

Mitigating Psychological Costs

The Role of Citizens' Administrative Literacy and Social Capital

Döring, Matthias; Madsen, Jonas Krogh

Published in:
Public Administration Review

DOI:
10.1111/puar.13472

Publication date:
2022

Document version:
Final published version

Document license:
CC BY

Citation for pulished version (APA):
Döring, M., & Madsen, J. K. (2022). Mitigating Psychological Costs: The Role of Citizens' Administrative Literacy and Social Capital. *Public Administration Review*, 82(4), 671-681. <https://doi.org/10.1111/puar.13472>



Go to publication entry in University of Southern Denmark's Research Portal

Terms of use

This work is brought to you by the University of Southern Denmark.
Unless otherwise specified it has been shared according to the terms for self-archiving.
If no other license is stated, these terms apply:

- You may download this work for personal use only.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying this open access version

If you believe that this document breaches copyright please contact us providing details and we will investigate your claim.
Please direct all enquiries to puresupport@bib.sdu.dk

Matthias Döring 
 University of Southern Denmark
 Jonas Krogh Madsen 
 Roskilde University

Research Article

Mitigating Psychological Costs—The Role of Citizens’ Administrative Literacy and Social Capital

Abstract: *A key claim in the administrative burden framework is that citizens do not experience interactions with public programs as equally burdensome. Existing research has argued that citizens’ generic human capital may influence the severity of these experiences. In this article, we argue that a specific form of human capital specific to interactions with public programs—administrative literacy—affects the psychological costs recipients are facing. Specifically, we propose that administrative literacy is positively associated with autonomy maintenance in the face of burdensome rules, and that autonomy maintenance is negatively associated with stress. In doing so, we investigate a theoretically founded differentiation of psychological costs. We test these propositions using structural equation modeling on a unique survey of 915 unemployment insurance recipients in Denmark. The findings support our arguments, suggesting that accumulation or training of program-specific human capital may help recipients to cope with the strains of unemployment.*

Evidence for Practice

- Unemployment insurance recipients are highly vulnerable group as they encounter numerous administrative burdens. These burdens inflict feelings of autonomy loss which lead to stress.
- Having high levels of administrative literacy reduces autonomy loss. Public organizations and employees should foster citizens’ knowledge and skills about administrative procedures and requirements.
- Social capital serves as last safeguard to avoid severe psychological costs in the form of stress even when lacking administrative literacy.
- Identifying clients with low levels of administrative literacy and/or social capital makes it easier to address most needy clients.

The development of administrative burden as a focal element of citizen-state interactions has provided researchers with a conceptual tool to advance various topics in public administration research. Studies addressing administrative burden range from macro-perspectives, such as policy take-up (Fox, Stazyk, and Feng 2020) and equity (Álvarez, Devoto, and Winters 2008; Heinrich 2016), to micro-phenomena, such as the psychological and economic consequences for citizens that encounter onerous regulations and demands from public programs (Bhargava and Manoli 2015; Hattke, Hensel, and Kalucza 2020; Soss 1999).

Recently, researchers have started to explicitly address whether individual resources influence how citizens perceive, engage, and cope with administrative processes (Christensen et al. 2020; Döring 2021; Masood and Nisar 2021; Mik-Meyer 2017; Masood and Nisar, Nielsen, and Bisgaard 2021). Here, it is widely claimed that citizens with lower levels of human and social capital are less able to navigate

these processes and thus experience administrative burdens more severely (Herd and Moynihan 2019). At the same time, scarcity, health problems, age-related cognitive decline, and other common life factors further exacerbate these effects (Christensen et al. 2020). However, we still lack empirical evidence of how human capital differences actually affect the impact of administrative burden. More importantly, while the focus on generic human capital, such as cognitive functioning (Christensen et al. 2020), is valuable, it has limited implications and value for researchers and practitioners as they are difficult to address through training, policy design, or during encounters with public programs.

In this article, we investigate how a specific subset of human capital—administrative literacy—affects the experience of administrative burden among citizens who are in close interaction with public programs. According to Döring (2021), administrative literacy describes the capacity to “obtain, process, and understand basic information and services from

Matthias Döring is an assistant professor in Public Administration at the Department of Political Science and Public Management at the University of Southern Denmark, Odense M, Denmark. His research focuses on citizen-state interactions, street-level bureaucracy, digitalization, and leadership.
Email: mdoering@sam.sdu.dk

Jonas Krogh Madsen is a doctoral candidate in Public Administration at the Department of Social Sciences and Business at Roskilde University, Roskilde, Denmark. His research focuses on citizen-state interactions, street-level bureaucracy, and social policy.
Email: jkroghm@ruc.dk

[The copyright line for this article was changed on 6 June 2022 after original online publication.]

Public Administration Review, Vol. 82, Iss. 4, pp. 671–681. © 2022 The Authors. *Public Administration Review* published by Wiley Periodicals LLC on behalf of American Society for Public Administration.
 DOI: 10.1111/par.13472.

public administrations needed to make appropriate decisions” (Döring 2021, 1). Generally, competence is often defined as a function of skills, knowledge, and attitudes (Lizzio and Wilson 2004). As a domain-specific competence, administrative literacy is a useful resource to draw upon in order to address how experiences of administrative burden affect citizens during encounters with public programs. In addition, citizens who realize that they lack the necessary level of competence, knowledge, and skills to navigate the encounter might also try to reach to other parties, such as family, friends, and supportive organizations, to compensate for these shortcomings (Masood and Nisar 2021; Nisar 2018). Therefore, we incorporate social capital in our research focus.

For this purpose, we provide a theoretically founded differentiation of psychological costs—specifically autonomy loss and stress—that have remained a rather broad conceptual notion in the administrative burden framework so far. While Herd and Moynihan (2019) name and describe various examples ranging from autonomy loss to the experience of stress, we argue that these phenomena should not be considered as unrelated outcomes. Rather, and by following Ryan and Deci (2017), we expect that perceived stress is the result of autonomy loss. In order to assess the impact of individual resources, this differentiation provides us with a clearer understanding of administrative burden as a concept. By incorporating on conservation of resources (COR) theory (Hobfoll 1989), we discuss how individuals use and protect their resources in the face of unexpected and challenging situations.

In doing so, we build on insights from a recent qualitative study by Masood and Nisar (2021), which is the first empirical study to investigate how different types of capital affect the way citizens navigate administrative burdens. We extend their findings by testing how administrative literacy and social capital alleviate psychological costs.

We test our propositions with a unique sample of Danish unemployment insurance recipients. Recipients have frequent interactions with their unemployment agency, while having to comply with various demands in order to stay eligible for benefits. Additionally, they suffer from the more general challenges of being unemployed. The unemployment benefit setting therefore serves as a highly relevant case to investigate how recipients draw upon their individual human and social capital to navigate these encounters with public programs and comply with the rules and demands that follow.

We find evidence that higher levels of administrative literacy substantially reduce the perceived autonomy loss from being an unemployment insurance recipient and thereby indirectly alleviate the experience of stress when facing administrative burden. Furthermore, social capital reduces stress despite the experience of autonomy loss. Our findings add important contributions to the research on citizen-state interactions by deriving knowledge on how to actively reduce administrative burdens and their wide range of negative effects on citizens. This is important not only to the development of administrative burden research but also policy makers and other actors aiming to ensure successful implementation of public programs.

The article is structured as follows. First, we outline the conceptual framework for understanding the relationship between individual resources and psychological costs in bureaucratic encounters. We then develop our hypotheses of the serial relationship between administrative literacy, autonomy loss, and stress. Finally, we present our findings and discuss their contributions, limitations, and future directions for this type of research.

