information + Stigma* condition ($\chi^2(2) = 1.19, p = .55$).

This analysis is exploratory and should be interpreted with caution given that it is based on data from a small number of program applicants. But even still, the large distributional differences found in submitted applications by race across conditions, as well as the differences in treatment effects by census-tract level demographics, point to potentially interesting and important directions for future study.

Overall, providing information about rental assistance benefits increased take-up, as measured by submitted applications, by 25% compared to providing no additional information. This confirms that learning costs may be consequential barriers to take-up. But these findings also suggest that destigmatizing the language used in outreach may further increase take-up relative to providing information alone. The *Information + Stigma* message increased application requests by an additional 18% compared to *Information Only*, although this difference was not statistically significant. However, it is worth noting that our minimum detectable effect for the pairwise comparison between treatment conditions in Study 1 is 0.2 pp—larger than the observed 0.07 pp effect. Moreover, while we were able to measure second stage outcomes in this study, we were not able to measure engagement with the material – an intermediate outcome on which we would have more power to detect differences between the treatment conditions.

Study 2 extends these findings by both strengthening the external validity of these results and directly testing the difference between targeting learning costs and learning plus psychological costs in a context where we are able to observe immediate engagement with the outreach material.

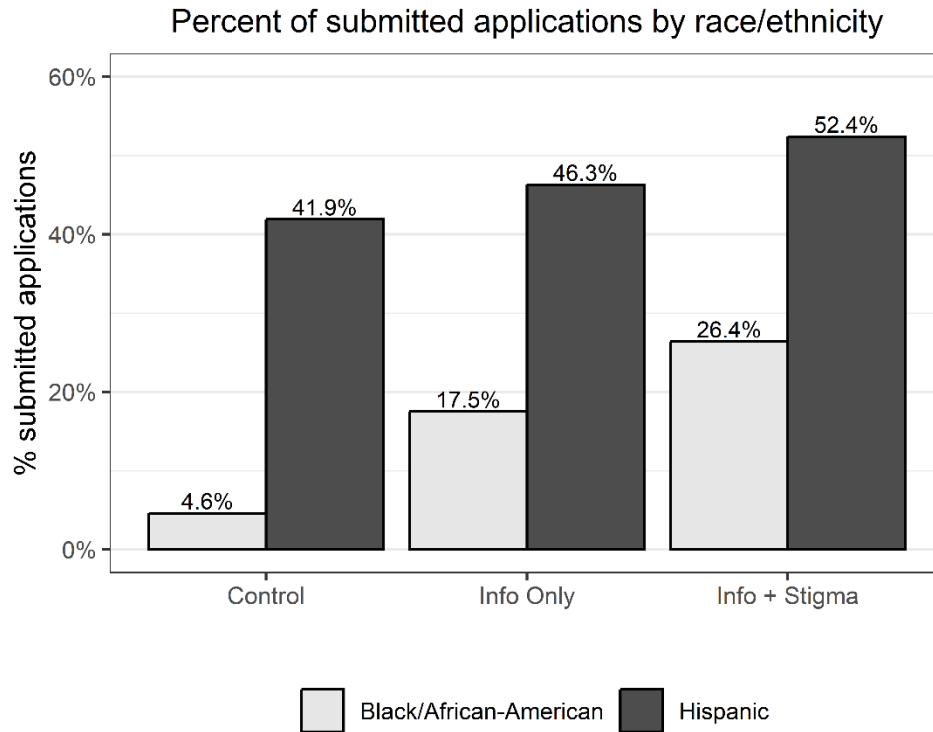


Figure 2. Study 1: Distribution of submitted applications by race and ethnicity

Notes: Bars represent the raw percent of households that submitted an application, by race and ethnicity, during the eight-week outcome period.

Study 2: Austin, TX

Experimental Design and Data

In Study 2, we partnered with the City of Austin’s Housing and Planning Department to conduct an email-based outreach campaign to 54,544 residents whose email addresses were part of a listserv maintained by the city. We have no individual-level data on any of the 54,544 residents included in this sample. The city administered both the email and experiment in October 2021. Because this experiment was conducted by the city, it was not subject to IRB approval.

The randomization was conducted through the city’s email marketing platform, which has built-in A/B testing capability. Half of the residents ($N = 27,272$) received an *Information Only* email (see Figure S3). The other half of the residents ($N = 27,272$) received an *Information*

+ *Stigma* email that provided the same information as the *Information Only* email, but included subtle language changes to target potential sources of internalized and anticipated stigma associated with program participation. The language choices in each are almost identical to Study 1 but delivered via a new medium (email) and in a different setting. This allows us to provide a conceptual replication of the intervention language in a new context, and also provides a different – more immediate – outcome that may be more appropriate to measure the differential impact of two similarly worded treatment arms.

Our primary outcomes of interest were (1) total click-throughs on the six embedded links to the rental assistance program application website; and (2) total click-throughs on any embedded link in the email. Click-throughs were measured by the email marketing platform and provided to the research team via an aggregate report two weeks after the emails were sent.

Results

Because we have no individual-level data on the individuals or behavior associated with any of the email addresses, we evaluated differences in our two primary outcomes via a two-sample proportions test. Each email included eleven total links, six of which directed recipients to the Austin rental assistance application web page. Overall, 2.6% of *Information + Stigma* email recipients clicked on one of the rental assistance application links, compared to 2.0% of *Information Only* email recipients ($z = 4.77, p < .001, 95\% \text{ CI } [0.36, 0.87]$).

The *Information + Stigma* email also generated higher overall engagement: 3.0% of recipients who received the *Information + Stigma* email clicked on any link in the email, compared to 2.2% of recipients who received the *Information Only* email ($z = 5.83, p < .001, 95\% \text{ CI } [0.53, 1.06]$).

