THREE ESSAYS ON NONPROFIT-GOVERNMENT INTERACTIONS
AND THE EFFECTS ON CITIZEN PARTICIPATION

Ruodan Zhang

Submitted to the faculty of the University Graduate School
in partial fulfillment of the requirements
for the degree
Doctor of Philosophy
in the Paul H. O’Neill School of Public and Environmental Affairs,
Indiana University
June 2020
Accepted by the Graduate Faculty, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Doctoral Committee

____________________________________
Jill Nicholson-Crotty, PhD

____________________________________
Matthew Baggetta, PhD

____________________________________
Sean Nicholson-Crotty, PhD

____________________________________
Brad Fulton, PhD

Date of Defense
May 18, 2020
Acknowledgements

I am deeply grateful for enjoying a luxurious balance of freedom and accountability as a very happy doctoral student at the O’Neill School (and getting the dissertation completed on schedule). I could not have done it without my dissertation advisor Jill Nicholson-Crotty. I owe special thanks to her for the generous guidance, support, and encouragement. Jill has so much confidence in me and always has my back even when some of my irrational decisions turn into a total waste of time. She is also the only person that repeatedly reminds me to think about what research questions I really feel passionate about. I would also like to thank my dissertation committee for being great role models and sharing their time, wisdom, and kindness: Matthew Baggetta, Sean Nicholson-Crotty, and Brad Fulton.

Many thanks to people who supported and guided me, in particular: Helen Liu and Danny Wai-Fung Lam, who led me into this program because I wanted to be like them; Beth Gazley, for her unconditional mentorship; Haeil Jung, who pushed me to take the qualifying exam early and always trusts me; Sergio Fernandez, Maureen Pirog, Deanna Malatesta, and Leslie Lenkowsky. I would also like to thank my mentors, whom I was so fortunate to be matched with at various points of this long journey: Lauren Dula, Gonzalo Rivero, Hagai Katz, and Angela Bies. Special thanks to Peter Frumkin, Matt Bennett, and the Best Fellows Ever.

I am also grateful to my peers who have fought this fight together and shared mountains of love and support with me. I have truly learned a lot from them. I am deeply indebted to Haohan Chen, Viviana Wu, Arthur Lin Ku, Zhengyan Li, and Jose Manuel Paz y Miño, who have endured my long conversations and even tears, tolerated the most willful side of me, shared countless meals, and above all, showed me their strong work ethic. I have found tremendous strength in them.
Finally, I want to thank my family for the endless love from afar. Thank God and Buproprion for keeping me alive. I would also like to acknowledge myself for every little attempt I make to be kind and brave in life. Honeste vivere.
Ruodan Zhang

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Nonprofit organizations serve an important function of “voluntary redistribution” in society (Witesman, 2016), and form different relationships with the government. This dissertation project examines nonprofits’ role in involving citizens in public affairs and the effects of nonprofit-government interactions on civic participation, with a specific focus on two missing connections in this triangular relationship: the collective efficacy mechanism, and the government-nonprofit funding relations on individual volunteering. The overarching research question is “How do nonprofit-government interactions affect the recruitment the persistence of citizens as volunteers?” I argue that collaborative interactions between nonprofits and the government are likely to positively affect citizens’ voluntary participation in public affairs, even in conflicts, and that on average, public funding facilitates nonprofits’ function as “schools of democracy” (Tocqueville, [1835]2000).

This project intends to contribute to the growing dialogue on the role of nonprofits in motivating and sustaining citizen participation, considering the nonprofit-government dynamic on the other hand. The three essays examine multiple ways in which citizens develop their civic life and speak truth to power. The first essay examines whether the funding relationship between nonprofits and the government has negative consequences on nonprofits’ use of volunteers. The results suggest a small crowding-in effect, and show that the effect varies by nonprofit fields. In the second essay, I investigate the use of volunteers for lobbying activities, and examine whether the presence of government grants reduces the likelihood of such grassroots participation. The
analyses show that government grants' effect varies by nonprofit sub-sectors—while human
service organizations increase the tendency to use volunteer lobbyists, environment
organizations report a significantly lower likelihood. The final essay explores mechanisms
behind citizens’ persistence in protests, and I argue that the strength of “collective efficacy”
predicts protesters’ persistence.

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Jill Nicholson-Crotty, PhD

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Matthew Baggetta, PhD

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Sean Nicholson-Crotty, PhD

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Brad Fulton, PhD
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1. Statement/Introduction

Current trends in public affairs among democratic states have been characterized by increasingly fragmented political views and values, and the alienation or disinterest among the youth population in the political process (Goodwin & Heath, 2016; Sloam, 2007). Hence, public and nonprofit management scholars have shown growing interests in participatory governance and citizen participation in public affairs, from nonprofit advocacy (Boris & Krehely, 2002; Nicholson-Crotty, 2007), to various forms of citizen participation (Fung, 2006; 2015), and factors that motivate citizen engagement (Sjoberg, Mellon, & Peixoto, 2017).

Nonprofit organizations serve an important function of “voluntary redistribution” in society (Witesman, 2016), and form different relationships with the government, including but not limited to supplementary, complementary, or adversarial relationships (Young, 2000). The nonprofit-government interactions perplex ways in which citizens participate in public affairs. The existing literature in nonprofit studies offers abundant insights on donation behaviors in the face of different nonprofit-government relations. However, we know relatively little about how these interactions affect citizens’ contribution of time. This dissertation project thus examines nonprofits’ role in involving citizens in public affairs and the effects of nonprofit-government interactions on civic participation. The overarching research question is “How do nonprofit-government interactions affect the recruitment and the persistence of citizens as volunteers?” In this project, I argue that collaborative interactions between nonprofits and the government are likely to positively affect citizens’ voluntary participation in public affairs, even in conflicts, and
that on average, public funding facilitates nonprofits’ function as “schools of democracy” (Tocqueville, [1835]2000).

This dissertation project proceeds with three types of citizen participation: general volunteering through nonprofits, lobbying through nonprofits, and protests. Each type of participation has been understood as a multi-dimensional construct involving factors at different levels of analysis in different literature. Each stream of literature emphasizes different characteristics in the broad picture of civic participation. Specifically, the volunteering literature benefits from in-depth analyses on individual and organizational characteristics, with limited mention of the government. On the other extreme, the contentious politics literature tends to frame issues as a state-society interaction, and usually does not consider the intermediary roles played by organizations such as nonprofits. Therefore, I base my discussion on a theoretical model of civic participation, developed on Corrigal-Brown’s protest persistence model (2011) and other volunteer motivation literature (e.g. Nesbit, Christensen, & Brudney, 2018). The project primarily studies two missing connections in the triangular relationship: the collective efficacy mechanism, and the government-nonprofit funding relations on individual volunteering.

The Three Essays

The first essay “Does government funding to public charities crowd out or crowd in volunteers?” (co-authored with Haohan Chen and Jill Nicholson-Crotty) examines whether the funding relationship between nonprofits and the government has negative consequences on nonprofits’ use of volunteers. Volunteering is highly correlated with social capital and community life (Dekker & Halman, 2003), and is predictive of individual civic skills, knowledge, and even voting behaviors (e.g. Settle, Bond, & Levitt, 2011; Wilson & Musick,
The literature has extensively examined the interactions between the public and the private monies, and found support for both crowding-in and crowding-out effects. However, it is unclear whether government funding also shows similar effects on volunteering. We use the 2013-2016 IRS Form 990 e-filer data from 501(c)(3) organizations and ask—given a similar mission, are nonprofits with government funding more or less likely to get volunteers? The results from random-effects models suggest a small crowding-in effect, and show that the effect varies by nonprofit fields. The effect is stronger for religious organizations, and weaker for health and human service organizations. This study contributes in a new way to the public management literature by revealing the consequences of public funding on nonprofit volunteer capacity.

The second essay “Who speaks truth to power? The choice between volunteers and paid staff for lobbying activities” examines citizens’ participation in lobbying activities through nonprofit organizations, because we know little about to what extent nonprofits rely on professional paid staff or volunteers for advocacy work. Specifically, this study investigates the use of volunteers for lobbying activities, and examines whether the presence of government grants reduces the likelihood of such grassroots participation. I use the 2010-2016 IRS Form 990 and Schedule C non-(h)-elector e-filer data and explore the effect of government grants on nonprofits in different sub-sectors. The analyses show that government grants' effect indeed varies by nonprofit sub-sectors—while human service organizations increase the tendency to use volunteer lobbyists, environment organizations report a significantly lower likelihood. I argue that this difference is based on their propensity to adopt different advocacy frames—for organizational benefits or social benefits, or because of different lobbying needs concerning the status quo. Government grants may positively affect lobbying volunteers when the organization
adopts an organizational benefits frame or engages in defensive lobbying to maintain the status quo; yet negatively affect lobbying volunteers when the organization aims to change the existing policy agenda or policy outcomes. Nonprofit organizations can be instrumental for citizens to develop skills to participate in the public sphere (e.g. Dodge and Ospina, 2016). Volunteer engagement in advocacy activities such as lobbying benefits both the organization itself (e.g. Mosely, 2008), and the general public, because it serves as an important venue for citizens to practice interacting with the legislature. The study contributes to the literature by considering government grants as a potential censoring factor that decreases nonprofits’ willingness to engage volunteers in lobbying activities, and it also identifies sub-sectors of nonprofits that are more likely to experience such decrease.

The final essay “Persistence in Adversity: Why do protesters in China respond to state control differently?” explores mechanisms behind citizens’ persistence in protests. Combining the contentious politics and the social movements/protest literature, I present a theoretical model of protest persistence, primarily based on the Corrigal-Brown model (2011) and argue that the strength of “collective efficacy” predicts protesters’ persistence. In the study, I review eight major protests against para-xylene facility constructions in China from 2007 to 2015, which ended in different levels of confrontation intensity, lengths of time, and the number of participants. I found that when states adopted repressive tools, protesters from a strong civil society were more likely to persist; and protesters from a weaker civil society were more likely to disengage. There was an exceptional case where nonprofits actively facilitated the state-society conversation and the protest did not lead to repression. The evidence reveals the short-term mediating and bridging role of the nonprofits in non-antagonistic protests. In the long-term,
the development of the nonprofit sector also contributes to the growth of local collective efficacy.

Definition of Nonprofit Organizations

A key difficulty in conceptualizing the triangular relationship among nonprofits, the government, and citizens, lies in the fuzzy boundary of nonprofit organizations. For the purpose of theorizing the triangular relationship, I adopt an institutional lens and understand “nonprofit” broadly as voluntary redistribution (Witesman, 2016). The definition would then include both the section 501(c)(3) organizations in the U.S. context (in the first and the second essay) and the grassroots social/non-governmental organizations in China (in the third essay).

Nonprofit organizations are studied as distinct entities in the social space outside the public and for-profit sectors (e.g. Salamon & Anheier, 1997). The nonprofit term covers a wide variety of organizations, and thus presents considerable difficulty to draw clear definitions. In the U.S., nonprofit organizations are legally defined under the Internal Revenue Code and exempt from the federal income tax under at least thirty-nine sections, ranging from the most commonly known 501(c)’s (for example, the 501(c)(3)/“public charities”), to 527’s (political organizations) and 408(e) (Individual Retirement Arrangements) (see Boris & Steuerle, 2006; Salamon, 2012). Beyond the legal definition, other scholarly efforts define “nonprofits” as organizations within a certain sectoral boundary. These definitions consider shared characteristics of the organizations within the sector, such as the source of income (the economic definition), the primary functions of serving public purposes (the functional definition), and key structural-operational characteristics (Salamon & Anheier, 1992a; 1992b; 1997). The structural-operational definition was developed in the Johns Hopkins Comparative Nonprofit Sector Project, and has been the
most comprehensive defining criteria for the nonprofit sector (e.g. Morris, 2000; Salamon & Anheier, 1997; Witesman, 2016). It was intended to map the nonprofit sector across different nations. This definition describes the sector as a collection of “organizations that are formally constituted; non-governmental in basic structure; self-governing; non-profit-distributing; and voluntary to some meaningful extent” (Salamon & Anheier, 1992b, p.268). The authors argue that, although the involvement of volunteers in staffing is not a defining characteristic, individual participation in these non-profit-distributing organizations results from voluntary choices, as opposed to from legal requirements or sanctions, and the fact that the profit is not distributable implies the “public-serving” nature of such participation (see Salamon, 2012, pp.16-17).

Generally, these organizations fulfill five major roles in society, including service provision, advocacy and problem identification, the expressive function, social capital, and value guardian (pp. 22-24). Nonprofit service provision complements government service provision, in areas such as health, education, housing, and social services, and is thought to addresses unmet or specialized needs. In advocacy, nonprofits bring individuals together for efforts intending to influence public policies. The expressive function refers to religious, cultural, and artistic pursuits as covered by churches, museums, opera and ballet companies, and so forth. Finally, voluntary participation in these organizations breeds and reinforces trust, reciprocity, individualism, and diversity.

Such sector-based definitions offer a big picture of this unique group of organizations that do not fall under either the government or the market. Nonetheless, the robustness of the definitions has been challenged by the existence of the informal and diverse nonprofit-type organizations in the earlier years (Morris, 2000) and the blurring sectoral boundaries (Brody, 2003; Dees & Anderson, 2003; Weisbrod, 1997). Specifically, organizations serving public
purposes are subject to the tradeoff between efficiency and democracy. The struggle is prominent among the service provision type of nonprofit and public organizations, which are likely to adopt business practices such as fee-for-service and social entrepreneurship to increase its efficiency (e.g. Eikenberry & Kluver, 2004). For-profit organizations, on the other hand, have also engaged in corporate philanthropy to enhance legitimacy and reputation, even though the organizations may not necessarily reap any financial benefit from such philanthropic activities (Wang & Qian, 2011). Even the government may turn “nonprofit-like”, through hiring former nonprofit personnel or adopting nonprofit strategies, in service provision (Brass, 2012). Other sector-blurring examples include interactions as contractors and collaborators, hybrid organizations, or specific service areas where all types of organizations are seen (Dee & Anderson, 2003). Bromly and Meyer (2017) argue that the sector blurring is an inevitable result of the meta-level isomorphism and interdependence among all types of organizations, essentially driven by the pursuit of scientific means of management and human empowerment.

Considering these challenges for a sector-based definition, in the dissertation project, I adopt an institutional approach as suggested by Witesman (2016). The institutional definition broadly understands the “nonprofit” concept as characterized by “voluntary redistribution” (p. 110S). “Voluntary” refers to the non-coercive nature of the exchange activities. The institution does not by any means hold the authority to force an exchange or to sanction any individuals. “Redistribution” refers to the end of the exchange activities, that is redistributing the tangible and/or intangible goods to beneficiaries other than the payer oneself. I emphasize “redistribution” as an end here, so as to distinguish “nonprofit redistribution” from activities that may unintentionally generate positive externalities to other beneficiaries, because the (pro-social) intention to benefit others matter.
With such institutional prescription, I consider organizational activities that exhibit the voluntary redistributive characteristic as nonprofit-like (or, “nonprofit-type activities,” as in Witesman, 2016), regardless of the organizations’ sectoral classification. The institutional definition better reflects the highly malleable boundary of “nonprofit” activities, particularly when it is subject to the public perception. Further, in understanding citizens’ engagement in nonprofit activities, using the institutional definition, I do not treat private contributions to different sectors differently, so long as the target activity itself exhibits the nonprofit characteristics (i.e. voluntary redistribution). Of course, those formally or legally recognized as “nonprofit” organizations, such as the 501(c)(3) “public charities” in the U.S. would still fall under this definition.

A second advantage of the institutional definition is that “nonprofit-type” activities are in parallel with the market or the government activities. Using the definition, I do not presume that nonprofit activities exist to fill in the gap from market and government failures (see for example, Ben-Ner & Van Hoomissen, 1991; Hansmann, 1987), and subsequently I do not consider the perceived unique nonprofit social space as a residual product of any other sectors, because “the nonprofit sector cannot be understood when the attention is limited to the failures of other institutions” (Ott, 2001, p. 185). Responding to DiMaggio and Anheier’s (1990) earlier critique on the economic definition of nonprofits, I recognize that the perceived space outside of the market and the government is indeed culturally loaded—subject to state policies, norms, and ideologies. However, the nature of the nonprofit-type activities is universally “voluntary redistribution.”