Administrative Burden

A defining feature of means-tested public programs is measures employed to ensure that only eligible citizens participate. While they can be introduced to serve perfectly legitimate policy goals, they simultaneously impose a range of rules and demands onto recipients for information, self-declaration, and justification. Therefore, street-level bureaucracy that has to implement these programs imposes substantial costs on recipients to ensure the most efficient case processing for the public organization (Lipsky 2010, 38).

Herd and Moynihan (2019) coined the term administrative burden to capture how citizens’ experience these rules and demands. At the core of the concept lies the assumption that whenever citizens experience demanding implemented policies as onerous, they face three types of costs: the efforts spent on *acquiring* knowledge and information about the requirements (learning costs), the time and money spent on *fulfilling* the requirements (compliance costs), and the stress, stigma, or autonomy loss that may arise from *experiencing* these requirements or the benefits themselves (psychological costs). By taking into account these different costs, we gain additional insights into the nature of citizen–state interactions.

Indeed, experiencing administrative burden can have substantial consequences for the individual. For instance, Hatke, Hensel, and Kalucza (2020) show that encountering administrative burdens and red tape causes negative emotional responses, such as frustration and confusion. Others find that the easing of compliance demands in public programs immediately reduces the experiences of stress and autonomy loss among its recipients (Bækgaard et al. 2021). Combined with social stigma often associated with certain types of welfare programs (Buss 2019; Caswell, Larsen, and Sieling-Monas 2015; Currie 2006), administrative burdens may also have unintended behavioral side-effects on program success and recipients wider democratic participation (Larsen 2019; Moynihan and Soss 2014). These include program non-take-up (Brodtkin and Majmundar 2010; Daigneault and Macé 2019), social exclusion (Nisar 2018), and civic disengagement (Bruch, Ferree, and Soss 2010; Moynihan and Herd 2010; Soss 1999).

More importantly, the perceived severity of administrative burdens are not evenly distributed throughout society (Heinrich 2016; Heinrich and Brill 2015). In their recent study, Chudnovsky and Peeters (2020) show that the experiences of administrative burden in social welfare programs, such as a conditional cash transfer program, are markedly more prevalent among the most vulnerable recipients (11). Similarly, Deshpande and Li (2019) find that the increasing application costs in disability programs from closures of Social Security Administration field offices markedly reduce program targeting efficiency and disproportionately affect recipients with low income and education (215). Taken together, these findings suggest that the unequal distribution of resources, even within the

same general group of eligible clients, explain why bureaucratic demands of targeted policies may unintentionally backfire with even disproportionate effects among the most vulnerable.

Disentangling the Costs

While the work on administrative burden (Bækgaard, Moynihan, and Thomsen 2021; Carter, Scott, and Mahallati 2018; Jilke, van Dooren, and Rys 2018; Moynihan, Herd, and Harvey 2015; Thomsen, Bækgaard, and Jensen 2020) has substantially advanced research on citizen–state interactions, we argue that the concept needs further specification to properly disentangle the internal relationship between the different costs and their underlying mechanisms (Bækgaard and Tankink 2021). Most importantly, we need to identify the ways in which sub-dimensions and elements of the framework are linked. How do the different types of costs relate to each other? How do sub-concepts within these costs relate to each other? Adding more clarity to these questions will help us better understand how citizens experience and cope with administrative burden and ultimately how administrative burden can be examined and employed in the policy context.

In doing so, we are particularly interested in psychological costs. Herd and Moynihan (2019) conceptualize these costs as an umbrella term for psychological concepts, such as autonomy loss and stress. They are treated as somewhat independent effects that may arise during burdensome administrative encounters. However, following Karasek's (job) demand-control model (Karasek 1979), stress is more likely to be considered an outcome of autonomy loss. Hence, the loss of autonomy is likely to be a major driver of stress and thus increases the psychological costs.

Why is this differentiation necessary? Researchers have stressed the importance of citizen's available resources when navigating and coping with burdensome administrative encounters (Döring 2021; Heinrich 2016; Masood and Nisar 2021; Nielsen, Nielsen, and Bisgaard 2021). For instance, Christensen et al. (2020) emphasize that human capital (or the lack of it) affects how hard burdens hit recipients of public programs with distributive effects. Here, human capital encompasses general knowledge and skills necessary for everyday routines. Citizens facing serious life factors, such as scarcity or health impairments, are more disposed to lack these which consequently makes them even more vulnerable compared to other recipients of the same public program. We propose that domain-specific human capital is likely more relevant than generic types of human capital as encounters with the rules, demands, and requirements of public programs provide challenges that differ significantly from everyday encounters. Particularly essential to these types of interactions is “administrative literacy” (Döring 2021), which covers a set of competences that specifically enable users to cope with the administrative burdens they may arise during interactions with public organizations. The skills and knowledge are clustered into several sub-dimensions: functional, communicative, processual, structural, media, and civic literacy. These subsets cover all phases of citizen–state interactions (Döring 2021; Nielsen, Nielsen, and Bisgaard 2021)—from collecting and assessing information, exchanging information with street-level bureaucrats to, eventually, deriving personal decisions based on Steps 1 and 2. Masood and Nisar's (2021) conceptualization of administrative capital builds on a similar logic; however, they focus on domain-

specific knowledge. Knowledge provides only a limited part of human capital, while skills play an equally important role. Moreover, Masood and Nisar (2021) describe how various types of capital that may help citizens in such situations, ranging from financial capital over social and cultural capital to administrative capital. Whenever citizens lack the necessary knowledge and skills to interact with public authorities themselves, they might rely on third parties for assistance (Nisar 2018), either based on good will (social capital) or in exchange for payments (financial capital). Hence, financial and social capital serve as a “safety net” in case the individual's human capital is insufficient.

For our discussion, this human capital perspective is particularly interesting. It relies on a distinction from the administrative burden literature between state actions, such as the demands, requirements, and rules imposed on citizens, and the citizens' subjective experiences of these state actions. It is the nature of these latter experiences that lead to reactive behaviors among users and make rules behaviorally impactful (Madsen, Mikkelsen, and Moynihan 2021). Here, Christensen et al. (2020) insert human capital differences as a moderator on the first of these two theoretical linkages: Human capital stock bolsters users from experiencing state actions as onerous and costly. In a sense, individuals with ample human capital endowments do not experience administrative burdens as much as individuals lacking such endowments.

In this article, we aim to expand this argument in two ways. First, we embed it in a prominent psychological stress theory: COR theory (Hobfoll 1989). Doing so enables us to predict not only that a larger stock of human capital—conceptualized as a domain-specific resource—is associated with less stressful experiences as recipients of public programs but also to make predictions on the process leading to this outcome through satisfaction or conservation of basic psychological needs (Halbesleben et al. 2014; Vansteenkiste, Ryan, and Soenens 2020).

COR theory assumes that individuals “are motivated to acquire, protect, and foster the acquisition of those things which they value—their resources” (Holmgreen et al. 2017, 443). Situations causing stress are considered to be those in which these resources are (expected to be) drawn upon. Interactions with the state that imposes costs on citizens are examples of such situations. Citizens lacking the necessary knowledge or skills to comply with the requested requirements (understanding forms, providing information, producing proofs for eligibility, etc.) will have to invest a significant share of their available resources to make up for the lack. While this investment may lead to financial support (e.g., in the form of benefits or allowances), losses are perceived more pronouncedly than the potential gains which in return increases stress (Hobfoll 2001, 343). However, citizens who already possess the knowledge and skills necessary to acquire information do not need to invest as many resources and therefore will perceive these situations as less stressful.