Overall, these findings suggest that destigmatizing language (i.e., language that aims to reduce internalized and anticipated stigma) significantly increases engagement with outreach beyond providing information alone. This finding extends the results from Study 1 to suggest that targeting stigma may influence behavior above and beyond targeting learning costs alone, although additional research is needed to understand whether - and in what conditions - these effects translate into significant differences in take-up behavior.

Studies 3 and 4: Exploring Mechanisms

Studies 1 and 2 offer evidence that the *Information + Stigma* intervention may yield gains in take-up beyond providing information alone. The nature of the field experiments, however, does not allow us to directly measure whether the intervention actually reduced anticipated or internalized stigma as theorized. It is possible that the *Information + Stigma* communications in both field experiments were more effective than the *Information Only* communications because they changed some other aspect of recipients' perceptions of the program. For instance, if the *Information + Stigma* communications led recipients to believe the

program was easier to apply for, or that they would be more likely to receive funds should they apply, those changes in perceptions could have affected take-up through a different channel. In fact, if perceptions about the difficulty of applying for a program is a significant barrier to take-up, which we may expect given previous literature (Herd & Moynihan, 2019), changing beliefs about these compliance costs may affect take-up even without reducing stigma. We disentangle these mechanisms in two pre-registered online studies conducted via Amazon Mechanical Turk (MTurk). It is important to acknowledge that, while we limit our sample to low-income participants and perform a series of quality checks, MTurk participants may not be representative of the population at large. As such, we do not interpret the absolute levels of perceived stigma as a meaningful population-wide indicator, but rather focus on the causal relationship between experimental treatment arm and perceptions of stigma.

Experimental Design and Data

Study 3

In Study 3, a sample of 832 participants (mean age = 38.3 years, $SD = 11.2$; 39.7% female) with a household income less than \$50,000 per year were recruited through MTurk to complete a 2-minute online survey for which they were paid \$0.50 each. After relevant data quality exclusions (see Supplemental Methods), balanced evenly across treatment conditions ($\chi^2(1) = .08, p = .78$), our final analytic sample consisted of 622 participants (mean age = 39.1 years, $SD = 11.4$; 42.6% female). Study 3 was conducted in November 2021 and approved by the University of California, Berkeley IRB (2021-06-14435).

All participants who consented to participate and passed an initial attention check were randomly assigned by the survey software (Qualtrics) to see a redacted version of either the *Information Only* or *Information + Stigma* mailer from Study 1. Participants were then asked eight questions to measure the internalized and anticipated stigma associated with the temporary rental assistance program in order to allow us to measure whether the mailers affected these two distinct stigma constructs. All questions were presented in a random order and measured on a 7-point Likert scale. Participants were also asked about their perceptions of the difficulty of the application process, as well as their likelihood of applying for the program. See Supplemental Methods for exact question text.

We constructed three indices as our primary outcomes: overall stigma, anticipated stigma, and internalized stigma. Each is calculated as the equal-weighted average of their respective measures. In addition, we measure (1) participants' reported likelihood of applying for the rental assistance program on a 7-point scale, where 7 reflects "extremely likely to apply"; and (2) their perceptions of the difficulty of the application process on a 10-point scale where 10 reflects "extremely difficult to apply." We also construct a binary indicator for likelihood of applying for rental assistance, defined as a response of 5 ("somewhat likely") or higher on the 7-

point Likert scale. All hypotheses and outcomes were pre-registered on OSF (<https://osf.io/6pxw4>).

Study 4

Study 4 participants were 791 MTurk workers (mean age = 39.8 years, $SD = 12.9$; 49.2% female) whose reported household income was below \$50,000 per year and who were recruited to complete a 1-minute online survey for which they were paid \$0.30 each. Standard participant qualifications were applied (see Supplemental Methods). After relevant data quality exclusions (see Supplemental Methods), balanced evenly across treatment conditions ($\chi^2(1) = .62, p = .43$), our final analytic sample consisted of 636 participants (mean age = 40.7 years, $SD = 13.2$; 53.3% female). Study 4 was conducted in December 2021 and approved by the University of California, Berkeley IRB (2021-06-14435).

All participants who consented to participate and passed the initial attention check were again randomly assigned everyone to see either the *Information Only* or *Information + Stigma* mailer from Study 2. We then asked about perceptions of (1) the difficulty of the application process; (2) the credibility of the mailer; and (3) their expectations of the likelihood of receiving money if they applied. They were also asked a comprehension question to assess whether they read and understood the postcard. See Supplemental Methods for exact question text.

Our primary outcomes for Study 4 were participants' perceptions of the difficulty of the application process, which was measured on a 10-point scale where 10 reflects "extremely difficult to apply;" perceptions of the likelihood of receiving money, measured on a 5-point scale in which a 5 reflects "very likely to receive money;" and credibility of the postcard measured on 5-point scales in which a 5 reflects "very credible." All hypotheses and outcomes were pre-registered on OSF (<https://osf.io/m56nh>).

Empirical Strategy

For both Studies 3 and 4, we evaluated the average impact of assignment to the *Information + Stigma* condition through the following linear model:

$$(2) Y_i = \alpha + \tau_1 T_{1i} + X_i + \varepsilon_i$$

where Y_i is the outcome of interest for participant i ; τ_1 is the coefficient of interest on the treatment indicator T_1 , which corresponds to assignment to the *Information + Stigma* condition; X_i is a vector of individual-level covariates, including gender, age, a binary indicator for college education, race, income, party affiliation, housing insecurity, and prior experience utilizing rental assistance. The specification reports robust standard errors.