Finally, I do not assume that all nonprofits are broadly public-serving. Organizations may form different redistribution preferences with regard to their target populations. Moreover,
organizations serving various segments of society may represent conflicting interests. The
redistributive nature separates these activities from market behaviors, because the payers do
intend to benefit a larger population which may or may not include themselves. As a result, the
“nonprofit” status is not a sufficient or necessary condition for collaboration with civil society as
a whole or the general public; and it also does not predict an antagonistic role when a nonprofit
stands between the government and civil society.

Nonprofit Roles: Service and Advocacy

By such definition, nonprofits fulfill distinct redistributive roles in society. The intended
products of nonprofit redistribution can be either tangible or intangible goods, among which
service and advocacy are two major provisions (Boris & Steuerle, 2016; Salamon, 2012). (Other
functions include religion, cultural and artistic expressions, and social capital.)

Sectoral boundaries are mostly blurry in the tangible service provision area (Boris and
Steuerle, 2016, pp. 23-24): education, health, human services, etc. Not only do we see service
providers from nonprofit, market, and public sectors, the cross-sector interactions take diverse
forms, including contracting out, partnerships, third-party government, and hybrid entities.
Additionally, Bromley and Meyer (2017) argue that organizations as a formal problem-solving
structure, are driven by “rationalized science and individual empowerment” (p. 950). Both forces
lead the growing cross-sector institutional isomorphism (DiMaggio & Powell, 1983), and thus
present the effects of “business-like” (science) and social responsibility (empowerment).

On the other hand, advocacy is a unique provision of the nonprofit (see also, Salamon,
2012, p. 207). Pekkanen, Smith, and Tsujinaka (2014, p. 3) define advocacy broadly as “the
attempt to influence public policy, either directly or indirectly.” This definition encompasses many different types of advocacy activities, and they vary in the level of professionalization (insider/outsider) and directness. There are other dimensions where advocacy activities may meaningfully diverge. For example, in terms of venue, advocacy activities may take place at the municipality, state, federal, or transnational level (DeVita, Nikolova, & Roeger, 2014); advocacy activities may target at different government functions, ranging from the executive/administrative, legislative to the judicial branch, or at different policy process stages, such as the agenda-setting, policy formulation, or implementation stage (Andrews & Edwards, 2004; LeRoux & Krawczyk, 2014); in terms of policy domains, advocacy activities have been developed for AIDS/HIV, animal welfare, civil rights, economic development, disaster relief, education, immigrant rights, LGBTQ, and environmental issues, etc. (Pekkanen, Smith, & Tsujinaka, 2014; Prakash & Gugerty, 2010).

This advocacy provision redistributes civic skills, social changes, and values. It is irreplaceable by any market players because these intangible goods by nature are public—non-excludable and non-rivalrous. Nor could it be substituted by the government because the provision is premised on voluntary engagement and the redistribution process must be autonomous. In Michael Walzer’s (2008, pp.303-304) theory of justice and complex equality, democracy came from communicative skills and persuasion. “Ideally, the citizen who makes the most persuasive argument—that is, the argument that actually persuades the largest number of citizens—gets his way. But he can’t use force, or pull rank, or distribute money; he must talk about the issues at hand. And all the other citizens must talk, too, or at least have a chance to talk” (p. 304). Such kind of persuasion cannot be guaranteed in either marketplace or the government, where money and coercive authority can take over communicative and pure
rhetorical action. However, nonprofits are able to make it accessible to all individuals, regardless of “weapons and wallets, titles and degrees” (p. 304). Even when democracy is indeed a monopoly of the persuasive, nonprofits have been known as “schools of democracy” (Tocqueville, [1835]2000), where civic skills can be learned in various ways of engaging in advocacy activities. For example, Dodge and Ospina (2016) detail how framing and relational practices help citizens develop skills to participate in the public sphere. Nicole Marwell (2004) described this “machine politics CBO [community-based organizations]” process in which nonprofits “create reliable voting constituencies for local elected officials” and then the local officials can trade the constituencies for more resources that eventually benefits the CBOs. This shows another way in which, even without strategic “schooling”, nonprofits bring community participants into the public sphere.

In reality, nonprofit organizations commit to the advocacy mission to a various extent: some primarily focus on influencing public policy, and often actively change the political and regulatory environment they operate in; however, others may devote fewer resources to advocacy activities (Child & Grønbjerg, 2007; Fyall & McGuire, 2015; Prakash & Gugerty, 2010). Although the number of nonprofit organizations specializing in advocacy issues, such as human rights, environment, and civic groups, is relatively small (e.g. Jenkins, 2006, p. 310; Salamon, 2012, p. 212), many service delivery organizations also take a secondary advocacy mission in order to create a more supportive environment (Boris & Mosher-Williams, 1998; Ljubownikow & Crotty, 2016). Additionally, nonprofits are present in participatory policymaking processes as “nonelected representatives” (Mosley & Grogan, 2012). Due to regulatory restrictions on lobbying and political campaign activities, many nonprofit
organizations, although undertaking public education and representation programs, intentionally avoid the use of “advocacy” in characterizing what they do (Jenkins, 2006, pp. 308-309).

Nonprofit-Government Relations

Multiple strands of theories have offered insights into the intricate and evolving nonprofit-government relations. In line with nonprofits’ service provision role and economic theory, the demand/supply model describes a transactional and mostly complementary relation (Smith & Grønbjerg, 2006). With the “third-party government” efforts, nonprofit organizations and the government have engaged in various collaborative activities in social service delivery, such as contracting out, loan guarantees, voucher programs, and other informal service delivery partnerships (Gazley, 2008; Salamon 1987). Earlier research shows that government funding has a positive effect on the number of nonprofit organizations (Luksetich, 2006; Smith & Lipsky, 1993). However, the ongoing development of nonprofit-government relations also raises challenges to both sides, with legitimacy and control on the government side, and autonomy and predictability on the nonprofit side (Grønbjerg, 1991; Milward & Provan, 2000). Meanwhile, the civil society/social movement model focuses on the expressive or the advocacy function, and describes a more complex landscape where nonprofit organizations may bring opposing agendas, build social capital, and speak truth to power (Boris and Mosher-Williams, 1998; Smith & Grønbjerg, 2006). The two models neatly reflect the pursuit of efficiency and democracy (civic participation and pluralism) in nonprofit-government interactions.

The interactions may take on supplementary, complementary, adversarial, or even co-optative nature (Lu, 2015; Najam, 2000; Young, 2000; Young & Casey, 2016). These relations are by no means mutually exclusive, and in fact, a complex interaction may reflect multiple
natures simultaneously. Saidel (1991) analyzed the nonprofit-government interdependence on service areas including arts, health, mental retardation/developmental disabilities, and human services, and noted nonprofits’ “program-based dependence”, meaning program-specific strings with the government due to the need for resources. Outside of the program scope, organizations may also participate in the policy process. Scholars have normally attributed the adversarial relations to advocacy-related activities initiated by nonprofit organizations (Najam, 2000; Young & Casey, 2016). Since nonprofits themselves make different levels of advocacy commitments, they would naturally expect a mix of collaborative and confrontational relations with the government.

From the institutional perspective, the nonprofit-government confrontation stands out because of the essential difference in whether the exchanges are voluntary or coercive. This key institutional difference leads to “a fundamental tension in the contemporary nonprofit-government relationship: how much should organizations that receive tax benefits or direct government support be allowed to influence public policy” (Young & Casey, 2016), and conversely, how much should these organizations self-censor or cooperate on the government’s agendas? As in many nonprofit organizations, the service and the advocacy provisions are intertwined, this nonprofit-government tension between nonprofit advocacy and self-censorship is not limited to those that primarily engage in adversarial work. In addition, with its regulatory authority, the government has multiple ways to contain nonprofits’ advocacy activities or involvement in the policy-making processes, by setting legal obstacles, defining ambiguous standards (in particular, the use of a “substantial part of the activities” test), or exercising the power to revoke the tax-exempt status (Berry, 2005).
I argue in the dissertation project that this fundamental tension puts a question mark on whether citizens gain more or fewer opportunities to voluntarily participate in public affairs.

Contributions

Meaningful citizen participation is important because it makes democracy possible. “Democracy works when people exercise their right to have a voice in the political system—but democracy fails when people do not, or do not do it very thoroughly” (Han, 2014, 27). This project intends to contribute to the growing dialogue on the role of nonprofits in motivating and sustaining citizen participation, considering the nonprofit-government dynamic on the other hand. The three essays examine multiple ways in which citizens develop their civic life and speak truth to power.

The project makes two theoretical contributions. First, I identify the collective efficacy mechanism as a key factor leading to persistence in participation. The case studies show indirect evidence that nonprofits positively reinforces collective efficacy. Second, I argue that nonprofit-government funding relations are more likely to crowd in voluntary labor due to improved managerial capacity. However, the effects vary significantly by nonprofit sub-sectors, and thus more nuanced analyses are necessary to understand such dynamics.
2. Three Essays

Essay 1

A new bureaucratic effect: Does government funding to nonprofit organizations crowd out or crowd in volunteers?

Abstract

This study investigates the effect of government funding on volunteering. The literature has extensively examined the interaction between private donations and public funds, and found a broad array of results supporting both crowding-in and crowding-out effects. However, the potential money-to-labor interaction has not been studied. This study tests whether government funding increases the bureaucratization of nonprofit organizations, which may either crowd out volunteers through professionalization, or crowd in volunteers due to improved managerial capacity. Using the 2010-2016 IRS Form 990 e-filer data from 501(c)(3) organization, the results from random effects models suggest a small crowding-in effect, and show that the effect varies by nonprofit fields. The effect is stronger for religious organizations, and weaker for health and human service organizations. This study contributes in a new way to the public management literature by revealing the consequences of public funding on nonprofit volunteer capacity.
Introduction

With the rise of the New Public Management and third-party government, the nonprofit sector has seen increasing opportunities in delivering public goods and services with the support of government funding (Grønbjerg 1993; Salamon 2003). Government grants and contracts, taken together, accounted for about one-third of the revenue of public charities in 2013, while private contributions made up for about 13 percent (McKeever 2015). The cross-sector interdependence merits close investigation due to the complex relationships between nonprofits and government (Young and Casey 2016). Despite the collaborative nature of the funding relationship in particular, scholars have noted potential challenges in nonprofit governance and management (Frumkin and Kim 2002; Grønbjerg 1993), attracting private donations (de Wit and Bekkers 2017; Lu 2016), and fulfilling the advocacy function (Chavesc, Stephens, and Galaskiewicz 2004; Mosley 2012).

There is abundant literature on whether government funding crowds out or crowds in private donations. Among the 106 studies reviewed in two recent meta-analyses, scholars have found empirical evidence supporting both directions (de Wit and Bekkers 2017; Lu 2016): experimental studies are likely to suggest a crowding-out effect; meanwhile, non-experimental studies tend to suggest a small to “negligible” crowding-in effect.

Similar to private donations, volunteer labor is another valuable resource for nonprofits to achieve organizational missions and providing services. In fact, the majority of nonprofit organizations utilize volunteers (Hager and Brudney 2004; Nesbit, Christensen, and Brudney 2018). However, the answer to whether and how government funding affects volunteer labor remains unexplored. Although donation and volunteering are both prosocial behaviors, and some
scholars argue that both are complementary goods (Andreoni, Gale and Scholz 1996; Apinunmahakul et al. 2009). At the individual level, donors and volunteers differ in many meaningful ways. As volunteering naturally requires physical engagement, it thus often implies a higher barrier of entry. Moreover, the existing literature shows that volunteers tend to seek emotional meaning, whereas donors are more likely to be utility-driven (Liu and Aaker 2008). When people are highly motivated by a cause, they would prefer to donate time, rather than money (DeVoe and Pfeffer 2007; Reed, Aquino, and Levy 2007). At the organizational level, independent of government funding, organizations may refrain from recruiting a larger number of volunteers due to the cost of using available volunteer labor (Handy and Srinivasan 2005), which is less likely in the case of monetary donations. Therefore, conclusions from the rich money-to-money interaction literature, albeit mixed, may not necessarily apply to the money-to-labor case.

Does government funding crowd out or crowd in volunteers in nonprofit organizations? It is a tension worth exploring, because, first, monetary donations do not “capture the full spectrum of private contributions (Lu 2016: p. 395).” Compared with donations, volunteering has a more direct effect on good citizenship (Musick and Wilson 2008: pp. 459-462): individuals build trust and social capital, practice civic skills, participate in and develop understandings of public affairs. Second, citizens tend to trust nonprofit organizations—especially when they know little about the type of service providers, citizens tend to believe that an “unsatisfactory” provider is a public agency rather than a nonprofit (Van Slyke and Roch 2004). In practice, many nonprofit managers refrain from public-nonprofit collaborations precisely due to such concerns over the trust issue (Gazley and Brudney 2007). For nonprofits relying on volunteer labor, an answer to the (public) money-to-labor interaction help address whether the losing trust concerns are
empirically warranted. Third, the decision between government funding or volunteers may also drive nonprofit governance structure and service delivery. Nonprofits relying on volunteers tend to demonstrate stronger community connection, and are more likely to offer governance power to volunteers (Guo 2007; Lipsky and Smith 1989); on the contrary, the need for government funding contributes to a board with more “upward” connections (Guo 2007). The funding-volunteer balance may further determine who deliver the services: professionals or volunteers (Ebaugh, Chafetz, and Pipes 2005). Government funding has long been known for leading to nonprofit bureaucratization (Brooks 2000; Froelich 1999; Smith and Lipsky 2009; Suárez 2010).

Therefore, this study seeks to understand the relationship between government funding and the use of volunteers in an organization. Departing from the neo-institutionalism perspective (DiMaggio and Powell 1991; Meyer and Rowan 1977) and existing literature on donation and government-nonprofit partnerships, we develop hypotheses along the line of nonprofit bureaucratization. We argue that bureaucratization may result in two conflicting effects on volunteers. A perhaps more widely discussed direction is that government funding crowds out volunteers through increasing the use of professional staff. On the other hand, the organizational transformation, coupled with funding resources, may contribute to improved managerial capacity, which is instrumental to the use of volunteers.

To test which direction prevails, this study uses the 2010-2016 Internal Revenue Service (IRS) Form 990 e-filer data from nonprofit charities under Section 501(c)(3). The results from random effects models suggest a small crowding-in effect. The effect also varies by nonprofit sub-sectors, where religion-related organizations experience the largest increase in volunteers, whereas health and human service organizations experience a weaker increase. We also show results controlling for organizational mission and program activities using text-as-data methods.
The study contributes in a new way to the public management literature by revealing the consequences of government funding on nonprofit use of volunteers. Nonprofit bureaucratization as a result of government funding is often discussed with a negative connotation. Our results show a positive bureaucratization effect which reinforces managerial capacity and crowds in volunteers. The study also taps into sub-sector variations – practical implications.

Crowding-Out: Professionalization

Institutional theory (DiMaggio and Powell 1983; 1991; Meyer and Rowan 1977) suggests that organizations make isomorphic changes to obtain institutional legitimacy and to survive in an uncertain environment. Among the three forces of change: coercive, mimetic, and normative, government funding acts as a coercive force to professionalize nonprofit organizations (DiMaggio and Powell 1991). In order to meet the requirements and standards in operation and service delivery, as a result, nonprofits shift the dependence from volunteers towards paid staff (Frumkin and Kim 2002; Smith and Lipsky 2009). Stone, Hager, and Griffin (2001) identified a negative relationship between the use of volunteers and government funding among organizations affiliated with the United Way of Massachusetts Bay.

The logic behind such transformation is by no means efficiency-oriented. Nonprofits may find the requirements burdensome to comply with and even costly (Grønbjerg 1993). Nonetheless, nonprofits may actively professionalize in the hope of obtaining government funding. According to Suárez (2010), nonprofits exhibiting professionalization, collaborative experience, and past success have a higher chance of receiving government funding. A desirable nonprofit awardee would rely on paid staff in management and service delivery, have established
collaborative partnerships with other organizations (regardless of the sector), and ideally have received government funding in the past. Considering the underlying costs and benefits, nonprofit organizations with government funding may withdraw fundraising efforts as they become less reliant on private contributions (Andreoni and Payne 2003). In a similar vein, reducing the use of volunteers keeps nonprofits away from relevant recruitment, management, and retention costs. At the board level, board functions may shift away from fundraising towards monitoring and advocacy, and its composition may favor members with connections in public agencies, rather than volunteer representatives (Guo 2007; O’Regan and Oster 2002).