Within the COR framework, we conceptualize administrative literacy as a means for protecting and conserving core resources. In particular, we draw on Halbesleben et al.'s (2014) nomothetic definition of resources, which anchors COR in the basic

psychological needs theory, a sub-theory within self-determination theory (Vansteenkiste, Ryan, and Soenens 2020). That is, administrative literacy can help citizens when they face the rules, requirements, and demands from public programs to protect their competence, and, most importantly, autonomy—and consequently stave off the stress that follows from their dissatisfaction (e.g., Ryan and Deci 2017). Citizens with high levels of administrative literacy possess the necessary knowledge about bureaucratic procedures and requirements or the relevant skills to acquire the needed information. They are more acquainted with bureaucratic terms and more easily navigate the administrative system. Hence, we would expect that administrative literacy serves as domain-specific competence which will, in a first step, lower learning costs and potentially compliance costs. Furthermore, however, citizens might also feel more autonomous and self-efficacious compared to other citizen with lower levels of administrative literacy. The latter may quickly feel overwhelmed and heteronomous as encountering bureaucratic challenges are stressful situations for which they lack the resources to cope with (Lazarus and Folkman 1984). Furthermore, administrative literacy provides citizens with a coping resource that makes it less stressful to face the rules and requirements of public programs.

Hypothesis 1: Administrative literacy is negatively associated with experienced autonomy loss among unemployment fund benefit recipients.

Hypothesis 2: Administrative literacy is negatively associated with experienced stress among unemployment fund benefit recipients.

Herd and Moynihan (2019) explicitly base their claim that autonomy loss is an important psychological cost of administrative burdens on Ryan and Deci's (2000) work on self-determination theory. However, in their original proposition, they include stress, stigma, and loss of autonomy as exemplary psychological costs of administrative burdens. Researchers have examined whether onerous experiences of public programs lead citizens to feel more stress, stigma, and autonomy loss (e.g., Bækgaard et al. 2021). From a COR theory perspective, however, these three psychological costs are not equal, nor should they be thought of as parallel outcomes. Instead, they are sequentially connected. From a self-determination theory anchored COR perspective, Halbesleben et al. (2014) argues that autonomy loss is a mechanism through which onerous encounters with public programs induce feelings of stress. Hence, the experience of autonomy *is* a threat to a basic psychological need and thus a stressor, particularly to those who do not have the resources to combat it. Thus, our claim is that autonomy loss is likely a cause of stress rather than an outcome parallel to it. Based on these considerations, we propose our third hypothesis.

Hypothesis 3: Autonomy loss is positively associated with experienced stress among unemployment fund benefit recipients.

If learning, compliance, and psychological costs cannot be internalized by citizens due to their lack of competence, they may want to externalize the costs by involving third parties that help them cope with the threatening situation. Social support may act as a vehicle for coping with stressors (e.g., Cohen and Wills 1985;

Lazarus and Folkman 1984). This is particularly relevant among unemployed citizens. In their meta-analysis of the unemployment literature, McKee-Ryan et al. (2005) find that coping resources and strategies are more strongly associated with well-being among unemployed citizens than their human capital.

Social ties or networks are often seen as a component of social capital, alongside social trust, and civic norms (e.g., Coleman 1990; Putnam 2000). But as the research tradition following Granovetter's (1973) work demonstrates, social ties are important in their own. The reason for these effects is that networks provide resources: access to information and access to support. *Access to information* from social ties can be helpful for unemployed individuals as social ties can be a source of information to get back into the labor market, for example, prospective open positions (see, e.g., DeLongis and Holtzman 2005; Leana and Feldman 1988; Russell 1999). Furthermore, it may provide the individual with information about recent changes in the unemployment administration, changing requirements, new organizational structures, or processes. *Access to support* may provide individuals with lower human capital with substitute to cope with administrative burden, for example, friends, relatives, or organizations that help with collecting information, understanding official letters, or searching for relevant documents (Masood and Nisar 2021; Nisar 2018). Additionally, embeddedness in a social network may further a positive outlook, as well as other coping resources, which can be a resource for staving off stress (McKee-Ryan et al. 2005). There is ample evidence from different domains that social support can act as a resource to prevent stress and burnout. Janssen, Schaufelie, and Houkes (1999) find social support to be negatively associated with emotional exhaustion among nurses.

While relying on social capital also means to accept one's own lack of ability—and thus autonomy and competence—it provides a valuable source to cope with stressful situations. Yet, simply having a social network of a certain size is not necessarily a resource for unemployed individuals. As already Hobfoll noted: "social relations are seen as a resource to the extent that they provide or facilitate the preservation of valued resources, but they also can detract from individuals' resources" (1989, 517). Hence, social ties can act as a resource for unemployed individuals if they can be relied on for support.

Hypothesis 4: Social capital is negatively associated with experienced stress among unemployment fund benefit recipients.

Figure 1 sums up our theoretical model and corresponding hypotheses.

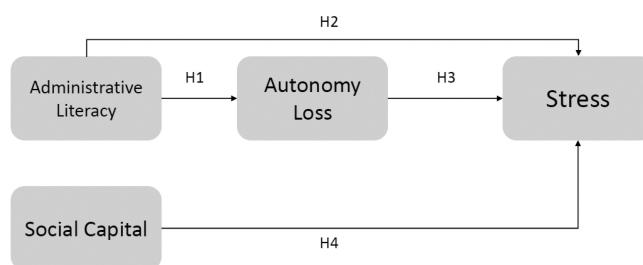


Figure 1 Proposed Model

Case Setting: Danish Unemployment Insurance Benefit Recipients

To investigate how human and social capital affect the experience of psychological costs during citizen–state interactions, we need a case where administrative burdens are salient to recipients of public programs. To this end, we rely on the case of unemployment insurance recipients in Denmark. In the Danish unemployment insurance system, the unemployment insurance agencies have the dual responsibility of delivering job consultation and job training courses, while granting and monitoring unemployment insurance recipients' eligibility for benefits. Eligibility is based on a range of criteria regarding residency and prior employment history, income, and insurance status. Once they become recipients, they have to comply with a range of demands, such as active job search, acceptance of work offers despite their relevance, digital registration of activities, and frequent meetings on a short notice. Hence, recipients have to navigate rather complex legislation and multiple demands, while continuously being subject to the fund's right to sanction noncompliance which can have severe consequences for recipients facing the financial strain of unemployment. At the same time, they also often face the precarious conditions that come with becoming unemployed. Research has for instance shown that both job loss and job search are associated with stress and other negative psychological health outcomes as it can deprive individuals of their income, social contacts, status, daily structure, and other valued resources (Jahoda 1982; for meta-analyses see McKee-Ryan et al. 2005; Paul and Moser 2009; Wanberg 2012; Wanberg, Griffiths, and Gavin 1997; Warr, Jackson, and Banks 1988). Moreover, engaging in job search is challenging, often does not result in the desired outcomes, and can undermine individuals' self-efficacy and feelings of competence when unsuccessful (McKee-Ryan et al. 2005; Wanberg, Ali, and Csillag 2020).

Taken together, the setting therefore serves as a particularly interesting case to study how administrative literacy and social capital matter to the experiences of administrative burden among unemployment insurance recipients.

Data and Participants

Data for this analysis are derived from a survey sent to 5,000 members of the Danish unemployment insurance fund 3FA, which primarily serves individuals searching for employment in blue-collar industries. All respondents were randomly sampled from the funds complete list of unemployed members. The data were collected between April 7 and 17, 2020 and consists of a total of 915 completed responses (18.3 percent response rate). The sample roughly matches the target population on characteristics recorded in 3FA's administrative records. Average age is 50 years (44 years in the population) with 36.7 percent women (about 30.4 percent in the population).