Results

As hypothesized, overall stigma associated with the rental assistance program, calculated as the average of all eight stigma measures, was significantly lower among participants who saw the *Information + Stigma* mailer than those who saw the *Information Only* mailer ($F(1, 603) = 4.46, p = .04, 95\% \text{ CI} [-0.46, -0.02]$). This difference appears to be driven by a reduction in internalized stigma. As shown in Table 3, internalized stigma among participants who saw the *Information + Stigma* mailer was 0.3 points or 5% lower than among participants who saw the *Information Only* mailer ($F(1, 603) = 5.62, p = .02, 95\% \text{ CI} [-0.55, -0.05]$). We see a similar, but smaller and non-significant difference between conditions on anticipated stigma. Anticipated stigma was 0.2 points or nearly 4% lower among participants who saw the *Information + Stigma* mailer than those who saw the *Information Only* mailer ($F(1, 603) = 2.34, p = .13, 95\% \text{ CI} [-0.41, 0.05]$). A power analysis reveals that the minimum detectable effect in this experiment is 0.3 points on a 7-point scale. As such, it is possible that we are slightly underpowered to detect significant differences between the two conditions on anticipated stigma. But at a minimum, these findings suggest that our intervention does, in fact, shift feelings of internalized stigma.

We find a small, but non-significant difference across conditions in reported likelihood of applying for the program: 75.0% of participants who saw the *Information + Stigma* mailer reported being at least somewhat likely to apply, compared to 72.2% of participants who saw the *Information Only* mailer ($F(1, 603) = 0.66, p = 0.42, 95\% \text{ CI} [-0.04, 0.10]$). However, with a sample of 622 online participants, we are underpowered to detect differences smaller than 9 pp. Importantly, there was no difference between conditions in perceptions of the ease of applying for the rental assistance program ($F(1, 603) = 1.14, p = .29, 95\% \text{ CI} [-0.17, 0.57]$).

Study 4 builds on these findings by testing and ruling out other potential explanations for the observed differences in effect between the two mailers.

Overall, 77% of participants in the *Information Only* group and 80% of participants in the *Information + Stigma* group correctly answered the comprehension question ($F(1, 616) = 1.16, p = .28$). As in Study 3, we find no difference across conditions in perceived difficulty of the application process ($F(1, 616) = 0.43, p = .51, 95\% \text{ CI} [-0.49, 0.25]$). Similarly, there is no difference across conditions in perceptions of the likelihood of receiving money ($F(1, 616) = 1.35, p = .25, 95\% \text{ CI} [-0.07, 0.29]$). However, participants who saw the *Information + Stigma* mailer found the mailer to be less credible than participants who saw the *Information Only* mailer ($F(1, 616) = 4.01, p = .05, 95\% \text{ CI} [-0.35, 0.00]$). The juxtaposition between this result and the findings of the field experiments points to one promising area for further research.

Combined, studies 3 and 4 provide suggestive evidence that the larger effects seen from the *Information + Stigma* mailer in the field experiment are being driven by a reduction in internalized stigma, as opposed to a change in how target beneficiaries understand the program.

Table 3. Studies 3 and 4: Testing hypothesized mechanisms

VARIABLES	Study 3				Study 4			
	Overall stigma (1)	Anticipated stigma (2)	Internalized stigma (3)	Likelihood of applying (4)	Difficulty of application (5)	Likelihood of receiving (6)	Credibility (7)	Comprehension (8)
Info + Stigma	-0.239 (0.113) [0.035]	-0.178 (0.116) [0.127]	-0.300 (0.127) [0.018]	0.028 (0.035) [0.417]	-0.124 (0.188) [0.510]	0.106 (0.091) [0.246]	-0.177 (0.089) [0.046]	0.032 (0.029) [0.281]
Observations	622	622	622	622	636	636	636	636
Mean for Info Only	4.470	4.615	4.325	0.722	5.709	3.053	3.396	0.770

Notes: Estimates of equation (2) in Study 3 (Columns 1-4) and Study 4 (Columns 5-8). Overall, anticipated, and internalized stigma (Columns 1-3) are equal-weighted indices, each measured on a 7-point scale in which 7 reflects high stigma. Likelihood of applying (Column 4) is a binary measure in which a 1 reflects a response of at least “somewhat” likely to apply for rental assistance. Difficulty of application (Column 5) is measured on a 10-point scale in which 10 reflects “extremely difficult to apply.” Likelihood of receiving money (Column 6) and credibility (Column 7) are both measured on 5-point scales in which 5 reflects “very likely” and “very credible,” respectively. Comprehension (Column 8) is a binary measure in which a 1 reflects a correct answer to a question about what program the treatment was advertising. Controls include income, age, gender, college education, race, party, prior experience with housing insecurity, and prior experience using rental assistance. Robust standard errors in parentheses; *p*-values in brackets.

Discussion

Participation in the US social safety net has been shown to lift people out of poverty and mitigate some of its damaging effects on health and education, but only if those who are eligible for benefits can access them (e.g., Bitler et al., 2017; Currie, 2008; Hoynes et al., 2016). In two large-scale field experiments, we document the role of learning and psychological costs as potential barriers to access. In Denver, we find that a one-time communication aimed at reducing learning costs by providing information about rental assistance increased program application requests by 52% compared to a no-communication control group. Outreach that aimed to reduce both learning and psychological costs by including language that targeted internalized and anticipated stigma increased application requests by an additional 18% relative to providing information alone, although this difference was not statistically significant. An exploratory analysis suggests that the destigmatizing outreach may have also yielded a disproportionate increase in applications from Black and African-American renters. In a conceptual replication in Austin, we find significantly higher engagement with email outreach when it included destigmatizing language compared to outreach that only targeted learning costs. Taken together, these findings suggest that learning costs pose a meaningful barrier to accessing emergency rental assistance in this context, and that psychological costs may impose a barrier over and above learning costs. In two subsequent online experiments, we offer evidence that the destigmatizing outreach reduced internalized stigma without affecting perceptions of the program or available benefits.