Volunteer involvement is a combined result of the organization’s decision to use and the volunteer’s decision to participate (Nesbit, Christensen, and Brudney 2018). Hence, we need to look at the supply side of the resources as well. A popular explanation for the crowding-out effect in the donation literature argues that donors may view government funding as a substitute for donations, and direct donations to other less-funded organizations. However, this is unlikely for volunteers. Warr (1982) and Roberts (1984) found a dollar-to-dollar substitution effect. This explanation has been challenged primarily because in making donation decisions, donors may not have sufficient information on nonprofits’ funding situations, especially concerning government funding (Horne, Johnson, and Van Slyke 2005). Donors to religious organizations may also be more tolerant of public money (Nikolova 2015). By nature of the contribution, volunteers are less likely to perceive government funding as a substitute (or a complement) to their time. Experimental evidence shows that volunteering engages a different mindset from making monetary donations (Liu and Aaker 2008). In essence, the volunteering decisions involve more emotional sense-making, whereas individuals making donation decisions appear more as utility-driven “Econs”. Correspondingly, volunteering produces a larger “warm glow” than a
donation (Brown and Meer 2018). Therefore, volunteers are less likely to be aware of nonprofits’
funding sources, or be dissuaded by government funding at any level due to the substitution
concern.

But with the neo-institutionalism lens, we can see how nonprofits with government funding
are less appealing to volunteers. While nonprofits conform to a government’s ideal service
provider, volunteers (and donors) can indeed perceive a different picture and sense less
legitimacy in these organizations to represent their needs. Corporate donors certainly prefer an
independent organization as opposed to some demi-governmental agency (Brooks 2000). A
recent study on U.S.-based foreign aid nonprofits identified a curvilinear relationship, where the
crowding-out effect kicks in when government funding takes up at least a third of the total
revenues (Nikolova 2015).

Therefore, in the crowding-out direction, we expect:

H1: Nonprofits with government funding will engage a fewer number of volunteers.

Crowding-In: Managerial Capacity

While the decision to volunteer is mostly motivated by individual values and needs (e.g. see
the “Volunteer Functions Inventory” in Clary and Snyder 1999), the decision to volunteer for
certain organizations results from the interaction between volunteer skills/assets and
organizational factors (e.g. Meijs and Brudney 2007). According to the Volunteer Involvement
Framework (Nesbit, Christensen, and Brudney 2018), relevant observable organizational
characteristics include “resources and capacity, source of funds, structures, outputs or services,
mission, and location (p. 505).” Paid staff and government funding do not necessarily decrease volunteer involvement, as the added financial and human resources enhance the managerial capacity of the organization, which can be directed towards volunteers. Government funding can, therefore, expand the “scope of volunteer involvement” (Nesbit, Christensen, and Brudney 2018).

Nonprofit bureaucratization and coercive isomorphism can improve managerial capacity and crowd in volunteers in different ways. First, government funding makes necessary financial resources available for volunteer management and allow nonprofits to grow in size (Frumkin and Kim 2002). Some funding may require volunteer involvement as a condition. Second, government funding introduces formal rules, regulation, practices, and even information technology (IT) that streamline nonprofit operation or achieve more efficiency (Barman and MacIndoe 2012; Hackler and Saxton 2007). In particular, the use of IT and government funding are mutually reinforcing. Government funders often favor organizations with high IT capacity, especially as social media presence becoming increasingly relevant for public perception and organizational reputation (Hackler and Saxton 2007). Finally, formal rules of volunteer roles and responsibilities help expand volunteer involvement and improve volunteer satisfaction (Russel and Scott 1997). Although certain service areas, such as health and education, are highly professionalized, nonprofits still use volunteers as complements to paid staff in performing other specialized tasks (Brudney 1990; Brudney and Gazley 2002), to reduce costs, or to “provide extensive interaction or follow-up to clients” (Nesbit, Christensen, and Brudney 2018: p. 505).

For donors, government funding also signals the trustworthiness and quality of the organization (Payne 2001; Vesterlund 2003; List and Lucking-Reiley 2002). The effect is particularly prominent when the level of government funding is low (Borgonovi 2006; Nikolova
Heutel (2014) argues that government grants can function as a signal for charity quality when individuals are less informed. To show that the signal relates to reputation and quality, Heutel (2014) interacted organizational age as a proxy for reputation and government grants and found that the crowding in effect is stronger among the younger organizations. However, as previously discussed, volunteers are likely to be less sensitive to such financial information than donors. We may still expect to observe differences in effect magnitude across organizational age and size, because younger and smaller organizations—ones more susceptible to death—can reap more benefit from bureaucratization and improving managerial capacity (Freeman, Carroll, and Hannan 1983; Hager, Galaskiewicz, and Larson 2004; Singh, Tucker, and House 1986).

Additionally, nonprofits providing services primarily within a disadvantaged community are more likely to rely on government grants and contracts (Jang and Feiock 2007). Government funding reinforces or expands the organization’s presence in these areas, which demonstrates or signals to volunteers that it has the legitimacy to serve social needs (also see Brooks 1999; Lu 2016). Studies have also asked—do nonprofits compromise their political activities due to government funding? Chavesc, Stephens, and Galaskiewicz (2004) found a positive or null relationship between government funding on human service programs and their political activity, suggesting that public funds on human service may even have a spillover effect on nonprofit advocacy. Mosley’s (2012) findings echo those results—nonprofits providing homeless service in Chicago reported a higher level of advocacy activities when they received government funding, possibly motivated by the need to secure future funding. As nonprofits increase advocacy efforts, they may require more volunteer labor (Mosley 2011), and become more appealing to potential donors and volunteers (Nicholson-Crotty 2011).

Therefore, in the crowding-in direction, we expect:
H2: Nonprofits with government funding will engage more volunteers.

Data and Methods

We use the 2010-2016 electronically filed IRS Form 990 data on 501(c)(3) nonprofit organizations. Because religious organizations or those with less than $10 million total assets are not required to file the form or file electronically, observations included in the data set are biased towards the larger nonprofits. The data were extracted from the AWS database by 990 Consulting, LLC. For duplicate submissions within each organization in the data set, we keep observations from the last submission within each tax period. The cleaned data set contains 955,603 observations from 222,252 unique 501(c)(3) organizations. Blank values in the number of volunteers and government grants (and contributions) were assumed to be 0. The summary statistics for both variables are then more comparable to existing research (e.g. Suárez 2010). We drop observations with missing values in formation year and total assets (beginning of the year), and those that reported negative values in financial variables including total assets, total revenue, government funding, private donations, program service revenue, and fundraising expense. The unbalanced panel contains 891,356 entries from 204,732 organizations. We also generate a balanced panel with organizations that are available in all seven years, which leaves us 303,345 observations from 43,335 organizations. Most of the results reported in the next section are from the unbalanced panel. We show one model results using the balanced panel as a baseline case for comparison. Note that the balanced panel is more biased towards larger nonprofits.

Our current analyses focus on the interaction between government funding and the number of volunteers. Our dependent variable is the number of volunteers. The treatment variables measure...
whether the organization has any government grants or contributions (as reported in Form 990; and it must be a positive amount) and the amount of government funding received. In general, over 30 percent of the organizations reported government funding.

Prior empirical studies on government funding and donation commonly control for other revenue sources, organizational age and size, fundraising expenditure, and organization type. Specifically, religious organizations (Nikolova 2015), health, arts, and human/social services organizations (Andreoni and Payne 2003; Frumkin and Kim 2002), were found to be affected differently. Our study thus controls for private donations, program service revenue, organizational age (calculated by the difference between the formation year and the tax period), and fundraising expense. Outreach to volunteers is the most important factor in recruiting individuals (Piatak 2016). Since we do not have measures on such outreach, fundraising expense, in this case, serves as a proxy for the extent to which the nonprofit has been exposed to the public. We control for the number of paid staff, which is indicative of both organizational size and potential capacity to manage volunteers. Most of the existing studies used the National Taxonomy of Exempt Entities (NTEE) codes developed by the National Center for Charitable Statistics to categorize nonprofits. The NTEE codes divide nonprofits into 10 broad categories. Our models include dummy variables for six most relevant groups: arts (Arts, Culture, and Humanities), human services, religious (Religion-Related), education, environment (Environment and Animals), and health. Table 1.1 presents summary statistics on key variables in the full sample and the balanced panel respectively.

We use natural log transformed data for highly skewed variables including the number of volunteers, government funding, private donation, program service revenue, fundraising expense, and the number of paid staff. Because reverse causality may exist between government funding
and the number of volunteers, we use lagged government funding variables to address the endogeneity problem and reduce bias in the estimates (Nikolova 2015; Okten & Weisbrod 2000). Private donations and program service revenue, correspondingly, are also measured in the previous fiscal year (lagged). We use the current year fundraising expense as the previous year values are highly correlated with private donations. As with Nikolova (2015), we believe that the concerns over possible omitted variables can be mitigated due to the longitudinal nature of our data set.

Although the Hausman test result shows evidence for contextual effects, we present results using random effects generalized least squares regressions. The Breusch-Pagan test shows supporting evidence for the presence of random effects ($p < 0.000$). Additionally, our models include time-invariant yet important covariates such as organizational age and NTEE categories, which would be impossible to estimate using the fixed-effects model (Bell, Fairbrother, and Jones 2019; Clark and Linzer 2015). To control for the aggregate trends, we include year effects in the models.

Results

Table 1.2 presents the random effects regression results with the government funding dummy (whether or not received government funding) as the treatment variable. All model specifications show evidence for crowding in (H2). It suggests that the recipient of government funding in the past year does have a statistically significant ($p < 0.0001$) positive effect on the number of volunteers in the current period. Even with the balance panel on a sub-sample of larger nonprofits, the results still hold, and the estimates on most control variables are consistent.
Nonprofits with previous period government funding generally experience a 28 to 39 percent increase in the number of volunteers. We also estimated the model using fixed effects, the crowding-in effect remains, only with a smaller effect size.

Because program services and organizational missions affect the supply and demand of volunteers (Nesbit, Christensen, and Brudney 2018), by controlling for the NTEE categories, we assume that the same type of organizations experiences similar dependence on volunteer use. However, as Fyall, Moore, and Gugerty (2018) have shown, text-based methods of categorization are much more accurate than the NTEE codes. We, therefore, control for organizational mission and program activities using the text information reported in Part I line 1 and Part III of Form 990. We fitted the data into Structural Topic Model of one hundred topics generated from the pooled text information (Roberts et al. 2014). Column 4 in Table 2 shows results with text variables.

Although all models report a low overall R², the values are consistent with previous empirical studies on government funding and donations (e.g. Nicholson-Crotty 2011; Nikolova 2015). The model with text control slightly improves the explanatory power.

Prior studies have identified unique effect patterns between religious and secular organizations (Nikolova 2015), between arts and social service organizations (Andreoni and Payne 2003), and between health and human service organizations (Frumkin and Kim 2002). Table 1.3 presents regression results by major NTEE categories. To some extent, these results are consistent with findings in the aforementioned studies. For instance, religion-related organizations show the highest crowding-in effect. Compared with other types of nonprofits, these organizations tend to be smaller in terms of revenue, expenses, and the number of paid staff. Hence it suggests that government funding has a substantial effect on improving the
managerial capacity to use and attract more volunteers. On the contrary, health and human service organizations, known to be larger on average, show weaker effects. For these two types of organizations, program service revenue appears to be unrelated to volunteer use.

We also estimate the model with the log transformed government funding amount as the treatment variable. The dollar-to-labor effect reaches the same crowding-in conclusion, significant at 0.0001 level—one percent increase in government funding amount in the past year leads to 0.011 percent change in the number of volunteers (see Appendix Table 1.A1). Although the effect estimate value is small, considering the general amount and the large standard deviation in government grants and contributions, the absolute value of the increased number of volunteers could be considerably large, depending on the size of the existing volunteer pool. However, the estimate is insignificant and effectively zero when we estimate the same model among nonprofits that were government funding recipients, suggesting that the effect is mostly driven by the difference between funding recipients and non-recipients. To examine the liability of newness, we interact the treatment variables with organizational age (see Column 2 and 4 in Appendix Table 1.A1). The interaction term estimates do carry a negative sign, as expected, but the effect is insignificant and negligible.

Supporting the managerial capacity explanation, results in Table 1.4 demonstrate that along with the other revenue sources, the lagged government funding amount is positively correlated with the number of paid staff in the present period.

We estimate the model by organizational age and total assets. We use the 25th percentile, 50th percentile, and 75th percentile values as the cutoff points. Table 1.5 shows that organizations up to the 50th percentile in age (less than 22 years) are likely to benefit more from the crowding-in effect. However, the differences by age are not substantial. On the other hand, in terms of
(beginning of the year) total assets, the effect peaks for organizations in the 50th to 75th percentile, and is the smallest for organizations with less than $200,000 total assets.

Discussion and Conclusion

The “mutual dependence of government and nonprofit organizations” has been characterized by the expansion of nonprofits’ role in public service delivery and the growing public funds in support of the nonprofits (Smith and Lipsky 2009: pp. 4-7). The study extends the government-nonprofit relations literature by exploring the effect of government funding on nonprofits’ use of volunteers, i.e. the donation of time. This funding-volunteer interaction is equally important to address because firstly, both volunteering and private donations constitute the supply side of prosocial resources; and secondly, on the demand side, organizations’ motivation to recruit volunteers is as sensitive as the motivation to raise donations, to the presence of other funding sources. We examine two possible explanations towards different effect directions: government funding may pose a professionalization pressure on nonprofits; alternatively, government funding increases the managerial capacity—through financial and human resources, or formalized rules and regulations—, which allows nonprofits to recruit and manage more volunteers.

Although the findings support the crowding-in argument, we are by no means arguing that professionalization does not exist in this money-to-labor interaction. The evidence merely implies that the crowding-in effect dominates the crowding-out direction. Meanwhile, many other factors explain the use of volunteers beyond the organizational level determine the extent of volunteer involvement, for instance, individual motivations, identities, past experience,
volunteer-organization matchedness, legal and policy environment, and community infrastructure (Nesbit, Christensen, and Brudney 2018; Musick and Wilson 2008). The impact of government funding only explains a small proportion of what drives volunteers in or away.

In practice, many nonprofit managers may feel hesitant about public-nonprofit collaboration for concerns such as loss of independence, donations, and volunteers (Gazley and Brudney 2007). Studies have shown that the relationship between government funding and private donations is rather complex (de Wit and Bekkers 2017; Lu 2016); but at the same time, government funding does no hinder nonprofits’ political activities (Chavesc, Stephens, and Galaskiewicz 2004; Mosley 2012; Nicholson-Crotty 2011). For nonprofit managers, this study shows that “loss of volunteers” is not a real concern to refrain from public-nonprofit collaboration. Although in the donation literature, crowding-out effects tend to dominate, especially given experimental evidence (de Wit and Bekkers 2017), or among social services and health organizations (Brooks 2000; Guo 2007). We find it possible that unlike donors, volunteers may not view government funding as a substitute for their time and labor. Moreover, because volunteers are driven more by emotional sensemaking (Liu and Aaker 2008), as long as the funding does not alter the value and meaning of their work, volunteers seem less likely to turnover due to changes in the funding sources. In contrast, in searching for more volunteers or improved volunteer management capacity, nonprofit managers may consider collaborations with public agencies.

We also find variations in the crowding-in effects across nonprofit sub-sectors, where religious organizations receive the largest positive effect, and health and human service organizations find a weaker effect. The results should be considered in relation to nonprofit subsectors’ dependence on volunteer labor. Previous studies have identified that nonprofits
aiming at providing public and social services, such as homeless shelter, hospice care, and firefighters, engage more volunteers (Henderson and Sowa 2018; Smith and Lipsky 2009; Suárez 2010); arts organizations, museums, and event organizing/sponsoring organizations also considerably rely on volunteers (e.g. Allen and Bartle 2014; Bussell and Forbes 2007). Nonprofit service areas that require more professionalized knowledge and skills, such as substance abuse, education and vocational training, on the other hand, are much less likely to use volunteers. Thus, the idea of enhancing managerial capacity for the purpose of volunteer management is more acute for human services and arts organizations, less so for health organizations. But given the weak crowding-in effect on volunteers for human service organizations, government funding perhaps should not be seen as a primary means to achieve public participation. For small religion-related groups, however, government funding seems more enabling, in terms of involving volunteers.

The findings also give rise to the challenge and a “fundamental tension” embedded in the institutional differences between public and nonprofit organizations, that is, “how much should organizations that receive tax benefits or direct government support be allowed to influence public policy” (Young & Casey 20216), and conversely, how much should nonprofits self-censor and cooperate on government’s agendas? In many nonprofit organizations, service and advocacy provisions are intertwined. Government-nonprofit funding relations often take place in the service arena in a collaborative way, yet the advocacy activities largely imply possible adversarial interactions. If government funding essentially induces more citizen participation in the nonprofit sector, then the challenge lies in how each side position individual citizens in the mix of collaborative and confrontational relations.
Methodologically, we use text-as-data methods to analyze nonprofit mission and activities information reported in Form 990s. We show that the topic modeling technique adds value to causal estimation by extracting more information from text.