Measures

We used four different measures to test our hypotheses. A list of variables is presented in the Appendix tables A1 and A2.

Autonomy loss and stress are based on Thomsen, Bækgaard, and Jensen (2020) consisting of seven items. Sample items include “As an unemployment insurance recipient, I cannot plan my every day as I would like to” (autonomy loss) and “After becoming

an unemployment insurance recipient, I often feel worried and stressed” (stress).

Administrative literacy was measured using an adapted short version of the Administrative Literacy Scale developed by Döring (2019) consisting of four items. The items have been framed for the specific policy setting of unemployment insurance. The items focus on the comprehension of documents and communication, knowledge about and comprehension of rules and requirements, and regular updating of information. Thus, the administrative literacy items target learning and compliance costs specifically (Herd and Moynihan 2019). While it is challenging to measure skills in a self-reported survey, we argue that asking for past behavior and performance is a reasonable approximation that goes beyond mere knowledge (see for example Powers, Trinh, and Bosworth 2010).

Social capital was measured using an adapted version of Chen et al. (2008) consisting of five items. The items encompass frequency of contacts with family and friends, emotional and financial support to account for the specific setting of unemployment, as well as support to navigate the bureaucratic system by either close relations or civil society organizations.

As controls, we included respondents' gender, education, length of current unemployment, and whether respondents have children at home they have to take care of.

All batteries were aggregated into scales in a latent variable modeling framework of structural equation modeling (SEM). McDonald's omega (as a more appropriate alternative for Cronbach's alpha) for internal reliability is reported in the list of variables (table A1) in the Appendix. All indices were estimated using the lavaan package for R. Table 1 shows the descriptive statistics for all items.

Results

We estimated an SEM to test our hypotheses. This approach is well-suited to study the expected theoretical relationship

Table 1 Descriptive Statistics

| | <i>N</i> | Mean | <i>SD</i> | Min | Max |
|----------------------|----------|-------|-----------|-----|-----|
| adminlit1 | 917 | 2.504 | 0.961 | 0 | 4 |
| adminlit2 | 915 | 2.741 | 0.856 | 0 | 4 |
| adminlit3 | 917 | 2.812 | 0.911 | 0 | 4 |
| adminlit4 | 909 | 2.690 | 0.880 | 0 | 4 |
| socialcap1 | 980 | 2.447 | 1.126 | 0 | 4 |
| socialcap2 | 979 | 2.860 | 1.042 | 0 | 4 |
| socialcap3 | 982 | 2.296 | 1.140 | 0 | 4 |
| socialcap4 | 979 | 1.823 | 1.208 | 0 | 4 |
| socialcap5 | 978 | 2.236 | 1.047 | 0 | 4 |
| auton1 | 925 | 1.821 | 1.151 | 0 | 4 |
| auton2 | 924 | 2.068 | 1.035 | 0 | 4 |
| auton3 | 925 | 1.871 | 1.132 | 0 | 4 |
| auton4 | 924 | 1.900 | 1.155 | 0 | 4 |
| stress1 | 926 | 2.157 | 1.239 | 0 | 4 |
| stress2 | 926 | 1.869 | 1.175 | 0 | 4 |
| stress3 | 926 | 1.716 | 1.222 | 0 | 4 |
| Education: primary | 299 | 0.377 | 0.485 | 0 | 1 |
| Education: secondary | 393 | 0.496 | 0.500 | 0 | 1 |
| Education: tertiary | 101 | 0.127 | 0.334 | 0 | 1 |
| Female | 987 | 0.366 | 0.480 | 0 | 1 |
| Unemployment length | 873 | 3.430 | 1.390 | 1 | 5 |
| Age | 980 | 49.55 | 11.23 | 20 | 65 |
| Children at home | 842 | 1.45 | 0.810 | 1 | 4 |

between multiple latent independent, mediating, and dependent variables at the same time while including observable controls such as gender and education. The model achieves an acceptable fit: $\chi^2(df 169) = 454.853$; $p < .001$; comparative fit index (CFI) = .937; Tucker-Lewis-Index (TLI) = .925; root mean square error of approximation (RMSEA) = 0.047 (90 percent CI: 0.042–0.053); standardized root mean square residual (SRMR) = 0.061. The results are given in table 2 and figure 2. The full measurement model is provided in table A2 in the Appendix.

Administrative literacy is found to reduce the level of autonomy loss ($\beta = -.237$, $p < .001$) as hypothesized in hypothesis H1. The skills and knowledge to effectively gather information as well as to navigate and comprehend the unemployment system help to alleviate autonomy loss. Hence, our data show evidence that domain-specific human capital, such as administrative literacy, might be a crucial explanatory concept to understand how citizens are affected by administrative burden. Furthermore, the effect remains stable and significant while controlling for the educational level and gender. The finding supports the assumption by Döring (2021) that while administrative literacy is partially related to socioeconomic concepts, such as education, it provides a more specific approach to conceptualize domain-specific human capital.

Likewise, autonomy loss is positively related to stress ($\beta = .881$, $p = .001$), thus supporting hypothesis H3. This is in line with our argument that autonomy loss is a major stressor during bureaucratic encounters and thus a cause for emotional and psychological stress (Halbesleben et al. 2014). Again, these results remain stable even when controlling for educational level and gender.

Social capital, however, can be an effective resource to alleviate the experience of stress ($\beta = -.111$, $p = .007$). This supports hypothesis H4. Individuals that do not have the necessary information or skills available to deal with the requirements of their benefit payments may find that friends, family, or even organizations—also referred to as intermediaries (Döring and Löbel 2018; Löbel, Paulowitsch, and Schuppan 2016; Nisar 2018; Shea 2011)—provide experience, guidance, and help. Despite suffering from autonomy loss, social capital is a valuable source to cope with onerous citizen–state interactions (Masood and Nisar 2021).

Surprisingly, administrative literacy was found to have a direct positive effect on perceived stress ($\beta = .116$, $p = .004$) contrary to the expected negative relationship proposed in hypothesis H2. One could argue that knowledge about requirements and the processing of unemployment payments foreshadows the actual loss of resources. Halbesleben et al. (2014) expect that “the fear of losing may actually carry greater importance than actual loss” (1345). As citizen–state interactions in the unemployment administration are not one-shot interactions, but carry over multiple interactions over a longer period of time, knowing about rules and demands might evoke higher levels of fear for resource loss than those that are less aware of the processing. Hence, administrative literacy may have adverse effects in making people aware of onerous procedures, thereby inducing negative emotions and stress. However, taking both the direct ($\beta = .116$) and indirect effects ($\beta = -.357$) of administrative literacy into consideration, we still see a total alleviating effect ($\beta = -.159$) of administrative literacy on administrative burden.

Furthermore, we find that education has no effect on autonomy loss but an alleviating effect on stress. Higher levels of education might increase the probability of re-employment and decrease the risk of long-term unemployment. However, this might not save benefit recipients from feeling autonomy loss when facing an alien system of onerous administrative requirements that forces them to produce documents or apply for jobs that might not be relevant to their careers. Thus, it is not surprising that education will not prevent autonomy loss.