While the effect of outreach in both field experiments may appear small in percentage point terms, these effects are academically and practically meaningful: the most successful treatment arms are 1.5 to 3 times larger than the average effect of a behavioral intervention (DellaVigna & Linos, 2022). Moreover, 413 households in our experimental universe – 166 of whom received the *Information Only* mailer and 183 of whom received the *Information + Stigma* mailer – applied for rental assistance during the outcome window. This accounted for approximately 24% of all applications the city received during that time. Following households from applications through actual funds disbursed, we estimate that if all residents in our sample had received the most effective treatment – the *Information + Stigma* mailer – the city would have disbursed an additional \$405,000 to an additional 143 households (see Table S9).

These findings deepen and extend our understanding of how administrative burdens affect public service delivery in multiple ways. First, a rich literature in public administration and beyond documents the existence of learning, compliance, and psychological costs in the social safety net (e.g., Baekgaard et al., 2021; Barnes, 2020; Barnes & Petry, 2021; Fox et al., 2023; Fox et al., 2020). We extend this literature to consider whether it is possible to reduce psychological costs in a critical policy context, and find that it is indeed possible. Second, while a growing body of experimental evidence aimed at reducing the take-up gap has shown some promise, results are relatively mixed and focus primarily on average treatment effects of efforts to reduce learning and compliance costs (e.g., Bird et al., 2021; Dynaski et al., 2021; Finkelstein & Notowidigdo, 2019; Linos et al., 2022). Our findings point toward the need for more research on how psychological costs and learning costs may interact and, especially, how this may disproportionately affect Black and Hispanic households. Last, while the existence of stigma associated with the social safety net has been well-documented, we demonstrate that “stigma” is both multifaceted and malleable. We find that individual constructs – namely, internalized stigma – can be moved even without shifting other constructs such as anticipated or societal stigma.

This research also has immediate implications for practice because it highlights a potentially serious and overlooked shortcoming of existing government outreach efforts. The language in the *Information Only* communication used in both field experiments was similar to the messaging found in status quo outreach from many of the largest cities and counties in the US. Our findings suggest that this status quo messaging may unintentionally and unknowingly reinforce the stigma associated with rental assistance participation, thereby affecting who ultimately benefits from the program. To be sure, a light-touch behavioral intervention will not close the take-up gap in the social safety net, nor solve the fundamental challenges of pervasive societal stigma against those who participate in government assistance programs. Still, our findings point to immediate improvements that can be made to existing outreach, while larger policy conversations address more systemic challenges.

The studies presented here also have a few important limitations that suggest directions for future work. First, while the *Information + Stigma* message significantly increased engagement with the communication relative to the *Information Only* message in Study 2, the

differences between treatment conditions in Study 1 were not significant. This could reflect a lack of statistical power or a difference in context. In either case, the juxtaposition of these findings warrants further study.

Second, the field experiments reported in this paper leveraged an unprecedented influx of federal funding for emergency rental assistance programs in the wake of the Covid-19 pandemic. While this offered a unique opportunity to study this traditionally oversubscribed, but also highly stigmatized program, it also raises questions about the generalizability of these findings outside the Covid-19 context. It is possible that the stigma associated with emergency rental assistance during the pandemic was more malleable than historically stigmatized programs even in the same policy area, such as Section 8 housing vouchers. Relatedly, it is unclear whether the relative importance of psychological costs was exacerbated or mitigated by the pandemic context. Further studies could test similar interventions on take-up of rental and utility assistance programs outside of a pandemic context, as well as on other traditionally stigmatized programs like SNAP or Temporary Assistance for Needy Families (cash assistance) to consider generalizability across the social safety net.

Third, due to the nature of the field experiments, we were unable to thoroughly explore heterogeneous effects or test possible moderators or mediators in Studies 1 and 2. Future research should further investigate the differential impact of reducing administrative burdens on socioeconomic subgroups, and explore possible moderating effects of other factors such as health or education.

Fourth, while Studies 3 and 4 present evidence consistent with our theorized mechanism—namely that our interventions reduced stigma and, in particular, internalized stigma—there are other possible psychological mechanisms that could be explored. For instance, future studies should disentangle perceptions of stigma from beliefs about governments and government workers, and should assess the relationship between stigma and one’s social identity, including self-esteem, beliefs about one’s work ethic, and feelings of resilience and self-efficacy. Similarly, future studies could explore how the negative emotions related to stigma in one setting may impact other interactions with the state (e.g., Bell et al., 2022a; Hattke et al., 2020).

Fifth, Studies 3 and 4 rely on data collected via MTurk, which may limit the generalizability of these findings. There are ongoing and well-documented issues with the quality and generalizability of data collected via MTurk (e.g., Chmielewski & Kucker, 2020). While we took numerous precautions to ensure data quality in both studies, as outlined in the pre-registered analysis plans, online samples of this nature still cannot be assumed to be representative of the broader population. While this is less of a concern for studies aimed at documenting a change in perceptions resulting from an experimental treatment, as in Studies 3 and 4, it is still worth considering when contextualizing these findings (Mortensen and Hughes, 2018).

Finally, the intervention tested here solely targeted felt stigma among individual prospective beneficiaries. Future research should explore methods of reducing societal stigma, especially among the frontline workers and landlords who are critical to the success of

government housing assistance programs. While targeting internalized stigma among low-income individuals may improve immediate take-up outcomes, a systems-wide approach is necessary to fully and enduringly destigmatize participation in government programs.

Acknowledgments: We thank the Denver County Department of Housing Stability and Office of Social Equity and Innovation and the Austin Department of Housing and Planning for collaboration on Studies 1 and 2. In particular we thank Kim Desmond and Melissa Thate for their leadership in making this project possible. We thank seminar and conference participants at Harvard University, University of Chicago, Society for Judgment and Decision Making, Advances in Field Experiments, Association for Public Policy & Management, and Public Management Research Conference for feedback on the manuscript.

Data and materials availability: Data and code from Studies 2, 3, 4, and the pilot study are available on OSF at <https://osf.io/wdqfh/>. Code from Study 1 is available on OSF at <https://osf.io/wdqfh/>. Data from Study 1 are not available as they are owned by Denver County and governed by a data use agreement that does not allow them to be shared publicly.