The funding-volunteer relationship is hard to disentangle for reasons including data availability and the interactive nature of the process. Using the Form 990 e-filer data, our study sample is biased towards the larger organizations. Even so, we still face a considerable proportion of nonprofits that do not use volunteers or do not receive government funding. Adding on to the complexity, nonprofits adopting different accounting practices, or reporting in different tax periods, introduce new comparability issues (Andreoni and Payne 2003). We believe that our results still carry practical relevance even with the current sample. Because larger organizations are more likely to obtain government grants and are more visible, if government funding is likely to crowd out volunteers, then this sample is certainly more vulnerable to the potential negative effect. Nonetheless, our findings support the other effect direction.

We do not find consistent evidence of how smaller or younger organizations may benefit more. Most of the results, together with findings from the donation literature using archival data, seem to suggest a “winner-takes-it-all” effect, where larger organizations are more likely to obtain government funding, receive more donations, and manage more volunteers. Further research is needed to zoom in on community-level nonprofit organizations, and explore whether a different picture would emerge, and whether relevant decisions (to obtain government funding and to engage volunteers) and concerns somehow diverge from the current sample. Additionally, although we understand that organizational funding sources are a component in volunteer decision-making, without the individual-level measures, it is unclear how individuals process
changes in the organizational characteristics due to the presence of government funding. Therefore, further research may explore whether volunteers are able to effectively interpret information about organizational capacity or legitimacy; or whether and how volunteers in service activities position them differently than those in advocacy activities knowing the nonprofit has received funding from a public agency.
### Table 1.1 – Summary Statistics (2010-2016)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N= 891,356</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n= 204,732</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of volunteers</td>
<td>872</td>
<td>142,020</td>
<td>0</td>
<td>80,000,000</td>
<td>832</td>
<td>39,300</td>
<td>0</td>
<td>15,000,000</td>
</tr>
<tr>
<td>Government funding (x$1,000)</td>
<td>935.030</td>
<td>16,820</td>
<td>0</td>
<td>4,550,000</td>
<td>1,834</td>
<td>27,210</td>
<td>0</td>
<td>4,550,000</td>
</tr>
<tr>
<td>Whether received government funding</td>
<td>0.315</td>
<td>0.464</td>
<td>0</td>
<td>1</td>
<td>0.353</td>
<td>0.478</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Program service revenue (x$1,000)</td>
<td>9,199</td>
<td>161,200</td>
<td>0</td>
<td>50,930,000</td>
<td>22,120</td>
<td>272,100</td>
<td>0</td>
<td>50,930,000</td>
</tr>
<tr>
<td>Private donations (x$1,000)</td>
<td>1,262</td>
<td>15,690</td>
<td>0</td>
<td>3,285,000</td>
<td>2,336</td>
<td>23,270</td>
<td>0</td>
<td>3,285,000</td>
</tr>
<tr>
<td>Total revenue (x$1,000)</td>
<td>12,310</td>
<td>172,200</td>
<td>0</td>
<td>51,070,000</td>
<td>28,320</td>
<td>289,900</td>
<td>0</td>
<td>51,070,000</td>
</tr>
<tr>
<td>Total assets BOY (x$1,000)</td>
<td>21,460</td>
<td>319,400</td>
<td>0</td>
<td>73,520,000</td>
<td>50,000</td>
<td>536,800</td>
<td>0</td>
<td>73,520,000</td>
</tr>
<tr>
<td>Fundraising expense (x$1,000)</td>
<td>122,516</td>
<td>1,417</td>
<td>0</td>
<td>201,300</td>
<td>246,734</td>
<td>2,300</td>
<td>0</td>
<td>201,300</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>126</td>
<td>2,311</td>
<td>0</td>
<td>908,433</td>
<td>260</td>
<td>2,004</td>
<td>0</td>
<td>787,050</td>
</tr>
<tr>
<td>Organizational age</td>
<td>29.312</td>
<td>27.024</td>
<td>-4</td>
<td>920</td>
<td>35.630</td>
<td>31.065</td>
<td>-1</td>
<td>818</td>
</tr>
<tr>
<td>NTEE: Arts</td>
<td>0.075</td>
<td>0.263</td>
<td>0</td>
<td>1</td>
<td>0.073</td>
<td>0.260</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Human services</td>
<td>0.368</td>
<td>0.482</td>
<td>0</td>
<td>1</td>
<td>0.369</td>
<td>0.482</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Religious</td>
<td>0.045</td>
<td>0.206</td>
<td>0</td>
<td>1</td>
<td>0.042</td>
<td>0.202</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Education</td>
<td>0.132</td>
<td>0.339</td>
<td>0</td>
<td>1</td>
<td>0.132</td>
<td>0.338</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Environment</td>
<td>0.040</td>
<td>0.197</td>
<td>0</td>
<td>1</td>
<td>0.041</td>
<td>0.198</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Health</td>
<td>0.213</td>
<td>0.410</td>
<td>0</td>
<td>1</td>
<td>0.218</td>
<td>0.413</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: International</td>
<td>0.018</td>
<td>0.134</td>
<td>0</td>
<td>1</td>
<td>0.018</td>
<td>0.134</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Public benefits</td>
<td>0.105</td>
<td>0.307</td>
<td>0</td>
<td>1</td>
<td>0.103</td>
<td>0.304</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Mutual benefits</td>
<td>0.003</td>
<td>0.054</td>
<td>0</td>
<td>1</td>
<td>0.003</td>
<td>0.052</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Balanced Panel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N= 303,345</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n= 43,335</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 1.2. Random Effects Regression Results

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Balanced Panel</th>
<th>(2) Base Model</th>
<th>(3) Full sample with control</th>
<th>(4) Full sample with text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government</td>
<td>0.266***</td>
<td>0.258***</td>
<td>0.254***</td>
<td>0.333***</td>
</tr>
<tr>
<td>funding (lagged)</td>
<td>(0.041)</td>
<td>(0.025)</td>
<td>(0.025)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.068***</td>
<td>0.078***</td>
<td>0.078***</td>
<td>0.060***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>0.013***</td>
<td>0.014***</td>
<td>0.013***</td>
<td>0.021***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.074***</td>
<td>0.085***</td>
<td>0.085***</td>
<td>0.070***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>0.152***</td>
<td>0.138***</td>
<td>0.138***</td>
<td>0.128***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>0.031***</td>
<td>0.031***</td>
<td>0.027***</td>
<td>0.026***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>NTEE: Arts</td>
<td>0.608***</td>
<td>0.556***</td>
<td>-0.589***</td>
<td>0.076</td>
</tr>
<tr>
<td></td>
<td>(0.131)</td>
<td>(0.064)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Human services</td>
<td>0.068</td>
<td>0.162**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.093)</td>
<td>(0.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Religious</td>
<td>-0.660***</td>
<td>-0.589***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.152)</td>
<td>(0.076)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Education</td>
<td>-0.454***</td>
<td>-0.130*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.110)</td>
<td>(0.055)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Environment</td>
<td>0.884***</td>
<td>0.950***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.157)</td>
<td>(0.081)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Health</td>
<td>0.470***</td>
<td>0.188***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.054)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-2.652***</td>
<td>-3.271***</td>
<td>-3.064***</td>
<td>1.557***</td>
</tr>
<tr>
<td></td>
<td>(0.091)</td>
<td>(0.032)</td>
<td>(0.048)</td>
<td>(0.364)</td>
</tr>
<tr>
<td>Observations</td>
<td>260,010</td>
<td>658,042</td>
<td>658,042</td>
<td>648,467</td>
</tr>
<tr>
<td>Number of EIN</td>
<td>43,335</td>
<td>173,898</td>
<td>173,898</td>
<td>167,303</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.010</td>
<td>0.005</td>
<td>0.007</td>
<td>0.008</td>
</tr>
<tr>
<td>Within</td>
<td>0.229</td>
<td>0.172</td>
<td>0.177</td>
<td>0.213</td>
</tr>
<tr>
<td>Between</td>
<td>0.185</td>
<td>0.159</td>
<td>0.163</td>
<td>0.197</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced panel?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Text control</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is the natural log of the reported number of volunteers. Robust standard errors in parentheses. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.0001.
Table 1.3. Random Effects Regression Results: by NTEE code

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Arts</th>
<th>(2) Human Services</th>
<th>(3) Religious</th>
<th>(4) Education</th>
<th>(5) Environment</th>
<th>(6) Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government funding (lagged)</td>
<td>0.325***</td>
<td>0.163***</td>
<td>1.128***</td>
<td>0.330***</td>
<td>0.351**</td>
<td>0.159**</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.041)</td>
<td>(0.187)</td>
<td>(0.073)</td>
<td>(0.109)</td>
<td>(0.055)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.069***</td>
<td>0.088***</td>
<td>0.065***</td>
<td>0.065***</td>
<td>0.085***</td>
<td>0.070***</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.002)</td>
<td>(0.007)</td>
<td>(0.004)</td>
<td>(0.009)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>0.054***</td>
<td>0.005*</td>
<td>0.037***</td>
<td>0.011***</td>
<td>0.039***</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.002)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.006)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.064***</td>
<td>0.099***</td>
<td>0.066***</td>
<td>0.071***</td>
<td>0.085***</td>
<td>0.083***</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.006)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>0.170***</td>
<td>0.140***</td>
<td>0.145***</td>
<td>0.115***</td>
<td>0.184***</td>
<td>0.135***</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.004)</td>
<td>(0.010)</td>
<td>(0.006)</td>
<td>(0.012)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>0.021***</td>
<td>0.031***</td>
<td>0.014***</td>
<td>0.015***</td>
<td>0.030***</td>
<td>0.042***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.004)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.529***</td>
<td>-2.894***</td>
<td>-3.683***</td>
<td>-2.782***</td>
<td>-2.192***</td>
<td>-3.120***</td>
</tr>
<tr>
<td></td>
<td>(0.133)</td>
<td>(0.055)</td>
<td>(0.141)</td>
<td>(0.078)</td>
<td>(0.153)</td>
<td>(0.086)</td>
</tr>
</tbody>
</table>

Observations 56,121  240,163  31,384  99,117  27,709  114,367
Number of ein 15,667  63,096  9,422  27,069  7,702  28,239

R²
<table>
<thead>
<tr>
<th>Within</th>
<th>0.007</th>
<th>0.007</th>
<th>0.005</th>
<th>0.008</th>
<th>0.011</th>
<th>0.012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>0.157</td>
<td>0.212</td>
<td>0.115</td>
<td>0.123</td>
<td>0.196</td>
<td>0.170</td>
</tr>
<tr>
<td>Overall</td>
<td>0.142</td>
<td>0.200</td>
<td>0.104</td>
<td>0.117</td>
<td>0.173</td>
<td>0.151</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is the natural log of the reported number of volunteers. Robust standard errors in parentheses. All regressions include year fixed effects.

*p<0.05; **p<0.01; ***p<0.0001.
Table 1.4. Random Effects Regression Results for Paid Staff

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Capacity</th>
<th>(2) Capacity+Control</th>
<th>(3) Human Services</th>
<th>(4) Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government funding $ (lagged)</td>
<td>0.046***</td>
<td>0.041***</td>
<td>0.031***</td>
<td>0.044***</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.052***</td>
<td>0.044***</td>
<td>0.047***</td>
<td>0.035***</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>0.099***</td>
<td>0.091***</td>
<td>0.062***</td>
<td>0.151***</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.059***</td>
<td>0.060***</td>
<td>0.037***</td>
<td>0.046***</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational age</td>
<td>0.045***</td>
<td>0.050***</td>
<td>0.046***</td>
<td>0.046***</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Arts</td>
<td>0.332***</td>
<td>0.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Human services</td>
<td>0.711***</td>
<td>(0.041)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Religious</td>
<td>0.502***</td>
<td>(0.068)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Education</td>
<td>0.564***</td>
<td>(0.048)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Environment</td>
<td>0.733***</td>
<td>(0.072)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Health</td>
<td>1.620***</td>
<td>(0.049)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-2.944***</td>
<td>-4.733***</td>
<td>-4.031***</td>
<td>-3.264***</td>
</tr>
<tr>
<td>(0.018)</td>
<td>(0.042)</td>
<td>(0.056)</td>
<td>(0.085)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>658,042</td>
<td>658,042</td>
<td>240,163</td>
<td>114,367</td>
</tr>
<tr>
<td>Number of ein</td>
<td>173,898</td>
<td>173,898</td>
<td>63,096</td>
<td>28,239</td>
</tr>
<tr>
<td>R²</td>
<td>0.003</td>
<td>0.005</td>
<td>0.003</td>
<td>0.011</td>
</tr>
<tr>
<td>Within</td>
<td>0.288</td>
<td>0.282</td>
<td>0.224</td>
<td>0.334</td>
</tr>
<tr>
<td>Between</td>
<td>0.278</td>
<td>0.277</td>
<td>0.223</td>
<td>0.328</td>
</tr>
<tr>
<td>Overall</td>
<td>0.278</td>
<td>0.277</td>
<td>0.223</td>
<td>0.328</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is the natural log of the reported number of paid staff. Robust standard errors in parentheses. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.001.
Table 1.5. Random Effects Regression Results by Organizational Age and Total Assets

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age&lt;12</td>
<td>12≤Age&lt;22</td>
<td>22≤Age&lt;38</td>
<td>Age≥38</td>
<td>Assets&lt;200,000</td>
<td>Assets&lt;900,000</td>
<td>Assets&lt;4,000,000</td>
<td>Assets≥4,000,000</td>
</tr>
<tr>
<td>Whether received government funding (lagged)</td>
<td>0.213***</td>
<td>0.301***</td>
<td>0.203***</td>
<td>0.203***</td>
<td>0.130*</td>
<td>0.213***</td>
<td>0.390***</td>
<td>0.184***</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.051)</td>
<td>(0.048)</td>
<td>(0.046)</td>
<td>(0.060)</td>
<td>(0.048)</td>
<td>(0.047)</td>
<td>(0.044)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.072***</td>
<td>0.082***</td>
<td>0.091***</td>
<td>0.091***</td>
<td>0.069***</td>
<td>0.096***</td>
<td>0.091***</td>
<td>0.075***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>0.014***</td>
<td>0.011***</td>
<td>0.002</td>
<td>0.022***</td>
<td>0.015***</td>
<td>0.002</td>
<td>-0.000</td>
<td>0.015***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.082***</td>
<td>0.095***</td>
<td>0.102***</td>
<td>0.082***</td>
<td>0.071***</td>
<td>0.088***</td>
<td>0.102***</td>
<td>0.097***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>0.124***</td>
<td>0.132***</td>
<td>0.137***</td>
<td>0.149***</td>
<td>0.090***</td>
<td>0.116***</td>
<td>0.142***</td>
<td>0.166***</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>0.036***</td>
<td>0.025**</td>
<td>0.018**</td>
<td>0.019***</td>
<td>0.021***</td>
<td>0.015***</td>
<td>0.020***</td>
<td>0.023***</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.008)</td>
<td>(0.005)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.164)</td>
<td>(0.179)</td>
<td>(0.128)</td>
<td>(0.094)</td>
<td>(0.084)</td>
<td>(0.088)</td>
<td>(0.098)</td>
</tr>
<tr>
<td>Observations</td>
<td>142,746</td>
<td>156,114</td>
<td>178,530</td>
<td>180,652</td>
<td>134,987</td>
<td>173,078</td>
<td>171,753</td>
<td>178,224</td>
</tr>
<tr>
<td>Number of ein</td>
<td>52,204</td>
<td>51,922</td>
<td>53,150</td>
<td>46,425</td>
<td>50,875</td>
<td>60,762</td>
<td>52,530</td>
<td>42,488</td>
</tr>
<tr>
<td>R²</td>
<td>0.006</td>
<td>0.006</td>
<td>0.006</td>
<td>0.007</td>
<td>0.003</td>
<td>0.004</td>
<td>0.007</td>
<td>0.012</td>
</tr>
<tr>
<td>Within</td>
<td>0.118</td>
<td>0.154</td>
<td>0.182</td>
<td>0.175</td>
<td>0.081</td>
<td>0.129</td>
<td>0.194</td>
<td>0.253</td>
</tr>
<tr>
<td>Between</td>
<td>0.106</td>
<td>0.140</td>
<td>0.167</td>
<td>0.155</td>
<td>0.067</td>
<td>0.117</td>
<td>0.172</td>
<td>0.219</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is the natural log of the reported number of volunteers. Robust standard errors in parentheses. All regressions include year fixed effects and the NTEE categories.