Finally, we find that women are more likely to experience both autonomy loss. Previous studies have been somewhat inconclusive about the role of gender in an unemployment context, finding

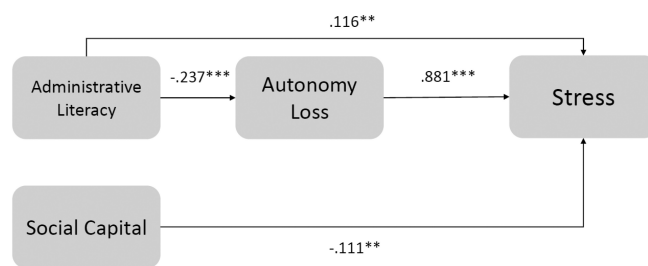


Figure 2 Estimated Model; * $p < .05$; ** $p < .01$; and *** $p < .001$; Controls: Education, Gender, Age, Length of Unemployment, and Children at Home; Standard Errors after Bootstrapping Reported

Table 2 Results of Structural Equation Model; Standardized Coefficients Reported

| lhs | op | rhs | Est. SD | SE | p Value |
|---------------|----|-------------------------|--------------|------|-----------------|
| Stress | ~ | Autonomy loss | .881 | .027 | <.001 |
| Stress | ~ | Social capital | -.111 | .041 | .007 |
| Stress | ~ | Administrative literacy | .116 | .040 | .004 |
| Stress | ~ | Female | .054 | .028 | .054 |
| Stress | ~ | Education | -.061 | .027 | .025 |
| Stress | ~ | Unemployment length | -.034 | .027 | .202 |
| Stress | ~ | Children at home | .016 | .032 | .604 |
| Stress | ~ | Age | -.050 | .030 | .090 |
| Autonomy loss | ~ | Administrative literacy | -.237 | .057 | <.001 |
| Autonomy loss | ~ | Female | .109 | .041 | .008 |
| Autonomy loss | ~ | Education | -.050 | .040 | .212 |
| Autonomy loss | ~ | Unemployment length | .008 | .039 | .834 |
| Autonomy loss | ~ | Children at home | .028 | .042 | .509 |
| Autonomy loss | ~ | Age | -.086 | .044 | .050 |

Significance bold estimates have a p-value < .05.

either no effect (Leana and Feldman 1991) or effects opposite of what we find in our data (Paul and Moser 2009). However, studies on this subject are highly context and culture specific depending on the role of women in families and society (Ensminger and Celentano 1990), as well as the general labor market context. Our research context of blue-collar workers might affect this relationship as these sectors are traditionally male dominated, which might make it more difficult for women to leave unemployment (Elser et al. 2018; Rosen 1990).

Discussion

Our model provides two novel contributions to the literature. First, we provide a model that differentiates and elaborates on the subdimensions of psychological costs. By doing so, we shed light on the dynamics of administrative burden as a focal concept of current public administration research. Second, we provide one of the first quantitative tests on the relationship between two types of capital, human capital (administrative literacy) and social capital, and the experience of administrative burden in an unemployment benefit setting.

Our study emphasizes the importance of unemployment benefits as the status of unemployment itself has not only financial but also social and psychological impact on individual lives (Jahoda 1982; Kunze and Suppa 2017; Mousteri, Daly, and Delaney 2018). However, administrative requirements linked to unemployment policy programs can impose additional burden on already vulnerable members of our society. Our findings support the assumption that domain-specific human capital (administrative literacy) supports recipients' psychological need for autonomy and volition during encounters with administrative requirements, processes, and rules. Recipients with high levels of administrative literacy can use these resources to cope with the imposed learning and compliance costs. This specific type of human capital provides us with a more accurate concept to explain differences in the experience of administrative burden than general education (Döring 2021). Individuals who lack these knowledge and skills will face more serious threats to their need for autonomy and, as a consequence, higher levels of stress. At the same time, our findings suggest that social capital serves as a buffer in the absence of administrative literacy. Having friends, family, or intermediaries at one's disposal to help with the administrative requirements can alleviate the exposure to stress even when recipients experience a loss of autonomy. Moreover, the positive impact of social capital may very well go beyond merely bureaucratic encounters as friends, family, and intermediaries can be drawn upon for, for example, emotional encouragement, job search, or other issues relevant during unemployment.

In sum, our findings show that skills (and knowledge) matter. Assumably, both are dynamic concepts that may be trained. Providing easily accessible information, low-barrier consulting, approachable help desks, and ensuring that street level bureaucrats have sufficient resources to explain procedures and rules (and their purpose) to recipients (Andersen and Guul 2019; Barnes and Henly 2018) may be some of numerous approaches to increase citizens' administrative literacy or account for lower levels. Future research should further investigate if and how different resources interact although we may also assume that certain resources (like administrative literacy) might always work no matter the specific policy context. Moreover, facilitating social capital is another way to

ease the impact of administrative burden. Public organizations may do so by ensuring the involvement of third actors that help clients to prepare and navigate the system, such as NGOs or administrative guides.

While our data focus on a specific type of public service (Danish unemployment benefits), it comes with compliance requirements similar to most social benefits in modern states. The psychological processes that underline our study are basic and well-established across a wide range of settings. However, recipients of unemployment benefits are still financially more independent than recipients of social assistance for whom we might expect even stronger effects of individual resources. Overall, we expect our findings to be generalizable to most contexts in which citizens are dependent of social benefits provided by the state.

Our findings come with several limitations. First, this is a cross-sectional data set, which limits the construction of causality. While we believe that reverse causality is less of an issue in our study, it is difficult to effectively rule out the impact of other unobserved factors. However, as we provide substantial theoretical background for our hypotheses, we are convinced that this study provides a path forward worth to pursue. Future research may incorporate time-series data to solidify our findings. For example, diary studies may examine potential recursive relationships between administrative literacy and experienced stress as citizen adjust to the demanding situation of bureaucratic encounters and learn from it. This would also rule out the potential risk of common source bias that may affect our study's results. Moreover, as administrative literacy and capital are relatively difficult to manipulate in meaningful ways, we also encourage the use of field experiments in which citizens are provided with trainings and workshops, rather than survey experiments that often suffer from short-term effects and low levels of ecological validity.

Second, this study focused on psychological costs to showcase how sub-dimensions subsumed under the various cost terms have much more sophisticated inter-relationships as is often accounted for in the literature on administrative burden (Bækgaard and Tankink 2021). However, it does not focus on learning and compliance costs, both of which are even more likely to be affected by our observed individual resources. Additionally, we have not covered the role of cultural and financial capital in our study. While the former may be especially relevant for various types of minorities (Nisar 2018), the latter may serve as a general resource to lower stress as individuals feel less pressured as they can build on past savings. Although we believe that these issues are less relevant for our sample as it includes blue-collar workers only, future studies should further investigate how these resources affect the experience of administrative burden.

Third, our data collection took place during the COVID-19 pandemic to which the Danish government responded by temporarily suspending compliance and registration requirements among unemployment benefit recipients from the 12th of March 2020, to the 27th of May 2020. While this may have affected our sample as well, we do not expect that such a short-term change in policy to have a significant effect on the overall situation of unemployment and the benefit system, which remains generally unchanged. However, we cannot rule out this issue.

Finally, as the accuracy of subjective versus objective assessments of knowledge and skills are widely discussed in other research domains (Houston et al. 2018), our measure of administrative literacy may face similar limitations. Nevertheless, we would argue that it serves as a fruitful starting point for future research. Additionally, our measurement of administrative literacy is tailored to the specific setting of this study. A multipurpose validated scale of administrative literacy is needed and would serve as a useful tool for subsequent research.

The same applies to our dependent variables where we only measure perceived assessments of autonomy loss and stress. We thus encourage future studies to replicate our findings on actual burdens in, for example, application processes for benefit payments. In order to strengthen the external validity of our findings, more research is needed in other administrative domains, such as the social benefit or social security system, where the consequences of noncompliance are even more severe. Moreover, citizens entering such programs are likely—on average—to face more challenges than unemployment insurance recipients, which would only increase the severity of administrative burden and thus the importance of human and social capital.