References

- Armour, P. (2018). The role of information in disability insurance application: An analysis of the social security statement phase-in. *American Economic Journal: Economic Policy*, 10(3), 1-41. <https://doi.org/10.1257/pol.20160605>
- Baekgaard, M., Herd, P., & Moynihan, D. (2022). Of ‘welfare queens’ and ‘poor carinas’: Social constructions, deservingness messaging and the mental health of welfare clients. *British Journal of Political Science*, 1-19. <https://doi.org/10.1017/S000712342200031X>
- Baekgaard, M., Mikkelsen, K. S., Madsen, J. K., & Christensen, J. (2021). Reducing Compliance Demands in Government Benefit Programs Improves the Psychological Well-Being of Target Group Members. *Journal of Public Administration Research and Theory*, 31(4), 806–821. <https://doi.org/10.1093/jopart/muab011>
- Bailey, M. J., Hoynes, H. W., Rossin-Slater, M., & Walker, R. (2020). *Is the social safety net a long-term investment? Large-scale evidence from the food stamps program* (National Bureau of Economic Research Working Paper No. 26942). <https://doi.org/10.3386/w26942>
- Barnes., C. Y. (2020). “It takes a while to get used to”: The costs of redeeming public benefits. *Journal of Public Administration Research and Theory*, 31(2), 295–310. <https://doi.org/10.1093/jopart/muaa042>
- Barnes, C., Michener, J., & Rains, E. (2023). “It’s like night and day”: How bureaucratic encounters vary across WIC, SNAP, and Medicaid. *Social Service Review*, 97(1). <https://www.journals.uchicago.edu/doi/full/10.1086/723365#pane-pcw-details>
- Barnes, C., & Petry, S. (2021). “It Was Actually Pretty Easy”: COVID-19 Compliance Cost Reductions in the WIC Program. *Public Administration Review*, 81(6), 1147–1156. <https://doi.org/10.1111/puar.13423>
- Bartlett, S., Burstein, N., & Hamilton, W. (2004). Food stamp program access study: Final report. *Electronic Publications from the Food Assistance & Nutrition Research Program*. https://www.ers.usda.gov/webdocs/publications/43390/30283_efan03013-3_002.pdf?v=8615.2
- Baumberg, B. (2016). The stigma of claiming benefits: A quantitative study. *Journal of Social Policy*, 45(2), 181–199. <https://doi.org/10.1017/S0047279415000525>

- Bell, E., Christensen, J., & Jessen Hansen, K. (2022a). Resistance or Capitulation? How Discrete Emotions Shape Citizens' Interactions With the Administrative State. *The American Review of Public Administration*, 52(8), 535–557.
<https://doi.org/10.1177/02750740221128554>
- Bell, E., Christensen, J., Herd, P., & Moynihan, D. (2022b). Health in citizen-state interactions: How physical and mental health problems shape experiences of administrative burden and reduce take-up. *Public Administration Review*, 83(2), 385–400.
<https://doi.org/10.1111/puar.13568>
- Benfer, E. A., Koehler, R., Mark, A., Nazzaro, V., Alexander, A. K., Hepburn, P., Keene, D. E., & Desmond, M. (2022, June 10). Assessing State Eviction Prevention Policies in Response to COVID-19. *Eviction Lab*. <https://evictionlab.org/assessing-state-eviction-prevention-covid-19/>
- Benfer, E., Robinson, D. B., Butler, S., Edmonds, L., Gilman, S., McKay, K. L., Owens, L., Steinkamp, N., Yentel, D., & Neumann, Z. (2020). The covid-19 eviction crisis: An estimated 30-40 million people in America are at risk. *The Aspen Institute*.
<https://www.aspeninstitute.org/blog-posts/the-covid-19-eviction-crisis-an-estimated-30-40-million-people-in-america-are-at-risk/>
- Bettinger, E. P., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA experiment. *The Quarterly Journal of Economics*, 127(3), 1205–1242.
<https://doi.org/10.1093/qje/qjs017>
- 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>
- Bird, K. A., Castleman, B. L., Denning, J. T., Goodman, J., Lambertson, C., and Rosinger, K. O. (2021). Nudging at scale: Experimental evidence from FAFSA completion campaigns. *Journal of Economic Behavior & Organization*, 183, 105-128.
<https://doi.org/10.1016/j.jebo.2020.12.022>
- Bitler, M., Hoynes, H., & Kuka, E. (2017). Child Poverty, the Great Recession, and the Social Safety Net in the United States. *Journal of Policy Analysis and Management*, 36(2), 358–389. <https://doi.org/10.1002/pam.21963>

- Blumenthal, M., Erard, B., & Ho, C.-C. (2005). Participation and Compliance with the Earned Income Tax Credit. *National Tax Journal*, 58(2), 189–213.
<https://doi.org/10.17310/ntj.2005.2.02>
- Bos, A. E. R., Pryor, J. B., Reeder, G. D., & Stutterheim, S. E. (2013). Stigma: Advances in theory and research. *Basic and Applied Social Psychology*, 35(1), 1-9.
<https://doi.org/10.1080/01973533.2012.746147>
- Briggs, X. de S., Popkin, S. J., & Goering, J. (2010). *Moving to Opportunity: The Story of an American Experiment to Fight Ghetto Poverty*. Oxford University Press, Incorporated.
- Brown, R. P., & Lee, M. N. (2005). Stigma consciousness and the race gap in college academic achievement. *Self and Identity*, 4(2), 149–157.
<https://doi.org/10.1080/13576500444000227>
- Brown-Iannuzzi, J. L., Dotsch, R., Cooley, E., & Payne, B. K. (2016). The relationship between mental representations of welfare recipients and attitudes toward welfare. *Psychological Science*, 28(1), 92–103. <https://doi.org/10.1177/0956797616674999>
- Cellhay, P. A., Meyer, B. D., & Mittag, N. (2022). *Stigma in Welfare Programs*. National Bureau of Economic Research Working Paper No. 30307. <https://doi.org/10.3386/w30307>
- Center on Budget and Policy Priorities (CBPP). (2016). *The Safety Net's Impact: A State-by-State Look*. Center on Budget and Policy Priorities. <https://www.cbpp.org/blog/the-safety-nets-impact-a-state-by-state-look>
- Chmielewski, M., & Kucker, S. C. (2020). An MTurk Crisis? Shifts in Data Quality and the Impact on Study Results. *Social Psychological and Personality Science*, 11(4), 464–473.
<https://doi.org/10.1177/1948550619875149>
- Christensen, J., Aarøe, L., Baekgaard, M., Herd, P., & Moynihan, D. P. (2020). Human capital and administrative burden: The role of cognitive resources in citizen-state interactions. *Public Administration Review*, 80(1), 127–136. <https://doi.org/10.1111/puar.13134>
- Cohen-Cole, E., & Zanella, G. (2006). *Stigma and Information in Welfare Participation*.
<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=22987eded215a31306d766bcd311e11876d79ab5>