*p<0.05; **p<0.01; ***p<0.0001.
Appendix

Figure 1.A1. Prevalence of All 100 Topics

100 Topics

Expected Topic Proportions
<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) WTR</th>
<th>(2) WTR*Age</th>
<th>(3) Amt</th>
<th>(4) Amt*Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government funding (lagged)</td>
<td>0.254***</td>
<td>0.275***</td>
<td>0.011***</td>
<td>0.012***</td>
</tr>
<tr>
<td>Government funding $ (lagged)</td>
<td>(0.025)</td>
<td>(0.040)</td>
<td>(0.001)</td>
<td>(0.002)</td>
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<tr>
<td>Organizational age</td>
<td>0.027***</td>
<td>0.028***</td>
<td>0.027***</td>
<td>0.027***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Whether received government funding (lagged) x Age</td>
<td></td>
<td></td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>Government funding $ (lagged) x Age</td>
<td></td>
<td></td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.078***</td>
<td>0.078***</td>
<td>0.078***</td>
<td>0.078***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>0.013***</td>
<td>0.013***</td>
<td>0.013***</td>
<td>0.013***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.085***</td>
<td>0.085***</td>
<td>0.085***</td>
<td>0.085***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>0.138***</td>
<td>0.138***</td>
<td>0.138***</td>
<td>0.138***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.064***</td>
<td>-3.072***</td>
<td>-2.938***</td>
<td>-2.936***</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.049)</td>
<td>(0.048)</td>
<td>(0.048)</td>
</tr>
<tr>
<td>Observations</td>
<td>658,042</td>
<td>658,042</td>
<td>658,042</td>
<td>658,042</td>
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<td>$R^2$</td>
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<td></td>
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<tr>
<td>Within</td>
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<td>0.007</td>
<td>0.007</td>
<td>0.007</td>
</tr>
<tr>
<td>Between</td>
<td>0.177</td>
<td>0.177</td>
<td>0.177</td>
<td>0.177</td>
</tr>
<tr>
<td>Overall</td>
<td>0.163</td>
<td>0.163</td>
<td>0.163</td>
<td>0.163</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is the natural log of the reported number of volunteers. Robust standard errors in parentheses. All regressions include year fixed effects and the NTEE categories.

*p<0.05; **p<0.01; ***p<0.001.
Essay 2

Who speaks truth to power? The choice between volunteers and paid staff for lobbying activities

Abstract

This study investigates the use of volunteers for lobbying activities among nonprofit organizations, and examines whether the presence of government grants reduces the likelihood of such grassroots participation. I use the 2010-2016 IRS Form 990 and Schedule C non-(h)-elector e-filer data and explore the effect of government grants on nonprofits in different sub-sectors. The analyses show that for non-(h)-elector nonprofits that report lobbying activities, government grants do not affect the use of volunteers both within and outside of lobbying. However, government grants' effect indeed varies by nonprofit sub-sectors—while human service organizations increase the tendency to use volunteer lobbyists, environment organizations report a significantly lower likelihood. I argue that this difference is based on their propensity to adopt different advocacy frames—for organizational benefits or social benefits, or because of different lobbying needs concerning the status quo. The study contributes to the literature by considering government grants as a potential censoring factor that decreases nonprofits’ willingness to engage volunteers in lobbying activities, and it also identifies sub-sectors of nonprofits that are more likely to experience such decrease.
Nonprofit organizations perform an important role in promoting political participation (Dodge & Ospina 2016; LeRoux, 2007; Skocpol, 2003) and have been known as “schools of democracy” (Tocqueville, 1835), where civic skills are taught in various ways by engaging citizens in advocacy activities. Advocacy, broadly defined as “the attempt to influence public policy, either directly or indirectly” (Pekkanen, Smith, & Tsujinaka, 2014), is a unique provision of the nonprofits that cannot be fulfilled by either the marketplace or the government (Salamon, 2012). Advocacy activities may range from public education, lobbying, to demonstrations and protests; take place at the municipality, state, federal, or transnational levels; affect policy during agenda-setting, formation, and implementation stages; and cover various policy domains such as animal welfare, civil rights, education, and environmental issues (Andrews & Edwards, 2004; DeVita, Nikolova, & Roeger, 2014; Pekkanen, Smith, & Tsujinaka, 2014).

Despite the significant implication of nonprofit advocacy, most nonprofits in the U.S. are discouraged from involving in the policy process to a great extent by the regulation that dictates their tax-exempt status (Berry, 2005; Berry & Arons, 2003). “Public charities” under the Internal Revenue Service (IRS) tax code 501(c)(3) currently accounts for two-thirds of all registered nonprofits in the U.S. (McKeever, 2018), and these organizations by regulation are restricted from focusing a “substantial part of the activities” on efforts to influence legislation, because lobbying or political campaign activities do not fall under “religious, charitable, scientific, testing for public safety, literary, or educational purposes.” If a 501(c)(3) organization fails to pass the “no substantial part” test, it risks exercising taxes or the loss of tax-exempt status.
While lobbying is specifically defined as the sum of direct lobbying and grassroots lobbying for tax purposes, the “substantiality” is a rather subjective measure. Many nonprofit organizations opt for the expenditure test under section 501(h) so that their engagement in the lobbying activities can simply be measured in monetary terms. Meanwhile, most other organizations that do not take the (h) election/expenditure test, are required to file a separate form (Form 990/990-EZ Schedule C) to report such activities.

These heavy regulations on nonprofit lobbying activities also reflect a fundamental tension between nonprofits and the government—“how much should organizations receive tax benefits or direct government support be allowed to influence public policy” (Young & Casey, 2016); as well as how much do these organizations self-censor and possibly mute the voice of citizens or their own clients?

In previous studies, much attention has been focused on nonprofit financial independence and advocacy (e.g. Hwang & Suárez, 2019; LeRoux & Goerdel, 2009; Lu, 2018a; Neumayr, Schneider, & Meyer, 2015; Nicholson-Crotty, 2007; 2009). However, how do nonprofits bring citizens into the advocacy picture also matters, given their crucial role in training citizens’ civic skills? In particular, when engaging citizens as volunteers, are nonprofit organizations with direct government support more or less willing to use them for collaborative activities (such as service provision) or confrontational activities (such as lobbying)?

Although there are no set limits on the use of volunteers in lobbying activities, the existing volunteerism literature does not offer much insight on the use of volunteers for lobbying, or advocacy-related activities in general (Nesbit, 2017). This has in turn limited our understanding of volunteer recruitment for an important sub-category of nonprofit activities. For example, research has found that advocacy-related nonprofits in general hire more paid staff than
those that do not engage in advocacy, and that they operate in specific areas such as environmental/animal protection, health, immigrant and refugee assistance (Child & Grønbjerg, 2007; Nesbit, 2017). But we know little about to what extent these organizations rely on professional paid staff or volunteers for their advocacy work.

Therefore, this study investigates the use of volunteers for lobbying activities among nonprofit organizations, and examines whether the presence of government grants reduces the likelihood of such grassroots participation. Specifically, among the nonprofits that report lobbying activities (using Schedule C), do they end up using more or fewer volunteers in general after getting government grants? Furthermore, do government grants decrease the likelihood of these organizations using volunteers for lobbying activities? Considering nonprofits’ function of providing individual citizens with opportunities to engage in public affairs (Dodge & Ospina, 2016), the findings to the second question is particularly important. The mere presence of such openings, i.e. volunteering opportunities to lobby, may have long-term implications on state-society relations and the polity.

The study directly builds on findings from the study of Zhang, Chen, and Nicholson-Crotty (2020), in which the authors found that government grants do not crowd out the use of volunteers among 501(c)(3) organizations, and that the potential crowding-in effect does vary by nonprofit subsector. In this study, I narrow down the focus on the non-(h)-electors. I use the 2010-2016 IRS Form 990 and Schedule C e-filer data. The results are mixed among nonprofit subsectors—with government grants, human service organizations are more likely to use volunteer lobbyists; on the other hand, environment organizations become less likely to do so. I argue that this difference is based on their propensity to adopt different advocacy frames—for organizational benefits or social benefits, or because of different lobbying needs concerning the
status quo. The study contributes to the literature by considering government grants as a potential censoring factor that decreases nonprofits’ willingness to engage volunteers in lobbying activities, and it also identifies sub-sectors of nonprofits that are more likely to experience such decrease.

Strategic Decision in Nonprofit Lobbying

Lobbying is an attempt to influence the public policy and issue-making functions of a regulatory, administrative, or legislative body” (Hopkins, 1992, p. 104). Similarly, IRS defines lobbying as an attempt to “influence legislation” (IRS, 2019), either through communication with members, officials, or employees in the legislative body or the government, or through affecting public opinion.

Why do organizations lobby? Two theoretical perspectives explain nonprofits’ presence in the field of lobbying activities. Economic theories of nonprofit organizations argue that nonprofits represent the unmet interests and preferences by the government (Weisbrod, 1977); in other words, nonprofits “‘act for’ (substantive representation) or ‘stand for’ (symbolic representation) the interests of their constituents” (Guo & Musso, 2007, p. 331), and therefore attempt to influence legislation on behalf of their particular constituents. Political theories of nonprofit organizations, on the other hand, emphasize on their mobilization function in the “state-building” and “democratic socialization” process (Clemens, 2006; DiMaggio & Anheier, 1990; McCarthy & Zald, 2001). Nonprofit organizations serve as vehicles to mobilize social resources, minority groups, or in the extreme the repressed population. This function ultimately
allows nonprofits to counterbalance state power or change policy outcomes. It in itself and normatively speaking is fundamental to a democratic polity.

However, Lowery (2007) argues that the motivation goes beyond the intention to influence policy. Research in both interest groups and nonprofit lobbying uniformly found that the number of organizations that engage in lobbying is still small, despite the increase in interest populations and lobbying activities (Baumgartner & Leech, 2001; Lowery, 2007; Prentice, 2018a). Using niche theory and resource dependence theory, Lowery (2007) suggests that lobbying organizations are driven by a need to survive; and that lobbying is a result of an existing resource threat and the condition of the organization’s contextual forces, including the level of competition, public opinion, rules and regulations, and decision-making processes. Indeed, government funding, threats in the policy environment, organizational capacity, constituent involvement, and professionalization, among others, were found to have a positive and significant relationship with nonprofit lobbying engagement (e.g. Hwang & Suárez, 2019; Lu, 2018b; Nicholson-Crotty, 2007, 2009).

Given the need to survive, once an organization decides to lobby, resources that affect organizational survival would naturally impact the subsequent strategic choices. Existing empirical research on lobbying engagement and strategies are affected by the organization/group’s political access, financial and political resources, sustained interests (Bertrand, Bombardini, & Trebbi, 2014), and government budgeting (La Pira, Thomas, & Baumgartner, 2012). For example, dependence on government funding may motivate lobbying nonprofits to adopt less aggressive strategies (Nicholson-Crotty, 2009). When organizational capacity and resources are limited, You (2017) argues that organizations face the tradeoff between lobbying for legislation (ex ante) and lobbying for implementation details (ex post).
Empirical results show that ex ante lobbying, which is more important and relatively a more contentious arena, consists of a significantly high proportion of organizations less bounded by resources and capacity.

Government Grants and General Volunteering

As the nonprofit-government interdependence increases, the government has become one of the important financial resources (McKeever, 2015; Pettijohn, Boris, De Vita, & Fyffe, 2013; Salamon, 2003). To understand the effect of government grants on the use of volunteers, institutional theory (DiMaggio and Powell 1983; 1991; Meyer and Rowan 1977) suggests that nonprofit organizations may make isomorphic changes to bureaucratize themselves; as a result, organizations experience improved managerial capacity that allows them to engage more volunteers in the day-to-day operation. In the previous study, Zhang, Chen, and Nicholson-Crotty (2020) found empirical evidence supporting a positive relationship between government grants and the reported number of volunteers in a nonprofit. Although the effect sizes differ by nonprofit subsectors, all the effects are in the crowding-in direction.

For nonprofit organizations that report lobbying activities, I argue that the institutionalism explanation would still apply to the size of volunteers. In addition to the improved managerial capacity, in some cases, nonprofits with government grants may have expanded demand on volunteers due to the increasing need for advocacy engagement. Advocacy is a broader concept than lobbying (and political campaign) (Berry & Arons, 2003); it covers activities that are not legally restricted for public charities, such as public education. Scholars
studying U.S. nonprofits have found mixed evidence on the effect of public funding on nonprofit advocacy, ranging from negative (Guo & Saxton, 2010), no impact (Garrow & Hasenfeld, 2014; Nicholson-Crotty, 2009; Suárez, 2009), to (no or) positive impact (Chaves, Stephens, & Galaskiewicz, 2004; LeRoux & Goerdel, 2009; Mosley, 2011; Moulton & Eckerd, 2012). A meta-analysis of such studies found a weak positive relationship between government funding and nonprofit advocacy (Lu, 2018a). This is similar to the case of government funding and the use of volunteers—the former does not seem to be a significant determining factor. However, given the general concern that the dependence on government funding may inhibit advocacy engagement, the empirical evidence suggests that at least it does not harm nonprofit advocacy. This conclusion also holds beyond the U.S. context (Neumayr, Schneider, & Meyer, 2015).

Overall, with government grants, these more politically engaged nonprofits are likely to report a higher number of volunteers. This is either because of their increased capacity to engage more volunteers, or because the increased level of advocacy activities calls for more human resources and thus creates more volunteering opportunities. Therefore, I hypothesize that:

H1: Nonprofits with government grants will engage more volunteers.

Government Grants and Volunteers for Lobbying

The existing literature suggests that dependence on government funding affects lobbying organizations’ strategic behaviors. Grasse, Ward, and Miller-Stevens (2019) found that while direct financial support from the constituents increases the likelihood to take the H-election option, taking government grants, on the contrary, disincentivizes nonprofits to be H-electors.
Studies have generally found that government funding drives organizations to behave more conservatively during lobbying engagement, for example, by preferring grassroots lobbying (as opposed to direct lobbying), or by focusing on ex post lobbying for policy implementation details (Nicholson-Crotty, 2009; Yu, 2017).

Under such assumption, nonprofits engaging in lobbying activities are less likely to use volunteers for lobbying, when they receive government grants. Firstly, because mobilizing volunteers to influence public policy can potentially create much tension between nonprofits and the government. Secondly, in cases when nonprofits shift focus from ex ante lobbying to ex post, the need to affect public opinion through grassroots lobbying would possibly decrease, leading to a smaller demand for volunteers. On the other hand, professional lobbyists and paid staff are more crucial in deliberating over the details of a policy prior to implementation. Therefore, government grants should either have no impact or positive impact on the decision to use paid staff for lobbying. In summary, I expect:

H2: Nonprofits with government grants are less likely to use volunteers for lobbying activities.

H3: Nonprofits with government grants are more likely to use paid staff for lobbying activities.
Non-501(h)-electors with Lobbying Engagement

Data availability has limited nonprofit lobbying research to date to address questions at the national level (De Figueiredo & Richter, 2014; Lu, 2018b; Prentice, 2018b). It is difficult to systematically identify organizations that engage in lobbying activities on a large scale. Existing studies (see Table 1 in Neumayr, Schneider, & Meyer, 2015) rely mostly on cross-sectional data from a limited sample of nonprofits, while lobbying theories call for longitudinal models (Baumgartner & Leech, 1996). Tax reporting information from Form 990s e-filers provides a possibility to examine nonprofit lobbying over time with a large sample.