Conclusion

In this study, we examine how citizens' individual resources affect the psychological costs that can arise during interactions with public programs. Using a COR framework, we argue that autonomy loss and stress—as commonly referenced in the administrative burden framework—should not be perceived as parallel psychological costs of bureaucratic encounters but rather as sequentially related. To test these claims, we include both in a structural equation model with a unique sample of 915 recipients of unemployment insurance benefits in Denmark. In addition, we test whether administrative literacy, as a domain-specific human capital, and social capital affect the severity of these psychological costs that arise during bureaucratic encounters.

The results show that administrative literacy equips recipients with coping capabilities that ultimately reduce their experience of autonomy loss even in situations where they are dependent on benefit payments. Furthermore, while autonomy loss is strongly related to perceived stress, social capital serves as another resource to further mitigate these consequences. Our research underlines the importance of focusing on domain-specific measures, such as administrative literacy, to better grasp how citizens employ different individual resources to navigate bureaucratic encounters and how such experiences affect their psychological well-being and subsequent behaviors. We invite future research for more in-depth analyses to expand the concept of administrative burden and our understanding of citizen-state interactions with a stronger focus on citizens.

Acknowledgment

We would like to thank Kim Sass Mikkelsen for his invaluable advice and support. Furthermore, would like to thank the participants of the NoPSA 2021 administrative burden workshop—your feedback helped to improve this manuscript substantially. Lastly, thanks to the anonymous reviewers who had an essential impact on this article's quality as well.

References

- Álvarez, Carola, Florencia Devoto, and Paul Winters. 2008. Why Do Beneficiaries Leave the Safety Net in Mexico? A Study of the Effects of Conditionality on Dropouts. *World Development* 36(4): 641–58. <https://doi.org/10.1016/j.worlddev.2007.04.014>.
- Andersen, Simon Calmar, and Thorbjørn Sejr Guul. 2019. Reducing Minority Discrimination at the Front Line—Combined Survey and Field Experimental Evidence. *Journal of Public Administration Research and Theory* 29(3): 429–44. <https://doi.org/10.1093/jopart/muy083>.
- Bækgaard, Martin, Kim Sass Mikkelsen, Jonas Krogh Madsen, and Julian Christensen. 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): 806–21.
- Bækgaard, Martin, Donald P. Moynihan, and Mette Kjærgaard Thomsen. 2021. Why Do Policymakers Support Administrative Burdens? The Roles of Deservingness, Political Ideology, and Personal Experience. *Journal of Public Administration Research and Theory* 31(1): 184–200.
- Bækgaard, Martin, and Tara Tankink. 2021. Administrative Burden: Untangling a Bowl of Conceptual Spaghetti. *Perspectives on Public Management and Governance*: gvab027. <https://doi.org/10.1093/ppmgov/gvab027>.
- Barnes, Carolyn Y., and Julia R. Henly. 2018. 'They Are Underpaid and Understaffed': How Clients Interpret Encounters with Street-Level Bureaucrats. *Journal of Public Administration Research and Theory*. 28(2): 165–81. <https://doi.org/10.1093/jopart/muy008>.
- Bhargava, Saurabh, and Dayanand Manoli. 2015. Psychological Frictions and the Incomplete Take-Up of Social Benefits: Evidence from an IRS Field Experiment. *American Economic Review* 105(11): 3489–529.
- Brodtkin, 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): 827–48. <https://doi.org/10.1093/jopart/mup046>.
- Bruch, Sarah K., Myra Marx Ferree, and Joe Soss. 2010. From Policy to Polity: Democracy, Paternalism, and the Incorporation of Disadvantaged Citizens. *American Sociological Review* 75(2): 205–26. <https://doi.org/10.1177/0003122410363563>.
- Buss, Christopher. 2019. Public Opinion towards Targeted Labour Market Policies: A Vignette Study on the Perceived Deservingness of the Unemployed. *Journal of European Social Policy* 29(2): 228–40. <https://doi.org/10.1177/0958928718757684>.
- Carter, David P., Tyler A. Scott, and Nadia Mahallati. 2018. Balancing Barriers to Entry and Administrative Burden in Voluntary Regulation. *Perspectives on Public Management and Governance* 1(3): 207–21. <https://doi.org/10.1093/ppmgov/gvx005>.
- Caswell, Dorte, Jørgen Elm Larsen, and Stella Mia Sieling-Monas. 2015. Cash Benefit Recipients—Vulnerable or Villains? In *The Danish Welfare State*, edited by Tea Torbenfeldt Bengtsson, Morten Frederiksen, and Jørgen Elm Larsen, 217–31. New York: Palgrave Macmillan. https://doi.org/10.1057/9781137527318_14.
- Chen, Xinguang, Bonita Stanton, Jie Gong, Xiaoyi Fang, and Xiaoming Li. 2008. Personal Social Capital Scale: An Instrument for Health and Behavioral Research. *Health Education Research* 24(2): 306–17. <https://doi.org/10.1093/her/cyn020>.
- Christensen, Julian, Lene Aarøe, Martin Bækgaard, 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): 127–36. <https://doi.org/10.1111/puar.13134>.
- Chudnovsky, Mariana, and Rik Peeters. 2020. The Unequal Distribution of Administrative Burden: A Framework and an Illustrative Case Study for Understanding Variation in People's Experience of Burdens. *Social Policy and Administration* 55(4): 527–42. <https://doi.org/10.1111/spol.12639>.