- Collins, S. R., Gunja, M. Z., Doty, M. M., & Beutel, S. (2016). *Who Are the Remaining Uninsured and Why Haven't They Signed Up for Coverage?* The Commonwealth Fund. <https://doi.org/10.26099/ahve-1s35>
- Collinson, R., Ellen, I. G., & Ludwig, J. (2019). Reforming housing assistance. *The ANNALS of the American Academy of Political and Social Science*, 686(1), 250-285. <https://doi.org/10.1177/0002716219877801>
- Congressional Research Service (CRS). (2021, October 21). Pandemic relief: The Emergency Rental Assistance Program. *CRS Report R46688*. <https://crsreports.congress.gov/product/pdf/R/R46688>
- Cook, F., & Barrett, E. (1992). Beliefs about recipient deservingness and program effectiveness as explanations of support. In *Support for the American welfare state: Views of Congress and the public* (pp. 95–145). Columbia University Press.
- Coronavirus and Unemployment Benefits: 50-State Legal Resources. (2023, March 24). Justia. <https://www.justia.com/covid-19/50-state-covid-19-resources/coronavirus-and-unemployment-benefits-50-state-resources/>
- Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes Toward the Poor and Attributions for Poverty. *Journal of Social Issues*, 57(2), 207–227. <https://doi.org/10.1111/0022-4537.00209>
- Currie, J. (2004). *The take up of social benefits*. National Bureau of Economic Research Working Paper No. 10488. <https://doi.org/10.3386/w10488>
- Currie, J. M. (2008). The Invisible Safety Net: Protecting the Nation's Poor Children and Families. In *The Invisible Safety Net*. Princeton University Press. <https://doi.org/10.1515/9781400826995>
- De La Rosa, W., Sharma, E., Tully, S. M., Giannella, E., & Rino, G. (2021). Psychological ownership interventions increase interest in claiming government benefits. *PNAS*, 118(35). <https://doi.org/10.1073/pnas.2106357118>
- DellaVigna, S., & Linos, E. (2022). RCTs to scale: Comprehensive evidence from two nudge units. *Econometrica*, 90(1), 81-116. <https://doi.org/10.3982/ECTA18709>

- Deshpande, M., & Li, Y. (2019). Who is screened out? Application costs and the targeting of disability programs. *American Economic Journal: Economic Policy*, 11(4), 213–248. <https://doi.org/10.1257/pol.20180076>
- Dougherty, C. (2020, Dec. 15). Use it or lose it: Tenant aid effort nears a federal cutoff. *The New York Times*. <https://www.nytimes.com/2020/12/15/business/economy/rental-aid.html>
- Dynarski, S., Libassi, C. J., Michelmore, K., & Owen, S. (2021). Closing the Gap: The Effect of Reducing Complexity and Uncertainty in College Pricing on the Choices of Low-Income Students. *American Economic Review*, 111(6), 1721–1756. <https://doi.org/10.1257/aer.20200451>
- Dovidio, J. F., Major, B., & Crocker, J. (2000). Stigma: Introduction and overview. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 1–28). Guilford Press.
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review*, 66(5), 522–541. <https://doi.org/10.1177/1077558709335173>
- Federico, C. M. (2004). When do welfare attitudes become racialized? The paradoxical effects of education. *American Journal of Political Science*, 48(2), 374–391. <https://doi.org/10.1111/j.0092-5853.2004.00076.x>
- 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>
- Food and Nutrition Service (FNS). (2020). Estimates of state Supplemental Nutrition Assistance Program participation rate in 2017. *U.S. Department of Agriculture*. <https://www.fns.usda.gov/SNAP/estimates-state-snap-participation-rates-2017>
- Fox, A. B., Earnshaw, V. A., Taverna, E. C., & Vogt, D. (2018). Conceptualizing and measuring mental illness stigma: The Mental Illness Stigma Framework and critical review of measures. *Stigma Health*, 3(4), 348–376. <https://doi.org/10.1037/sah0000104>
- Fox, A., Feng, W., & Reynolds, M. (2023). The effect of administrative burden on state safety-net participation: Evidence from food assistance, cash assistance, and Medicaid. *Public Administration Review*, 83(2), 367–384. <https://doi.org/10.1111/puar.13497>