This study intends to explore the relationship between government grants and nonprofits’ use of volunteers in lobbying activities. I specifically focus on the non-(h)-electors that report lobbying activities for several reasons. First, nonprofits that actively seek to participate in the policy process are usually more professionalized in lobbying engagement and at the same time more likely to take the H election or register under other tax codes (501(c)(4), 501(c)(5), or 501(c)(6)). And by taking the H election option, 501(c)(3) nonprofits benefit from the expenditure test, which is more objective than the “no substantial part” test and offers more certainty for the purpose of keeping the tax-exempt status (Berry, 2005; Grasse, Ward, Miller-Stevens, 2019). Therefore, these organizations’ lobbying-related decisions are less affected by possible financial dependence on government funding, compared with the non-(h)-electors. For example, Nicholson-Crotty (2007) found that total revenue is positively associated with the decision to be an H elector. As a result, including these organizations would possibly underestimate the impact of government grants. Interestingly, Grasse, Ward, and Miller-Stevens (2019) found that nonprofits receiving government grants are less likely to be H-electors.
Second, compared with 501(c)(3) organizations that do not report lobbying activities either unintentionally or intentionally, the non-(h)-electors that file Form 990 Schedule C for lobbying activities are the ones that directly deal with the decision to use volunteers and/or professionals for lobbying, because “lobbying” itself for these organizations has become a conscious decision; and in those cases, volunteers are also more likely to recognize the nature of the task as lobbying. Finally, considering nonprofit lobbying as a two-stage decision-making process, financial resources and organizational capacity are only relevant for the strategic choices once the organization decides to lobby. By analyzing the non-(h)-electors that report lobbying in Form 990 Schedule C, we are able to focus on the second stage only. In summary, the population of non-(h)-electors is most relevant to the research question, given the potential financial dependence on government funding and the conscious decision-making in using volunteers for lobbying activities.

Data and Methods

I use the 2010-2016 electronically filed IRS Form 990 data and limit the sample to the 501(c)(3) organizations that have filed Schedule C (“Political Campaign and Lobbying Activities”). I constructed a data set with information from both Form 990 and Schedule C Part II –B (organizations “exempt under section 501(c)(3) and has not filed Form 5768 (election under section 501(h))”). The data set contains 39,847 observations from 11,268 unique nonprofits. As was suggested in the existing literature, the proportion of nonprofit organizations willingly admit or recognize that they have involved in lobbying activities is very small (Berry &
Arons, 2003). The current sample (non-(h)-elector Schedule C e-filers) is only 5 percent of all the 501(c)(3) e-filers within the same period (total N = 222,252).

The main dependent variable is the use of volunteers and the use of paid staff (1 = Yes, 0 = No) for lobbying activities ("any attempt to influence foreign, national, state, or local legislation, including any attempt to influence public opinion on a legislative matter or referendum"). By definition, the variable reports the use of volunteers on either direct or grassroots lobbying. Based on the pooled data, only about 13.4 percent of the organizations reported the use of volunteers, the majority of which also reported the use of paid staff. Meanwhile, about 27.5 percent of the organizations rely on paid staff only for lobbying. To measure general volunteering, I use the number of volunteers reported in Form 990. Compared with the full 501(c)(3) e-filer sample, the current sample shows a higher average number of volunteers (mean = 6,526).

The independent variable measures whether the organization has received any government grants or contributions within the given tax period as reported in Form 990. Over half of the nonprofits in the current sample reported government grants, which is also higher than the full sample (31.5 percent). The average grant amount was also significantly higher (mean = $5.8 million).

Based on previous studies (Andreoni & Payne, 2003; Nikolova, 2015; Lu, 2018a; Zhang, Chen, & Nicholson-Crotty, 2020), I control for private donations, program service revenue, organizational age, number of paid staff, and fundraising expenses. I use the National Taxonomy of Exempt Entities (NTEE) codes developed by the National Center for Charitable Statistics to identify four major nonprofit subsectors: arts (Arts, Culture, and Humanities), human services, environment, and health.
Table 2.1 shows the summary statistics on the abovementioned variables.

I ran random and fixed effects generalized least squares regressions (H1) and logistic regressions (H2, H3). In the analyses, I used natural log transformed data for the number of volunteers, private donations, program service revenue, fundraising expenses, and the number of paid staff. The model includes both one-year and two-year lagged values of the government grant variable. Private donations and program service revenue variables are lagged by one year; and I used the current year value for the fundraising expenses variable to proxy for current exposure to the public. Finally, the model also includes year fixed effects to control for the aggregate trends.

Results

The first hypothesis stated that nonprofits receiving government grants will use more volunteers in the general non-lobbying-related activities. Table 2.2 shows the results from fixed- and random-effects models. I find that government grants (either measured as a binary variable or in dollar amount) in previous tax periods do not seem to matter for the Schedule C e-filers, regardless of the model specification. Government grants awarded two years before the current period only seem to be marginally significant in the random-effects models.

Due to variations in reporting protocols and ways of defining the formation year, I found extreme/outlier values in the number of volunteers and the organizational age (see Table 2.1). The analyses kept the original data reported by the organizations; however, to address the concerns related to these extreme values, I ran separate analyses with winsorized volunteer and
age variables. Winsorizing is a standard process to treat outliers by modifying the extreme values so that the distribution is more plausible (Ghosh & Vogt, 2012). In this case, it is preferred over trimming the outliers because the extreme sample values are not simply discarded. For the concerned variables, I created right-winsorized variables at 99<sup>th</sup> and 95<sup>th</sup> percentiles respectively. Table 2.3 shows results replicating the first two models in Table 2.2 with the new volunteer and age variables. The estimates remain similar to those in the previous models, suggesting that the regression results were not much biased by the outliers.

The second hypothesis states that nonprofits with government grants are less likely to use volunteers for lobbying activities. Table 2.4 Model 1 shows that government grants whether lagged by one or two periods, do not affect such decisions in general. Meanwhile, other revenue sources show some significant results: private donations are positively related to using volunteers for lobbying; program service revenue has a negative relationship. Previous studies (e.g. Grasse, Ward, & Miller-Stevens, 2019; Prentice, 2018a) suggest that nonprofit mission areas/subsectors matter for lobbying and reporting strategies: for example, environmental nonprofits are more likely to opt for the H-election, while arts organizations and hospitals are less likely to make the same decision. I further examined the relationship between government grants and lobbying volunteers using the NTEE categories. Table 2.4 Model 2 to 5 displays results for nonprofits coded are human services, arts, environment, and health, by the NTEE categories, respectively; and variations do emerge. The government grants variable lagged by two years has a statistically significant positive effect only for human service organizations (b = 0.620, p < 0.01). It has no significant effect on arts organizations or health organizations. For environmental organizations, government grants from the previous tax period have a statistically significant negative effect on the likelihood to use volunteers for lobbying (b = -0.765, p < 0.05).
The third hypothesis states that nonprofits with government grants are more likely to use paid staff for lobbying activities. Table 2.5 displays the results in the same breakdown order for the likelihood to use paid staff. I found support for a significant and positive relationship between government grants lagged by two years and the use of paid staff ($b = 0.200, p < 0.01$), which is possibly driven by human services organizations. There is a statistically significant positive relationship ($b = 0.770, p < 0.0001$) for human service organizations, also only with the two-year lag. This is similar to the finding for lobbying volunteers among human services organizations. However, the relation between government grants and the use of paid staff is not statistically significant among arts, environment, or health organizations.

Discussion

The model results for lobbying volunteers show an interesting contrast between environmental and human services organizations. To some extent, it is consistent with Grasse et al.’s (2019) findings, as environmental organizations are significantly more likely to be H-electors. Those who do not take the H-election are perhaps more constrained financially and are more willing to be less aggressive in lobbying engagement when they receive government grants.

There are two possible explanations to understand how government grants work in two different directions for environmental and human services organizations. First, it may reflect different lobbying framing preferences between the two subsectors. There are two major frames of nonprofit advocacy activities, namely, the organizational benefits frame and the social benefits frame (Garrow & Hasenfeld, 2014). The organizational benefits frame focuses narrowly on
reinforcing the organization’s legitimacy and securing future resources; whereas the social benefits frame targets at shaping policy agenda or outcomes at a broader level.

Studies on human service organizations’ advocacy activities suggest different implications in adopting the two frames. For example, as government funding increases nonprofit-government collaboration, the presence of such funding relationship may affect the willingness of the nonprofits to take on a possible confrontational role, for the fear of “unfavorable consequences” (LeRoux, 2007, p. 413). However, when the purpose of advocacy is framed as organizational benefits (either for securing future funding or for seeking political allies), it is likely to observe positive effects of government funding on advocacy (Mosley 2011; 2012; Nicholson-Crotty, 2011): because when the advocacy is driven by organizational benefits, the nonprofit is likely to avoid possible conflict (Mosley, 2012) or signal minimal interests in making a deeper change (Marwell, 2004). Garrow and Hasenfeld (2014) suggest that both frames are used by human service organizations, with different emphases, depending on their moral commitment and practical demands. Nonetheless, the authors did not find a significant relationship between reliance on government funding and advocacy type (i.e. organizational benefits or social benefits).

Applying the frames to the case of volunteers, if a nonprofit seeks societal level policy change, the use of volunteers in lobbying activities may be perceived as potential civil disobedience; and this conflicts a collaborative nonprofit-government funding relationship, which may be the case for environmental organizations. Essentially this explanation assumes that human service and arts organizations are more prone to share the organizational benefits frame, while environment organizations are more active in changing policy agenda or outcomes and more likely to use the social benefits frame. However, any nonprofits can adopt either (or even
both) frames (Garrow & Hasenfeld, 2014). The use of NTEE categories fails to reflect the actual framing preferences.

Without surveying the nonprofit organizations, the best possible indicator would be a group of nonprofit organizations known for political activism, such as the “identity-based” nonprofits (Reid, 1999; LeRoux, 2007). The identity-based organizations or their specific issue topics are difficult to systematically isolate using the NTEE codes or other classification schemes. For example, the identity area related to sexual orientation, which normally brings high tension in the policy process, is not reliably captured by the NTEE codes. The most relevant ones are P88 – LGBT centers and R26 – lesbian and gay rights. Using these two codes alone would result in a serious under-counting error. Some of these organizations may also fall under R30 – intergroup and race relations. However, including the code would result in an over-counting error. In order to systematically identify organizations working on sexual orientation identities, I used a text-as-data workflow developed by Chen and Zhang (2020) (also see Figure 2.A1 in the Appendix). The method makes use of the mission and program service activity statements in the 990 forms, and use word-embedding algorithms to quantify the relationship between words. I use “LGBT” as the focal term to generate a seed dictionary (see Figure 2.A2 in the Appendix for a sample word cloud based on “LGBT”). The output is a continuous variable that describes the cosine similarities between the text information provided by the organization and the term “LGBT”. Figure 2.A3 displays the distribution of the “LGBT-ness” of all organizations in the 501(c)(3) e-filers sample. Higher cosine similarity values indicate higher relevance to the focal term. The right-skewed distribution suggests that only a small group of organizations are highly relevant sexual orientation identity-based organizations. I used the cosine similarities as a continuous measure for the organization’s LGBT-ness, and interacted the variable with the
government grants variables. I expected that the interaction term would be negative for the grant-volunteer relation, suggesting that the more relevant the organization is to the LGBT issue topic, the more negatively affected it is by the government grant in using volunteers to lobby. The results in Table 2.6 show some support for this hypothesis. Government grants on its own do not affect the decision to use volunteers for lobbying; however, receiving government grants in the previous period decreases the LGBT-related nonprofits’ likelihood to use volunteers (b = -3.197, p < 0.05).

On the likelihood to use paid staff for lobbying, Table 2.6 shows no evidence supporting H3. Instead of a substitution relation between volunteer and paid staff, the effect of government grants on both cases seems to go hand-in-hand. Receiving government grants in the previous period also decreases the LGBT-related nonprofits’ likelihood to use paid staff (b = -2.585, p < 0.05), which may reflect an overall decreased level of aggressiveness in lobbying engagement.

A second explanation is that human services organizations with government funding tend to engage in defensive lobbying, which refers to the type of lobbying activities that aims at maintaining the status quo and suppressing new proposals (Richter, Samphantharak, & Timmons, 2009; Thomas, 2005). On the other hand, environmental nonprofits in general seek to elicit government actions or policy changes. The changes, instead of the status quo, justify their survival. Hence, human service and environmental organizations anticipate different “threats”. The former demands to maintain the funding relationship by defensive lobbying activities, while the latter protects the funding relationship by withdrawing from lobbying activities.
Conclusion

This study follows up on the money-to-labor interaction and investigates the choice to use volunteers (as well as paid staff) for lobbying activities in the presence of government grants. Taken the results together, for non-(h)-elector nonprofits that report lobbying activities, government grants do not affect their general use of volunteers outside of lobbying. On lobbying activities, I found that human service organizations and environmental organizations are affected by government grants in different ways. I argue that this difference is based on their propensity to adopt different advocacy frames—for organizational benefits or social benefits, or because of different lobbying needs concerning the status quo. The additional analysis seems to provide some support for using these frames as an important factor to explain the organizational decision to use volunteers for lobbying activities. This is consistent with the existing empirical findings that government funding is likely to increase advocacy engagement among human service organizations (Mosely, 2011; 2012; Nicholson-Crotty, 2011), which is partly explained by the need to maintain organizational benefits or the status quo. On the other hand, government funding is likely to reduce the likelihood of using volunteers for lobbying among those more policy-oriented nonprofits, as they use the social benefits frame, which inherently suggests more conflicts between the organization and the government. In this case, government funding does function as a censoring factor that decreases nonprofits’ willingness to use more “confrontational” strategies, such as mobilizing volunteers to lobby.

This study contributes to the literature by considering government grants as a potential censoring factor that impacts individual citizen’s political volunteering opportunities. The results identify the environment and LGBT identity-related organizations as susceptible to such a
decrease. It also suggests that the adoption of different lobbying strategies including framing and “defensiveness” helps understand how nonprofit organizations react to nonprofit-government collaboration in different ways. For example, government grants may positively affect lobbying volunteers when the organization adopts an organizational benefits frame or engages in defensive lobbying to maintain the status quo; yet negatively affect lobbying volunteers when the organization aims to change the existing policy agenda or policy outcomes. These findings have important implications for state-society relations and a democratic polity, because the available volunteer lobbying opportunities contribute to citizens’ development of civic skills and engagement in public affairs (Dodge & Ospina, 2016). The findings suggest that in most cases, government grants do not matter or do not hinder the provision of such opportunities. However, when it comes to more contentious policy areas, including environmental issues or LGBT identity-related issues, the presence of government grants does somehow negatively affect the volunteer lobbying opportunities.

For nonprofit practitioners aiming to influence policy or legislation for social benefits, it is important to recognize such effects. How nonprofits bring citizens into the advocacy picture matters. Borrowing the concepts from Althusser (2012, pp. 80-85; 2014), the government/authority with coercive power is the Repressive State Apparatus; and the nonprofit organizations constitute a key part of the Ideological State Apparatuses (ISAs), which function not by repression or coercive power, but by “ideology”. It is essential in a democracy for individuals to express and represent their ideas through ISAs, without co-optation or censorship from the repressive state apparatus, to make their voice heard and to gain a sense of self and autonomy. The results show that nonprofit organizations with direct government support are no less willing to use volunteers for collaborative activities including service provision or lobbying
for more service provision; but are possibly less willing to use volunteers for more
confrontational activities such as lobbying for policy changes. In light of the latter case,
nonprofit practitioners may want to caution against using citizens merely as instruments to get
service delivered free of cost, and to facilitate citizens to engage in the policy process, which
would ultimately contribute to a pluralistic society (Reich, 2018).