- Cohen, Sheldon, and Thomas A. Wills. 1985. Stress, Social Support, and the Buffering Hypothesis. *Psychological Bulletin* 98(2): 310–57. <https://doi.org/10.1037/0033-2909.98.2.310>.
- Coleman, James S. 1990. *Foundations of Social Theory*. Cambridge, MA: Belknap Press of Harvard University Press.
- Currie, Janet. 2006. The Take-Up of Social Benefits. In *Public Policy and the Income Distribution*, edited by Alan J. Auerbach, David Card, and John M. Quigley. Russell Sage Foundation.
- Daigneault, Pierre-Marc, and Christian Macé. 2019. Program Awareness, Administrative Burden, and Non-Take-Up of Québec's Supplement to the Work Premium. *International Journal of Public Administration*. 43(6): 527–39. <https://doi.org/10.1080/01900692.2019.1636397>.
- DeLongis, Anita, and Susan Holtzman. 2005. Coping in Context: The Role of Stress, Social Support, and Personality in Coping. *Journal of Personality* 73(6): 1633–56.
- Deshpande, Manasi, and Yue Li. 2019. Who Is Screened out? Application Costs and the Targeting of Disability Programs. *American Economic Journal: Economic Policy* 11(4): 213–48.
- Döring, Matthias. 2019. The Public Encounter—Dynamics of Citizen—State Interactions. Ph.D. Dissertation, Universität Potsdam. <https://publishup.uni-potsdam.de/opus4-ubp/frontdoor/index/index/docId/44267>.
- . 2021. How-to Bureaucracy: A Concept of Citizens' Administrative Literacy. *Administration & Society* 53(8): 1155–77. <https://doi.org/10.1177/0095399721995460>.
- Döring, Matthias, and Stephan Löbel. 2018. Street-Level Bureaucrats Und Intermediäre: Beziehung Auf Augenhöhe? *Der Moderne Staat—Zeitschrift Für Public Policy, Recht Und Management* 11(2): 347–66. <https://doi.org/10.3224/dms.v11i2.08>.
- Elser, Holly, April M. Falconi, Michelle Bass, and Mark R. Cullen. 2018. Blue-Collar Work and Women's Health: A Systematic Review of the Evidence from 1990 to 2015. *SSM - Population Health* 6: 195–244. <https://doi.org/10.1016/j.ssmph.2018.08.002>.
- Ensminger, Margaret E., and David D. Celentano. 1990. Gender Differences in the Effect of Unemployment on Psychological Distress. *Social Science and Medicine* 30(4): 469–77. [https://doi.org/10.1016/0277-9536\(90\)90349-W](https://doi.org/10.1016/0277-9536(90)90349-W).
- Fox, Ashley M., Edmund C. Stazyk, and Wenhui Feng. 2020. Administrative Easing: Rule Reduction and Medicaid Enrollment. *Public Administration Review* 80(1): 104–17.
- Granovetter, Mark S. 1973. The Strength of Weak Ties. *American Journal of Sociology* 78(6): 1360–80. <https://doi.org/10.1086/225469>.
- Halbesleben, Jonathon R.B., Jean-Pierre Neveu, Samantha C. Paustian-Underdahl, and Mina Westman. 2014. Getting to the 'COR': Understanding the Role of Resources in Conservation of Resources Theory. *Journal of Management* 40(5): 1334–64. <https://doi.org/10.1177/0149206314527130>.
- Hatke, Fabian, David Hensel, and Janne Kalucza. 2020. Emotional Responses to Bureaucratic Red Tape. *Public Administration Review* 80(1): 53–63. <https://doi.org/10.1111/puar.13116>.
- Heinrich, Carolyn J. 2016. The Bite of Administrative Burden: A Theoretical and Empirical Investigation. *Journal of Public Administration Research and Theory*. 26(3): 403–20. <https://doi.org/10.1093/jopart/muv034>.
- Heinrich, Carolyn J., and Robert Brill. 2015. Stopped in the Name of the Law: Administrative Burden and its Implications for Cash Transfer Program Effectiveness. *World Development* 72: 277–95.
- Herd, Pamela, and Donald P. Moynihan. 2019. *Administrative Burden: Policymaking by Other Means*. Chicago: Russell Sage Foundation <https://ebookcentral.proquest.com/lib/gbv/detail.action?docID=5607528>.
- Hobfoll, Stevan E. 1989. Conservation of Resources: A New Attempt at Conceptualizing Stress. *American Psychologist* 44(3): 513–24. <https://doi.org/10.1037/0003-066X.44.3.513>.
- . 2001. The Influence of Culture, Community, and the Nested-Self in the Stress Process: Advancing Conservation of Resources Theory. *Applied Psychology* 50(3): 337–421. <https://doi.org/10.1111/1464-0597.00062>.
- Holmgreen, Lucie, Vanessa Tirone, James Gerhart, and Stevan E. Hobfoll. 2017. Conservation of Resources Theory. In *The Handbook of Stress and Health: A Guide to Research and Practice*, edited by Cary L. Cooper and James Campbell Quick, 443–57. Chichester, UK: John Wiley & Sons, Ltd.
- Housten, Ashley J., Lisa M. Lowenstein, Diana S. Hoover, Viola B. Leal, Geetanjali R. Kamath, and Robert J. Volk. 2018. Limitations of the S-TOFHFLA in Measuring Poor Numeracy: A Cross-Sectional Study. *BMC Public Health* 18(1): 405. <https://doi.org/10.1186/s12889-018-5333-9>.
- Jahoda, Marie. 1982. *Employment and Unemployment: A Social-Psychological Analysis*, Vol 1. CUP Archive.
- Janssen, Peter P.M., Wilmar B. Schaufelie, and Inge Houkes. 1999. Work-Related and Individual Determinants of the Three Burnout Dimensions. *Work and Stress* 13(1): 74–86. <https://doi.org/10.1080/026783799296200>.
- Jilke, Sebastian, Wouter van Dooren, and Sabine Rys. 2018. Discrimination and Administrative Burden in Public Service Markets: Does a Public–Private Difference Exist? *Journal of Public Administration Research and Theory* 28(3): 423–39. <https://doi.org/10.1093/jopart/muy009>.
- Karasek, Robert A. 1979. Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly* 24(2): 285. <https://doi.org/10.2307/2392498>.
- Kunze, Lars, and Nicolai Suppa. 2017. Bowling Alone or Bowling at All? The Effect of Unemployment on Social Participation. *Journal of Economic Behavior and Organization* 133: 213–35. <https://doi.org/10.1016/j.jebo.2016.11.012>.
- Larsen, Erik Gahner. 2019. Policy Feedback Effects on Mass Publics: A Quantitative Review. *Policy Studies Journal* 47(2): 372–94. <https://doi.org/10.1111/psj.12280>.
- Lazarus, Richard Stanley, and Susan Folkman. 1984. *Stress, Appraisal, and Coping*. New York: Springer <http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780826141927>.
- Leana, Carrie R., and Daniel C. Feldman. 1988. Individual Responses to Job Loss: Perceptions, Reactions, and Coping Behaviors. *Journal of Management* 14(3): 375–89. <https://doi.org/10.1177/014920638801400302>.
- . 1991. Gender Differences in Responses to Unemployment. *Journal of Vocational Behavior* 38(1): 65–77. [https://doi.org/10.1016/0001-8791\(91\)90018-H](https://doi.org/10.1016/0001-8791(91)90018-H).
- Lipsky, Michael. 2010. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*. New York: Russell Sage Foundation.
- Lizzio, Alf, and Keithia Wilson. 2004. Action Learning in Higher Education: An Investigation of Its Potential to Develop Professional Capability. *Studies in Higher Education* 29(4): 469–88. <https://doi.org/10.1080/0307507042000236371>.
- Löbel, Stephan, Benedikt Paulowitsch, and Tino Schuppan. 2016. Intermediaries in the Public Sector and the Role of Information Technology. *Information Polity* 21(4): 335–46. <https://doi.org/10.3233/IP-160387>.
- Madsen, Jonas Krogh, Kim Sass Mikkelsen, and Donald Moynihan. 2021. Burdens, Sludge, Ordeals, Red Tape, Oh My! A User's Guide to the Study of Frictions. *Public Administration*. <https://doi.org/10.1111/padm.12717>.
- Masood, Ayesha, and Muhammad Azfar Nisar. 2021. Administrative Capital and Citizens' Responses to Administrative Burden. *Journal of Public Administration Research and Theory*: muaa031 31(2): 56–72. <https://doi.org/10.1093/jopart/muaa031>.
- McKee-Ryan, Frances, Zhaoli Song, Connie R. Wanberg, and Angelo J. Kinicki. 2005. Psychological and Physical Well-Being during Unemployment: A Meta-Analytic Study. *Journal of Applied Psychology* 90(1): 53–76.
- Mik-Meyer, Nanna. 2017. *The Power of Citizens and Professionals in Welfare Encounters*. Manchester University Press. <https://doi.org/10.7765/9781526110305>.