- Fox, A. M., Stazyk, E. C., & Feng, W. (2020). Administrative Easing: Rule Reduction and Medicaid Enrollment. *Public Administration Review*, 80(1), 104–117. <https://doi.org/10.1111/puar.13131>
- Gabbidon, J., Brohan, E., Clement, S., Henderson, R. C., Thornicroft, G., & MIRIAD Study Group. (2013). The development and validation of the Questionnaire on Anticipated Discrimination (QUAD). *BMC Psychiatry*, 13(1), 297. <https://doi.org/10.1186/1471-244X-13-297>
- Giannarelli, L. (2019). What Was the TANF Participation Rate in 2016? *Urban Institute*. https://www.urban.org/sites/default/files/publication/100521/what_was_the_tanf_participation_rate_in_2016_2.pdf
- Gilens, M. (1999). *Why Americans hate welfare: Race, media, and the politics of antipoverty policy*. Chicago, IL: University of Chicago Press.
- Gladstone, J. J., Jachimowicz, J. M., Greenberg, A. E., & Galinsky, A. D. (2021). Financial shame spirals: How shame intensifies financial hardship. *Organizational Behavior and Human Decision Processes*, 167, 42-56. <https://doi.org/10.1016/j.obhdp.2021.06.002>
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall.
- Hattke, F., Hensel, D., & Kalucza, J. (2020). Emotional Responses to Bureaucratic Red Tape. *Public Administration Review*, 80(1), 53–63. <https://doi.org/10.1111/puar.13116>
- Hall, C. C., Zhao, J., & Shafir, E. (2014). Self-affirmation among the poor: Cognitive and behavioral implications. *Psychological Science*, 25(2), 619–625. <https://doi.org/10.1177/0956797613510949>
- Halpern-Meehin, S., Edin, K., Tach, L., & Sykes, J. (2015). *It's not like I'm poor: How working families make ends meet in a post-welfare world*. University of California Press.
- Hattke F., Hensel D., Kalucza J. (2020). Emotional responses to bureaucratic red tape. *Public Administration Review*, 80(1), 53–63. <https://doi.org/10.1111/puar.13116>
- Heinrich, C. J. (2016). The bite of administrative burden: A theoretical and empirical investigation. *Journal of Public Administration Research and Theory*, 26(3), 403-420. <https://doi.org/10.1093/jopart/muv034>

- 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(1), 69–81. <https://doi.org/10.1111/puar.12114>
- Herd, P., & Moynihan, D. P. (2019). *Administrative burden: Policymaking by other means*. Russell Sage Foundation.
- Hoynes, H., Schanzenbach, D. W., & Almond, D. (2016). Long-Run Impacts of Childhood Access to the Safety Net. *American Economic Review*, 106(4), 903–934. <https://doi.org/10.1257/aer.20130375>
- Hunt, M. O., & Bullock, H. E. (2016). Ideologies and Beliefs about Poverty. In D. Brady & L. M. Burton (Eds.), *The Oxford Handbook of the Social Science of Poverty* (p. 0). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199914050.013.6>
- Iyengar, S. (1990). Framing responsibility for political issues: The case of poverty. *Political Behavior*, 12, 19-40. <https://doi.org/10.1007/BF00992330>
- Jackson, A. (2018). Barriers to Integrating New Urbanism in Mixed-Income Housing Plans in Chicago: Developer, Housing Official, and Consultant Perspectives. *Housing Policy Debate*, 28(5), 695–726. <https://doi.org/10.1080/10511482.2018.1433703>
- Jahn, D. R., Leith, J., Muralidharan, A., Brown, C. H., Drapalski, A. L., Hack, S., & Lucksted, A. (2020). The influence of experiences of stigma on recovery: Mediating roles of internalized stigma, self-esteem, and self-efficacy. *Psychiatric Rehabilitation Journal*, 43, 97–105. <https://doi.org/10.1037/prj0000377>
- Jennings, K. S., Cheung, J. H., Britt, T. W., Goguen, K. N., Jeffirs, S. M., Peasley, A. L., & Lee, A. C. (2015). How are perceived stigma, self-stigma, and self-reliance related to treatment-seeking? A three-path model. *Psychiatric Rehabilitation Journal*, 38(2), 109-116. <https://doi.org/10.1037/prj0000138>
- Joseph, M. L. (2010). Creating mixed-income developments in Chicago: Developer and service provider perspectives. *Housing Policy Debate*, 20(1), 91–118. <https://doi.org/10.1080/10511481003599894>
- Keene, D. E., Rosenberg, A., Schlesinger, P., Whittaker, S., Niccolai, L., & Blankenship, K. M. (2021). “The squeaky wheel gets the grease”: Rental assistance applicants’ quests for a rationed and scarce resource. *Social Problems*, 70(1), 203–218. <https://doi.org/10.1093/socpro/spab035>

- Keiser, L. R., & Miller, S. M. (2020). Does administrative burden influence public support for government programs? Evidence from a survey experiment. *Public Administration Review*, 80(1), 137–150. <https://doi.org/10.1111/puar.13133>
- Kluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality: Americans' views of what is and what ought to be*. Aldine de Gruyter.
- Lauter, D. (2016, Aug. 14). How do Americans view poverty? Many blue-collar whites, key to Trump, criticize poor people as lazy and content to stay on welfare. *Los Angeles Times*. <https://www.latimes.com/projects/la-na-pol-poverty-poll/>
- 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>
- Lowrey, A. (2021, July 27). The time tax: Why is so much of American bureaucracy left to average citizens?. *The Atlantic*. <https://www.theatlantic.com/politics/archive/2021/07/how-government-learned-waste-your-time-tax/619568/>
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393–421. <https://doi.org/10.1146/annurev.psych.56.091103.070137>
- Mead, L. M. (2019). *Burdens of freedom: Cultural difference and American power*. Encounter Books.
- Moffit, R. (1983). An economic model of welfare stigma. *The American Economic Review*, 73(5), 1032–1035. <https://www.jstor.org/stable/1814669>
- Moore, K. E., & Tangney, J. P. (2017). Managing the concealable stigma of criminal justice system involvement: A longitudinal examination of anticipated stigma, social withdrawal, and post-release adjustment. *Journal of Social Issues*, 73(2), 322–340. <https://doi.org/10.1111/josi.12219>
- Mortensen, K., & Hughes, T. L. (2018). Comparing Amazon's Mechanical Turk Platform to Conventional Data Collection Methods in the Health and Medical Research Literature. *Journal of General Internal Medicine*, 33(4), 533–538. <https://doi.org/10.1007/s11606-017-4246-0>