Finally, I recognize that there are two key limitations of the analysis. First, the tax
reporting data and the NTEE categories do not allow me to examine more in detail what causes
variations among nonprofit subsectors. Future research using survey or experiment designs is
needed to better understand the mechanisms that lead to distinctions in nonprofit-government
interactions. Second, the analysis is based on a sample of non-(h)-electors which file Form 990
Schedule C, and the sample most definitely under-represents nonprofit organizations that involve
in lobbying (see Prentice, 2018b). It does not include the (h)-electors or the 501(c)(4)
organizations. In addition, many nonprofit organizations do not understand what “lobbying” is or
engage in lobbying only indirectly (Berry & Arons, 2005). This is a persisting challenge in
studying nonprofit lobbying activities. Prentice (2018a, 2018b) also argues that although Form
990 data cover most of the lobbying nonprofits, they fail to capture smaller ones and churches,
and nonprofits are likely to misreport their lobbying activities due to lack of knowledge or an
intention to avoid possible penalties. For the purpose of understanding the relationship between
government funding and volunteer use, I think that the current sample appropriately covers the
nonprofits that are mostly concerned with this issue. However, future research combining data
collected at both federal (Form 990s) and state levels will reflect the nonprofit population of
interest more accurately.
Table 2.1 – Summary Statistics (2010-2016)

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Number of volunteers</td>
<td>39,847</td>
<td>6,526</td>
<td>328,622</td>
<td>0</td>
<td>33,000,000^</td>
</tr>
<tr>
<td>Use of volunteer (lobbying)</td>
<td>39,182</td>
<td>0.134</td>
<td>0.341</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Use of paid staff (lobbying)</td>
<td>39,719</td>
<td>0.275</td>
<td>0.446</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Whether received government grants</td>
<td>39,847</td>
<td>0.538</td>
<td>0.499</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Government grants (x$1,000)</td>
<td>39,847</td>
<td>5,833</td>
<td>65,660</td>
<td>0</td>
<td>4,550,000</td>
</tr>
<tr>
<td>Program service revenue (x$1,000)</td>
<td>39,847</td>
<td>104,200</td>
<td>614,100</td>
<td>0</td>
<td>48,350,000</td>
</tr>
<tr>
<td>Private donations (x$1,000)</td>
<td>39,847</td>
<td>6,709</td>
<td>45,250</td>
<td>0</td>
<td>3,285,000</td>
</tr>
<tr>
<td>Fundraising expense (x$1,000)</td>
<td>39,847</td>
<td>789.078</td>
<td>5,407</td>
<td>0</td>
<td>201,300</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>39,847</td>
<td>977.300</td>
<td>2,863</td>
<td>0</td>
<td>60,600</td>
</tr>
<tr>
<td>Organizational age</td>
<td>39,847</td>
<td>47.420</td>
<td>39.580</td>
<td>-1*</td>
<td>366</td>
</tr>
<tr>
<td>NTEE: Arts</td>
<td>39,847</td>
<td>0.050</td>
<td>0.217</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Human services</td>
<td>39,847</td>
<td>0.238</td>
<td>0.426</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Religious</td>
<td>39,847</td>
<td>0.020</td>
<td>0.140</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Education</td>
<td>39,847</td>
<td>0.127</td>
<td>0.333</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Environment</td>
<td>39,847</td>
<td>0.040</td>
<td>0.195</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NTEE: Health</td>
<td>39,847</td>
<td>0.437</td>
<td>0.496</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>


*The organization Colonial Beach Volunteer Fire Department (EIN: 54-1032230) reported 2012 as its formation year and filed the Form 990s in year 2011. The analysis kept the original data.
Table 2.2. General Volunteering: Regression Results (Fixed and Random Effects)

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) Whether government grant</th>
<th>(2) Government grant amount</th>
<th>(3) Government grant amount</th>
<th>(4) Government grant amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government grants (t-1)</td>
<td>-0.039 (0.117)</td>
<td>0.110 (0.100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether received government grants (t-2)</td>
<td>0.123 (0.119)</td>
<td>0.208* (0.102)</td>
<td>-0.001 (0.005)</td>
<td>0.005 (0.004)</td>
</tr>
<tr>
<td>Government grants ($ amount) (t-1)</td>
<td>0.123 (0.119)</td>
<td>0.208* (0.102)</td>
<td>-0.001 (0.005)</td>
<td>0.005 (0.004)</td>
</tr>
<tr>
<td>Government grants ($ amount) (t-2)</td>
<td>0.123 (0.119)</td>
<td>0.208* (0.102)</td>
<td>-0.001 (0.005)</td>
<td>0.005 (0.004)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.008 (0.008)</td>
<td>0.069*** (0.007)</td>
<td>0.008 (0.008)</td>
<td>0.069*** (0.007)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>-0.001 (0.016)</td>
<td>0.051*** (0.009)</td>
<td>-0.001 (0.016)</td>
<td>0.051*** (0.009)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.016 (0.010)</td>
<td>0.069*** (0.006)</td>
<td>0.016 (0.010)</td>
<td>0.069*** (0.006)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>-0.008 (0.028)</td>
<td>0.132*** (0.017)</td>
<td>-0.008 (0.028)</td>
<td>0.131*** (0.017)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>0.072 (0.068)</td>
<td>0.030*** (0.002)</td>
<td>0.072 (0.068)</td>
<td>0.029*** (0.002)</td>
</tr>
<tr>
<td>NTEE: Arts</td>
<td>1.527** (0.444)</td>
<td>1.534** (0.444)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Human services</td>
<td>1.014** (0.299)</td>
<td>1.018** (0.300)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Religious</td>
<td>-0.915 (0.615)</td>
<td>-0.907 (0.615)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Education</td>
<td>-1.151** (0.357)</td>
<td>-1.154** (0.357)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Environment</td>
<td>0.823 (0.470)</td>
<td>0.829 (0.470)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTEE: Health</td>
<td>1.937*** (0.298)</td>
<td>1.945*** (0.299)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.921 (3.735)</td>
<td>-2.796*** (0.296)</td>
<td>-1.899 (3.728)</td>
<td>-2.649*** (0.291)</td>
</tr>
<tr>
<td>Number of EIN</td>
<td>6,198</td>
<td>6,198</td>
<td>6,198</td>
<td>6,198</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>0.004</td>
<td>0.001</td>
<td>0.004</td>
<td>0.001</td>
</tr>
<tr>
<td>Between</td>
<td>0.092</td>
<td>0.246</td>
<td>0.092</td>
<td>0.246</td>
</tr>
<tr>
<td>Overall</td>
<td>0.083</td>
<td>0.225</td>
<td>0.083</td>
<td>0.225</td>
</tr>
<tr>
<td>Method</td>
<td>Fixed effects</td>
<td>Random effects</td>
<td>Fixed effects</td>
<td>Random effects</td>
</tr>
</tbody>
</table>

63
Note: The dependent variable in each model is the natural log of the reported number of volunteers. Standard errors in parentheses are clustered at the organizational level. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.0001.
## Table 2.3. General Volunteering: Regression Results with Right-Winsorized Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) Winsorize at 99th percentile</th>
<th>(2) Winsorize at 99th percentile</th>
<th>(3) Winsorize at 95th percentile</th>
<th>(4) Winsorize at 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government grants (t-1)</td>
<td>-0.038</td>
<td>0.108</td>
<td>-0.037</td>
<td>0.103</td>
</tr>
<tr>
<td></td>
<td>(0.117)</td>
<td>(0.100)</td>
<td>(0.117)</td>
<td>(0.100)</td>
</tr>
<tr>
<td>Whether received government grants (t-2)</td>
<td>0.122</td>
<td>0.205*</td>
<td>0.123</td>
<td>0.200*</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.102)</td>
<td>(0.118)</td>
<td>(0.101)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.008</td>
<td>0.069***</td>
<td>0.008</td>
<td>0.068***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>-0.001</td>
<td>0.052***</td>
<td>-0.002</td>
<td>0.051***</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.009)</td>
<td>(0.016)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.016</td>
<td>0.068***</td>
<td>0.016</td>
<td>0.066***</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.006)</td>
<td>(0.010)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>-0.008</td>
<td>0.131***</td>
<td>-0.008</td>
<td>0.129***</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.017)</td>
<td>(0.028)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>-0.029</td>
<td>0.030***</td>
<td>0.025</td>
<td>0.033***</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.002)</td>
<td>(0.028)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>NTEE: Arts</td>
<td>1.550***</td>
<td></td>
<td>1.608***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.443)</td>
<td></td>
<td>(0.440)</td>
<td></td>
</tr>
<tr>
<td>NTEE: Human services</td>
<td>1.022**</td>
<td></td>
<td>1.010**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.298)</td>
<td></td>
<td>(0.296)</td>
<td></td>
</tr>
<tr>
<td>NTEE: Religious</td>
<td>-0.890</td>
<td></td>
<td>-0.839</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.614)</td>
<td></td>
<td>(0.613)</td>
<td></td>
</tr>
<tr>
<td>NTEE: Education</td>
<td>-1.085**</td>
<td></td>
<td>-0.986**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.355)</td>
<td></td>
<td>(0.351)</td>
<td></td>
</tr>
<tr>
<td>NTEE: Environment</td>
<td>0.841</td>
<td></td>
<td>0.856</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.469)</td>
<td></td>
<td>(0.466)</td>
<td></td>
</tr>
<tr>
<td>NTEE: Health</td>
<td>1.930***</td>
<td></td>
<td>1.951***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.297)</td>
<td></td>
<td>(0.295)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.644*</td>
<td>-2.847***</td>
<td>0.654</td>
<td>-3.008***</td>
</tr>
<tr>
<td></td>
<td>(1.991)</td>
<td>(0.295)</td>
<td>(1.522)</td>
<td>(0.294)</td>
</tr>
<tr>
<td>Number of EIN</td>
<td>6,198</td>
<td>6,198</td>
<td>6,198</td>
<td>6,198</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>0.004</td>
<td>0.001</td>
<td>0.004</td>
<td>0.002</td>
</tr>
<tr>
<td>Between</td>
<td>0.059</td>
<td>0.246</td>
<td>0.111</td>
<td>0.245</td>
</tr>
<tr>
<td>Overall</td>
<td>0.055</td>
<td>0.224</td>
<td>0.098</td>
<td>0.223</td>
</tr>
<tr>
<td>Method</td>
<td>Fixed effects</td>
<td>Random effects</td>
<td>Fixed effects</td>
<td>Random effects</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is the natural log of the reported number of volunteers. Standard errors in parentheses are clustered at the organizational level. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.0001.
Table 2.4. Volunteer for Lobbying: Logistic Regression Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) All</th>
<th>(2) Human Services</th>
<th>(3) Arts</th>
<th>(4) Environment</th>
<th>(5) Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government grants (t-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.143</td>
<td>0.045</td>
<td>0.454</td>
<td>-0.765*</td>
<td>-0.208</td>
</tr>
<tr>
<td></td>
<td>(0.087)</td>
<td>(0.194)</td>
<td>(0.479)</td>
<td>(0.387)</td>
<td>(0.126)</td>
</tr>
<tr>
<td>Whether received government grants (t-2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.143</td>
<td>0.620**</td>
<td>-0.468</td>
<td>0.328</td>
<td>-0.100</td>
</tr>
<tr>
<td></td>
<td>(0.087)</td>
<td>(0.194)</td>
<td>(0.466)</td>
<td>(0.385)</td>
<td>(0.126)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.042***</td>
<td>0.084</td>
<td>0.065*</td>
<td>0.052*</td>
<td>0.036***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.013)</td>
<td>(0.032)</td>
<td>(0.025)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.013***</td>
<td>0.010***</td>
<td>-0.006</td>
<td>0.028**</td>
<td>-0.047***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.005)</td>
<td>(0.012)</td>
<td>(0.011)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.043***</td>
<td>0.030***</td>
<td>0.014</td>
<td>0.022</td>
<td>0.048***</td>
</tr>
<tr>
<td></td>
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<td>(0.005)</td>
<td>(0.014)</td>
<td>(0.014)</td>
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</tr>
<tr>
<td>Number of paid staff</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.021***</td>
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<td>-0.003</td>
<td>-0.001</td>
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</tr>
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<td>Organizational age</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>-0.003*</td>
<td>-0.000</td>
<td>0.005</td>
<td>-0.002</td>
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</tr>
<tr>
<td>Constant</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2.211***</td>
<td>-3.120***</td>
<td>-2.178**</td>
<td>-2.088***</td>
<td>-1.763***</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.210)</td>
<td>(0.499)</td>
<td>(0.401)</td>
<td>(0.130)</td>
</tr>
<tr>
<td>Chi²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1001.40</td>
<td>273.15</td>
<td>16.96</td>
<td>44.87</td>
<td>569.66</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.064</td>
<td>0.072</td>
<td>0.020</td>
<td>0.067</td>
<td>0.095</td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19,411</td>
<td>4,340</td>
<td>871</td>
<td>576</td>
<td>9,460</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is whether volunteers were used for lobbying activities. Standard errors in parentheses. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.0001.
Table 2.5. Paid Staff for Lobbying: Logistic Regression Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) All</th>
<th>(2) Human Services</th>
<th>(3) Arts</th>
<th>(4) Environment</th>
<th>(5) Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether received government</td>
<td>0.102</td>
<td>0.280</td>
<td>0.164</td>
<td>-0.110</td>
<td>0.035</td>
</tr>
<tr>
<td>grants (t-1)</td>
<td>(0.066)</td>
<td>(0.156)</td>
<td>(0.418)</td>
<td>(0.348)</td>
<td>(0.087)</td>
</tr>
<tr>
<td>Whether received government</td>
<td>0.200**</td>
<td>0.770***</td>
<td>-0.434</td>
<td>0.242</td>
<td>0.032</td>
</tr>
<tr>
<td>grants (t-2)</td>
<td>(0.066)</td>
<td>(0.156)</td>
<td>(0.414)</td>
<td>(0.350)</td>
<td>(0.088)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.018***</td>
<td>0.035***</td>
<td>0.045</td>
<td>0.023</td>
<td>0.019***</td>
</tr>
<tr>
<td>(lagged)</td>
<td>(0.003)</td>
<td>(0.007)</td>
<td>(0.029)</td>
<td>(0.019)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Program service revenue</td>
<td>-0.016***</td>
<td>-0.000</td>
<td>-0.005</td>
<td>-0.005</td>
<td>-0.030***</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.038***</td>
<td>0.038***</td>
<td>0.055***</td>
<td>0.043***</td>
<td>0.035***</td>
</tr>
<tr>
<td>(lagged)</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td>(0.011)</td>
<td>(0.010)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>0.044***</td>
<td>0.032**</td>
<td>0.034</td>
<td>0.132***</td>
<td>0.070***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.010)</td>
<td>(0.025)</td>
<td>(0.027)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>-0.003***</td>
<td>-0.008***</td>
<td>0.008***</td>
<td>-0.004</td>
<td>-0.003***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.210***</td>
<td>-1.792***</td>
<td>-1.817***</td>
<td>-1.012***</td>
<td>-1.144***</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
<td>(0.136)</td>
<td>(0.441)</td>
<td>(0.333)</td>
<td>(0.094)</td>
</tr>
<tr>
<td>Chi²</td>
<td>1483.76</td>
<td>608.92</td>
<td>96.95</td>
<td>111.86</td>
<td>521.98</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.063</td>
<td>0.112</td>
<td>0.086</td>
<td>0.141</td>
<td>0.052</td>
</tr>
<tr>
<td>Observations</td>
<td>19,425</td>
<td>4,351</td>
<td>871</td>
<td>575</td>
<td>9,467</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is whether paid staff were used for lobbying activities. Standard errors in parentheses. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.0001
Table 2.6. LGBT nonprofits: Logistic Regression Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) Volunteers</th>
<th>(2) Paid Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGBT-ness</td>
<td>9.315*** (0.613)</td>
<td>10.513*** (0.531)</td>
</tr>
<tr>
<td>Whether received government grants (t-1)</td>
<td>0.666 (0.401)</td>
<td>0.722* (0.321)</td>
</tr>
<tr>
<td>Whether received government grants (t-2)</td>
<td>0.022 (0.402)</td>
<td>0.222 (0.321)</td>
</tr>
<tr>
<td>LGBTQ * Grants (t-1)</td>
<td>-3.197* (0.402)</td>
<td>-2.585* (1.246)</td>
</tr>
<tr>
<td>LGBTQ * Grants (t-2)</td>
<td>0.439 (1.493)</td>
<td>-0.103 (1.245)</td>
</tr>
<tr>
<td>Private donations (lagged)</td>
<td>0.037*** (0.005)</td>
<td>0.012*** (0.003)</td>
</tr>
<tr>
<td>Program service revenue (lagged)</td>
<td>-0.008** (0.003)</td>
<td>-0.009*** (0.002)</td>
</tr>
<tr>
<td>Fundraising expense</td>
<td>0.034*** (0.002)</td>
<td>0.028*** (0.002)</td>
</tr>
<tr>
<td>Number of paid staff</td>
<td>-0.027*** (0.005)</td>
<td>0.044*** (0.005)</td>
</tr>
<tr>
<td>Organizational age</td>
<td>-0.000 (0.001)</td>
<td>-0.003*** (0.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.492*** (0.182)</td>
<td>-3.825*** (0.149)</td>
</tr>
<tr>
<td>Chi²</td>
<td>1,439.21</td>
<td>2,324.49</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.093</td>
<td>0.100</td>
</tr>
<tr>
<td>Observations</td>
<td>19,425</td>
<td>19,350</td>
</tr>
</tbody>
</table>

Note: The dependent variable in each model is whether volunteers/paid staff were used for lobbying activities. Standard errors in parentheses. All regressions include year fixed effects. *p<0.05; **p<0.01; ***p<0.0001
Appendix

Figure 2.A1. All-Text-In-One-Space Workflow Summary
Figure 2.A2. Form 990 Mission and Program Service Activity Text Generated LGBT Word cloud

Figure 2.A3. Histogram of Public Charities on Cosine Similarity with Keyword “LGBT”
Essay 3

Persistence in adversity: Why do protesters in China respond to state control differently?