- Mousteri, Victoria, Michael Daly, and Liam Delaney. 2018. The Scarring Effect of Unemployment on Psychological Well-Being across Europe. *Social Science Research* 72: 146–69. <https://doi.org/10.1016/j.ssresearch.2018.01.007>.
- Moynihan, Donald P., and P. Herd. 2010. Red Tape and Democracy: How Rules Affect Citizenship Rights. *The American Review of Public Administration* 40(6): 654–70.
- Moynihan, Donald P., P. Herd, and H. Harvey. 2015. Administrative Burden: Learning, Psychological, and Compliance Costs in Citizen-State Interactions. *Journal of Public Administration Research and Theory* 25(1): 43–69. <https://doi.org/10.1093/jopart/uuu009>.
- Moynihan, Donald P., and Joe Soss. 2014. Policy Feedback and the Politics of Administration. *Public Administration Review* 74(3): 320–32. <https://doi.org/10.1111/puar.12200>.
- Nielsen, Vibeke Lehmann, Helle Ørsted Nielsen, and Mette Bisgaard. 2021. Citizen Reactions to Bureaucratic Encounters Different Ways of Coping with Public Authorities. *Journal of Public Administration Research and Theory*: muua046 31(1): 381–98. <https://doi.org/10.1093/jopart/muaa046>.
- Nisar, Muhammad A. 2018. Children of a Lesser God: Administrative Burden and Social Equity in Citizen–State Interactions. *Journal of Public Administration Research and Theory* 28(1): 104–19. <https://doi.org/10.1093/jopart/mux025>.
- Paul, Karsten I., and Klaus Moser. 2009. Unemployment Impairs Mental Health: Meta-Analyses. *Journal of Vocational Behavior* 74(3): 264–82.
- Powers, Benjamin J., Jane V. Trinh, and Hayden B. Bosworth. 2010. Can This Patient Read and Understand Written Health Information? *JAMA* 304(1): 76. <https://doi.org/10.1001/jama.2010.896>.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster.
- Rosen, Ellen Israel. 1990. *Bitter Choices: Blue-Collar Women in and out of Work. Women in Culture and Society*. Chicago: University of Chicago Press.
- Russell, Helen. 1999. Friends in Low Places: Gender, Unemployment and Sociability. *Work, Employment and Society* 13(2): 205–24. <https://doi.org/10.1177/09500179922117917>.
- Ryan, Richard M., and Edward L. Deci. 2000. Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist* 55(1): 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>.
- . 2017. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York: Guilford Press.
- Shea, Jennifer. 2011. Taking Nonprofit Intermediaries Seriously: A Middle-Range Theory for Implementation Research. *Public Administration Review* 71(1): 57–66. <https://doi.org/10.1111/j.1540-6210.2010.02306.x>.
- Soss, Joe. 1999. Welfare Application Encounters: Subordination, Satisfaction, and the Puzzle of Client Evaluations. *Administration & Society* 31(1): 50–94. <https://doi.org/10.1177/009539999400935493>.
- Thomsen, Mette Kjærgaard, Martin Bækgaard, and Ulrich Thy Jensen. 2020. The Psychological Costs of Citizen Coproduction. *Journal of Public Administration Research and Theory* 30(4): 656–73. <https://doi.org/10.1093/jopart/muaa001>.
- Vansteenkiste, Maarten, Richard M. Ryan, and Bart Soenens. 2020. Basic Psychological Need Theory: Advancements, Critical Themes, and Future Directions. *Motivation and Emotion* 44(1): 1–31. <https://doi.org/10.1007/s11031-019-09818-1>.
- Wanberg, Connie R. 2012. The Individual Experience of Unemployment. *Annual Review of Psychology* 63: 369–96.
- Wanberg, Connie R., Abdifatah A. Ali, and Borbala Csillag. 2020. Job Seeking: The Process and Experience of Looking for a Job. *Annual Review of Organizational Psychology and Organizational Behavior* 7: 315–37.
- Wanberg, Connie R., Rich F. Griffiths, and Mark B. Gavin. 1997. Time Structure and Unemployment: A Longitudinal Investigation. *Journal of Occupational and Organizational Psychology* 70(1): 75–95.
- Warr, Peter, Paul Jackson, and Michael Banks. 1988. Unemployment and Mental Health: Some British Studies. *Journal of Social Issues* 44(4): 47–68.

Appendix A

Table A1 List of Variables

| Variable | Items | Scale |
|---|---|--|
| Stress ($\omega = .852$) | I am often stressed and nervous because of receiving unemployment insurance benefits. (stress1) I have often been in a bad mood since becoming an unemployment insurance benefit recipient. (stress2) I have slept less well at night since becoming an unemployment insurance benefit recipient. (stress3) | 0 "Strongly disagree" to 4 "Strongly agree" |
| Autonomy loss ($\omega = .76$) | I feel forced to do things that I do not want because of receiving unemployment insurance benefits. (auton1) I feel that I have influence over the processes related to receiving unemployment insurance. (auton2) As an unemployment insurance recipient, I cannot organize my everyday life as I want to. (auton3) As an unemployment insurance recipient, I do not feel in control over my own life. (auton4) | 0 "Strongly disagree" to 4 "Strongly agree" |
| Administrative literacy ($\omega = .803$) | I understand the content of the letters and documents I receive from the unemployment insurance fund and the job center. (adminlit1) I understand the rules and requirements that apply to me as an unemployment insurance recipient. (adminlit2) I understand why I have to comply with the rules and requirements imposed on me as an unemployment insurance recipient. (adminlit3) I keep myself informed on any changes in unemployment regulation (e.g., through media). (adminlit4) | 0 "Strongly disagree" to 4 "Strongly agree" |
| Social capital ($\omega = .751$) | I have frequent contact (by telephone or online) to a large group of friends and family. (socialcap1) If I need cheering up, I have family and friends who will certainly help. (socialcap2) If I need help in the insurance system (e.g., filling out forms), I have family and friends who will certainly help. (socialcap3) If I need financial assistance, I have family and friends who will certainly help. (socialcap4) If I need help with my job search, I know of civil society organizations who will certainly help. (socialcap5) | 0 "Strongly disagree" to 4 "Strongly agree" |
| Education | What is your highest level of education? 1 = Primary school, no more than eighth grade, Primary school, ninth-10th grade 2 = High school, vocational school (e.g. carpenter, mason) 3 = Short higher education (e.g. dental hygienist, datamatician), medium higher education (e.g. pedagogue, engineer), long higher education (e.g. lawyer, pharmacist) | |
| Female | What is your gender? 0 = Male 1 = Female | |
| Unemployment length | How long have you been unemployed? 1 = 0–5 weeks 2 = 6–10 weeks 3 = 11–15 weeks 4 = 16–20 weeks 5 = 21 weeks or more | |
| Children at home | Do you have children living at home? 1 = No 2 = 1 child 3 = 2 children 4 = 3 or more children | |
| Age | What is your age? | |

Table A2 Measurement Model

| Latent/Observable Variables | Estimate | SE | z-value | $p (> z)$ |
|-----------------------------|----------|-------|---------|------------|
| Social capital | | | | |
| socialcap1 | 1.000 | | | |
| socialcap2 | 1.047 | 0.070 | 14.905 | >.0001 |
| socialcap3 | 1.042 | 0.074 | 14.124 | >.0001 |
| socialcap4 | 0.896 | 0.074 | 12.166 | >.0001 |
| socialcap5 | 0.842 | 0.065 | 13.014 | >.0001 |
| Stress | | | | |
| stress1 | 1.000 | | | |
| stress2 | 0.967 | 0.036 | 27.070 | >.0001 |
| stress3 | 0.921 | 0.038 | 24.291 | >.0001 |
| Autonomy loss | | | | |
| auton1 | 1.000 | | | |
| auton2 | 0.321 | 0.043 | 7.487 | >.0001 |
| auton3 | 0.924 | 0.046 | 20.163 | >.0001 |
| auton4 | 1.044 | 0.046 | 22.508 | >.0001 |
| Administrative literacy | | | | |
| adminlit1 | 1.000 | | | |
| adminlit2 | 1.141 | 0.065 | 17.548 | >.0001 |
| adminlit3 | 1.021 | 0.063 | 16.212 | >.0001 |
| adminlit4 | 0.955 | 0.061 | 15.702 | >.0001 |