- Moss, K., Dawson, L., Long, M., Kates, J., Musumeci, M., Cubanski, J., & Pollitz, K. (2020, March 23). The Families First Coronavirus Response Act: Summary of Key Provisions. *KFF*. <https://www.kff.org/coronavirus-covid-19/issue-brief/the-families-first-coronavirus-response-act-summary-of-key-provisions/>
- Narayanswamy, A., O'Connell, J., Lang, M. J., & Swenson, K. (2021, June 4). With evictions set to begin next month, hundreds of millions in Washington-area rental aid remains unspent. *The Washington Post*. <https://www.washingtonpost.com/business/2021/06/04/dc-rent-relief-eviction/>
- Nicholson-Crotty, J., Miller, S. M., & Keiser, L. R. (2021). Administrative burden, social construction, and public support for government programs. *Journal of Behavioral Public Administration*, 4(1). <https://doi.org/10.30636/jbpa.41.193>
- Palar, K., Frongillo, E. A., Escobar, J., Sheira, L. A., Wilson, T. E., Adedimeji, A., Merenstein, D., Cohen, M. H., Wentz, E. L., Adimora, A. A., Ofotokun, I., Metsch, L., Tien, P. C.,
- Turan, J. M., & Weiser, S. D. (2018). Food insecurity, internalized stigma, and depressive symptoms among women living with HIV in the United States. *AIDS and Behavior*, 22(12), 3869–3878. <https://doi.org/10.1007/s10461-018-2164-8>
- Pescosolido, B. A. (2013). The public stigma of mental illness: What do we think; what do we know; what can we prove? *Journal of Health and Social Behavior*, 54(1), 1–21. <https://doi.org/10.1177/0022146512471197>
- Pescosolido, B. A., & Martin, J. K. (2015). The stigma complex. *Annual Review of Sociology*, 41(1), 87–116. <https://doi.org/10.1146/annurev-soc-071312-145702>
- Piff, P. K., Wiwad, D., Robinson, A. R., Aknin, L. B., Mercier, B., & Shariff, A. (2020). Shifting attributions for poverty motivates opposition to inequality and enhances egalitarianism. *Nature Human Behaviour*, 4(5), Article 5. <https://doi.org/10.1038/s41562-020-0835-8>
- Rao, D., Kekwaletswe, T. C., Hosek, S., Martinez, J., & Rodriguez, F. (2007). Stigma and social barriers to medication adherence with urban youth living with HIV. *AIDS Care*, 19(1), 28-33. <https://doi.org/10.1080/09540120600652303>
- Ray, V., Herd, P., & Moynihan, D. (2022). Racialized burdens: Applying racialized organization theory to the administrative state. *Journal of Public Administration Research and Theory*, 33(1), 139–152. <https://doi.org/10.1093/jopart/muac001>

- Remler, D. K., & Glied, S. A. (2003). What other programs can teach us: Increasing participation in health insurance programs. *American Journal of Public Health, 93*(1), 67–74.
<https://doi.org/10.2105/AJPH.93.1.67>
- Rintamaki, L. S., Davis, T. C., Skripkauskas, S., Bennett, C. L., & Wolf, M. S. (2006). Social stigma concerns and HIV medication adherence. *AIDS Patient Care and STDs, 20*(5), 359–368. <https://doi.org/10.1089/apc.2006.20.359>
- Schanzenbach, D. W. (2009). *Experimental estimates of the barriers to food stamp enrollment*. Institute for Research on Poverty, discussion paper 1367-09. <https://irp.wisc.edu/publications/dps/pdfs/dp136709.pdf>
- Smeeding, T. M., Phillips, K. R., & O'Connor, M. (2000). The EITC: Expectation, Knowledge, Use, and Economic and Social Mobility. *National Tax Journal, 53*(4.2), 1187–1209.
<https://doi.org/10.17310/ntj.2000.4S1.07>
- Soss, J. (2005). Making clients and citizens: Welfare policy as a source of status, belief, and action. In *Deserving and Entitled: Social Constructions and Public Policy*. State University of New York Press.
- Stuber, J., & Schlesinger, M. (2006). Sources of stigma for means-tested government programs. *Social Science & Medicine, 63*, 933-945.
<https://doi.org/10.1016/j.socscimed.2006.01.012>
- U.S. Postal Service. (n.d.). NCOALink. <https://postalpro.usps.com/mailing-and-shipping-services/NCOALink>
- United States Department of Agriculture (USDA). (2021, March 1). SNAP – Adjusting Interview Requirements Due to Novel Coronavirus (COVID-19).
<https://www.fns.usda.gov/snap/adjusting-interview-requirements-covid-19>
- Vartanian, L. R., & Novak, S. A. (2011). Internalized societal attitudes moderate the impact of weight stigma on avoidance of exercise. *Obesity, 19*(4), 757-762.
<https://doi.org/10.1038/oby.2010.234>
- Vartanian, L. R., & Shaprow, J. G. (2008). Effects of weight stigma on exercise motivation and behavior: A preliminary investigation among college-aged females. *Journal of Health Psychology, 13*(1), 131-138. <https://doi.org/10.1177/1359105307084318>

Watkins-Hayes, C., & Kovalsky, E. (2016). The discourse of deservingness: Morality and the dilemmas of poverty relief in debate and practice. In D. Brady & L. M. Burton (Eds.), *The Oxford Handbook of the Social Science of Poverty*. Oxford University Press.

Williamson, J. B. (1974). The stigma of public dependency: A comparison of alternative forms of public aid to the poor. *Social Problems*, 22(2), 213-228.
<https://doi.org/10.2307/799760>