Abstract

When facing different levels of state control measures, why did protesters back-off in some cases and persist even to the extent of conflict escalation in others? The article reviews eight major protests against para-xylene facility constructions in China from 2007 to 2015, which ended in different levels of confrontation intensity, lengths of time, and the number of participants. To understand their persistence in the face of adverse state control, I draw on the contentious politics and social movement literature, and present a model of protest persistence. I found that when states adopted repressive tools, protesters from a strong civil society were more likely to persist; and protesters from a weaker civil society were more likely to disengage. The article contributes by highlighting the collective efficacy mechanism on the trajectory of protests.
Introduction

Popular protests (or “collective incidents”) in China, during the period of 2006 to 2012, increased dramatically to around 100,000 each year, from only over 10,000 in the 1990s (Lu, Li, & Chen, 2012; Chen, 2012, pp. 27-33). In particular, environmental incidents—including letter-and-visits, and protests—have been rising at a rate of 30 percent annually in recent years, even as the total number of popular protests decreases after 2012 (Zhang & Yang, 2015). Players in these cases, such as state actors, protesters, and relevant policy coalitions, sometime react inconsistently or even contradictorily towards each other.

Recent studies on popular protests in China has contributed to a deeper understanding of the state-society dynamic, especially with regard to the seemingly “irrational” state/society reactions. Specifically, conventional contentious politics literature argues that state actors in an authoritarian regime tend to hold a repressive attitude (Goldstone & Tilly, 2001, p.188), and, as such, they face the “punishment puzzle,” where state actors consistently choose repression over concession in response to the protests, despite the evidence that the repression may sometimes backfire (Davenport, 2007; Davenport & Loyle, 2012). However, sub-national-level cases studies on protests in China showed that, in fact, state actors at the local level respond to protests with various strategies (e.g. Perry, 1994; Chen, 2012). Indeed, as Yan and Zhou (2017, p.44) stated that “local governments in China enjoy varying levels of autonomy… to deal with collective challengers.” Subsequently, repression is usually the last resort when other control strategies fail. The authors argue that the different responses at the local level were essentially a function of state capacity. While stronger states are more resourceful in employing effective control tactics, weaker states are prone to respond with violence.
Nevertheless, it appears that the local governments have yet to discover the “best practice” to control protesters, because protesters from different localities also respond to the repressive strategies differently. As a result, the popular protests unfolded in various level of confrontational intensity, length of on-street protest time, and number of participants. In some cases, an arguably strong state such as Shanghai may end up resorting to repression, but only found it in a worse position.

From the protester’s perspective, the social movement and contentious politics literature suggests that persistence and disengagement in protests can be explained through individual characteristics, such as biographical availability, resources, and socio-demographic background; the organizational context or the “group-level processes”; and the political environment (e.g. Brady, Verba, & Schlozman, 1995; Corrigall-Brown, 2011; Hirsch, 1990). However, it is unclear, for instance, when do state deterrence and repression lead to the end of a protest and when to an escalation. Why do protesters react differently? Why does the same repressive strategy work better in some localities while in others led to escalated confrontation? The article aims at unwrapping the variations in citizen reaction to state responses and to understand the state-society interaction after a protest breaks out.

Building on the existing literature, I examine the role of collective efficacy in shaping the protesters’ persistence. I argue that civil society capacity is positively correlated with long-term collective efficacy and that the protesters with low efficacy are more likely to disengage when they perceive severe state repression; and that otherwise, they are more likely to persist in adversity. The analysis draws on eight major not-in-my-backyard (NIMBY) protests against para-xylene (PX) facility projects in China from 2007 to 2015: Xiamen (2007), Chengdu (2008), Dalian (2011), Ningbo (2012), Chengdu (2013), Kunming (2013), Maoming (2014), and
Shanghai (2015). I found that the on-street protests in stronger civil society (Ningbo, Shanghai) lasted longer, when faced with repressive policies; on the other hand, protesters in those relatively weaker society (Chengdu, Dalian) disengaged sooner in adversity. Kunming’s case also showed a positive effect of non-governmental organizations in helping society peacefully realize their policy claims.

A Theoretical Model of Protest Persistence

The question of why some protests persist longer, even in the face of adversity, pertains to both state responses and the mechanisms that lead to persistence in social movements. In the contentious politics literature, rebellious activities (such as protests) and state repression have been studied as interdependent concepts (e.g. Gurr & Moore, 1997; Goodwin, 2001; Hultquist, 2017). While threats from protest affect state responses, repressive state actions may in turn either escalate or deter protests, and thus lead to increased confrontation or protest demobilization. On the other hand, studies on social movement and protest trajectories have identified several mechanisms leading to persistence beyond the initial participation (e.g. Corrigall-Brown, 2011; Hirsch, 1990; Nepstad, 2004). Therefore, in this article, I build on Corrigall-Brown’s (2011) trajectory model of participation, and present a theoretical model that combines the two threads of literature. As I connect state responses to the intermediary processes in protest participation, I argue that the collective efficacy mechanism was a missing causal link between the outburst of protests and the persistence outcomes.
Rationalizing state responses

In understanding when and why states use repressive tools, the existing literature, mostly developed from antagonistic conflict cases, has discussed four major factors: the political system, past response success, protesters’ characteristics, and state capacity. The political system hypotheses posit that democracies are less likely to use repressive tools to repress protests (Gurr & Moore, 1997). Saxton (2005) followed Gurr and Moore’s interactive model and found that the level of institutional democracy was negatively correlated with repression. However, the study also found that democratic durability—the number of years as a democracy—had a positive association with repression, possibly due to the long transition period experienced by countries with relatively low levels of institutional democracy. Past response success was also identified as the other crucial factor in Gurr and Moore’s repression equation. Although Gurr and Moore (1997) was mainly concerned with states’ path dependence on dealing with the challengers, Davenport (1996) in an earlier study suggested that past experiences in both state control tactics and democratization are relevant for state responses. In addition, states are likely to be motivated by long-term policy objectives (and would consequently rely on its long-term memory of past events) (Davenport & Loyle, 2012). Protesters’ collective characteristics, such as their motivation to participate, socio-economic statuses, type of protesting actions, the number of participants, and media involvement, determine the level of threats perceived by the state actors and types of applicable tactics (e.g. Casper & Tyson, 2014). For example, in Shellman’s (2006) model of government-dissident sequential responses, governments’ decision depends on the challengers’ level of hostility or cooperation, because the costs to respond to hostility and cooperation differ. Other studies also argue for economies of scale for the protesters—larger protests are more likely to gain attention from key political actors and media, and are more likely
to reach a favorable resolution for the protesters (Lohmann, 1993; Walgrave & Vliegenthart, 2012). Finally, the more recent literature on state capacity suggests that weaker states tend to rely and trigger more violence through its repressive responses (Bell, Cingranelli, Murdie, & Caglayan, 2013; Yan & Zhou, 2017).

The participation trajectory

The literature on persistence in social movements complements the explanations on state responses, as it presents multiple levels of factors from the protesters’ perspective, mainly based on lower-stakes protests. Generally, the persistence literature argues for the importance of intermediary processes in leading to the participation outcome, including experiences with the event or the organization (Drury & Reicher, 2009; Tausch & Becker, 2013), social identity (Nepstad, 2004), organizational integration (Diani, 1997), and group processes (Hirsch, 1990). For example, Hirsch (1990) suggests that group processes such as polarization and collective decision-making reinforce participants’ commitment to the movement and motivate them to even sacrifice individual welfare for a larger cause.

Corrigall-Brown’s (2011) trajectory model of participation captures factors leading an individual from initial participation to four different outcomes, namely, persistence, transfer, abeyance, and disengagement. Briefly, during the participation, individual factors including ideology, biographical availability, resources, and social networks, interact with organizational and relational context, and as such generate different engagement experiences. Such experiences constitute the intermediary mechanisms that eventually lead to persistence or disengagement. Transfer, abeyance, and disengagement essentially describe levels of disengagement, from
moving to another cause, to a temporary halt in movements participation, or to complete
disengage in the playfield. The trajectory applies to participation in social movement
organizations; yet the model framework also parallels findings in voluntary participation in
general (e.g. Gazley, 2013; Penner, 2002; Snyder & Omoto, 2008; Brady, Verba, & Schlozman,
1995). For example, Snyder and Omoto (2008) explain a similar process in the volunteer process
model: multiple levels of antecedents interact and build up to individual experiences such as
volunteer satisfaction and organizational integration, and eventually result in retention or
turnover.

The trajectory model describes two main intermediary mechanisms: social ties and
identities. For instance, individuals are more likely to persist if they maintain interaction with
members who brought them to the movement. At the same time, individual and collective
identities evolve and shape each other during the course of participation; and individuals who
share an “activist” identity are more likely to continue their engagement.

The trajectory model extended

As the model primarily focuses on the in-group dynamics, however, it does not fully
capture the out-group interaction, i.e. the conflict between society and the state, as well as the
intermediary mechanism towards persistence. Therefore, I present an extension based on the
Corrigall-Brown model, and connect state responses to the understanding of protest persistence.

Figure 3.1 illustrates the model of protest persistence. I follow the Corrigall-Brown
model in defining the process from initial participation to outcomes through intermediary
mechanisms, namely, general experiences, identity formation/reinforcement, social ties and
organizational integration. This model recognizes that, to decide whether to persist or not, participants also react to state responses, which are a function of political system, past response success, protester attributes, and state capacity, as outlined in the contentious politics literature. In conceptualizing the mechanism behind such interaction, a common underlying theme has emerged from the literature on persistence—that is, collective efficacy. As Corrigall-Brown (2011) acknowledges in the findings that the individual-level decision to continue is also a function of “the external political environment,” and more specifically, their perception on whether “they will be effective” (p. 127). Similarly, the group processes, in particular, collective decision-making (Hirsch, 1990; Rosenthal & Schwartz, 1989), reinforce both individual and collective efficacy and induce longer participation. Garner and Garner (2011) argue that in addition to organizational integration, allowing volunteer voice has a positive effect on volunteer retention, which suggests that the participants’ individual and/or collective efficacy is associated with persistence. Recent research (Aiyede, 2017) also suggests that “civil society efficacy” affects collective action and political engagement.

Persistence and efficacy

Efficacy is defined as beliefs relating to one’s capability to influence the action outcomes (Bandura, 1977; 2006); and collective efficacy, as a result of interaction among human agency, reflects the group’s perceived capability to produce expected outcomes (Bandura, 2006). While individual efficacy can be measured by assessing individual beliefs on what one can do, collective efficacy can be measured in two ways: either by aggregating individual efficacy, or holistically assessing individual’s perception about the group. As collective efficacy is a product
of group-level dynamics, the literature commonly suggests use of the holistic assessment for outcomes that are only obtainable through group efforts (Bandura, 2006; Goddard, Hoy, & Hoy, 2004; Sampson, Morenoff; & Earls, 1999). Four sources of information influence levels of efficacy (Bandura, 1997; 2000; Gist, 1987; Goddard, Hoy, & Hoy, 2004): mastery experience (prior success/organizational learning), vicarious experience (observational learning from a model), social persuasion (communicating collective capabilities), and emotional arousal (level of pressure, anxiety, or excitement). Among these four routes, although mastery experience has been found to be the most effective drive for shaping efficacy, in an interactive setting, social persuasion is likely the most influential source to discourage persistence (Goddard, Hoy, & Hoy, 2004).

Efficacy has been studied as a factor in initiating participation in protests (Van Stekelenburg & Klandermans, 2013), and evidence shows that self-efficacy positively contributes to protest participation (Van Zomeren, Postmes, & Spears, 2008). Within an organization, efficacy has also been found as an important source of volunteer satisfaction (Boezeman & Ellemers, 2008; Cuskelly, Taylor, Hoye, & Darcy, 2006). Moreover, Van Zomeren, Leach, and Spears (2010) found through an experiment that collective efficacy positively affects group identification and reinforces individual identity.

In the case of protest persistence, I argue that collective efficacy is an important mechanism leading towards persistence, and is influenced by civil society context, as well as state responses. While experiences within the collective may enhance long-term efficacy through mastery and vicarious experience, state responses act as temporary discouraging persuasion against persistence. In summary, a strong civil society is positively correlated with long-term collective efficacy. Meanwhile, the severity of state repression can give a negative shock to
short-term collective efficacy. When long-term collective efficacy is weak, protesters are more likely to disengage in the face of state repression. When long-term collective efficacy is strong, protesters are more likely to persist in adversity.

Case Selection, Data, and Method

To test the collective efficacy mechanism, I examined protests in Xiamen (2007), Chengdu (2008), Dalian (2011), Ningbo (2012), Chengdu (2013), Kunming (2013), Maoming (2014), and Shanghai (2015). These are eight major NIMBY protests against PX facility projects in China, with the Xiamen (2007) protest marking the first incidence against a PX project. I chose the cases mainly based on the most-similar strategy (Gerring, 2017), as these cases share commonalities to a great extent, and therefore I was able to control for individual motivational antecedents, and state-related variables including political system and past response success. The cases also differ significantly in the outcome of interest, i.e. participants’ persistence, as measured by length of on-street protests, as well as the final resolutions. I define the boundary of case inclusion by two standards: (1) protests were covered in both Chinese and English media; (2) protests were directly triggered by an opposition to a PX project.

I specifically selected the anti-PX protests for several other considerations. First, theoretically these NIMBY cases are less likely to cause repressive responses than those antagonistic ones in the contentious politics literature (Eisinger, 1973). Considering the regime context in China, these cases are rather “geographically insulated” and therefore create less concern for the governments over shift in scale (Perry & Selden, 2003). While local governments
enjoy considerable discretion to respond, I did observe use of repressive tools and escalated outcomes in some cases. Second, PX project-generated toxicity risk—the major claim of the protests—was controversial in the mass media conversations; but according to the International Agency for Research on Cancer (IARC, 1999), para-xylene is not classified as a substance that produces cancer. The nature of these protests, compared with other environmental protests, thus, is more ambivalent and subject to framing, and largely intertwines with economic interests of directly related stakeholders.

Given the dynamic state-society relationship in conflict events, McAdams, Tarrow, and Tilly (2008) suggest a process-based approach over the conventional variable-based approach, to identify causation. I attempted to follow the advice of indirect measurement using statistics to pin down the collective efficacy mechanism at work. The analysis compares two constructs: state repression and civil society capacity, the interaction of which directly shapes collective efficacy; and I assessed their relationship with the outcomes of interest. The intuition is that as repression severity increases, a weaker society is more likely to experience short-term decrease in collective efficacy. Protesters in a weak civil society are more likely to disengage in the face of adversity; whereas protesters in a strong civil society against a weak state are more likely to persist.

For key variables, I collected information on types of state repression, length of on-street protests, protest outcomes, and protester turnout from multiple news articles, and cross-reference using journal articles that have discussed the cases in detail (e.g. Gu, 2016; Yan & Zhou, 2017). I coded the severity of state responses and protest outcomes by adapting the scales used in Gurr & Moore (1997). Table 3.1 presents the coding scales. Municipality-level demographic and financial data (2007-2015), and provincial-level social organization data (2015) were collected from the National Bureau of Statistics of China (NBSC) and local statistical yearbooks.
For state capacity, although theoretically institutional and coercive capacity also matter in this case (Yan & Zhou, 2017), due to data availability, the present analysis measures the construct by its fiscal capacity only, in terms of gross domestic product (GDP) per capita and total revenue/GDP ratio. GDP per capita captures the overall economic performance; and the total revenue/GDP ratio captures fiscal resources available to pacify the public.

I measure civil society capacity by the number of social organizations per million population and per capita disposable income of urban residents. The latter one captures local residents’ capacity on consumption and living standards; however, it is also highly correlated with GDP per capita. Therefore per capita disposable income alone does not reflect society’s capacity and has to be taken together with other measures on civil society and social capital. I used the 2015 provincial-level social organization data from the NBSC database. Similar to several state capacity measures, municipality-level social organization data were not available, and unfortunately, equivalent measures were hard to obtain. Nonetheless, I believe that the measure offers a satisfying proxy for understanding variations in civil society capacity among the municipalities, because the geographical disparities among the presence of civil society organizations are most significant at the provincial level due to variations in provincial regulatory policies (Wu, 2013).

Findings from Eight Protests

Table 3.2 listed the protest cases by outcome, from state-win to civil-society-win. As outlined in Table 3.2, the first protest against PX project took place in Xiamen in 2007. Chengdu
had a small-scale protest in 2008 and an aborted protest plan in 2013. All seven cities in the eight cases belong to different provinces or municipality. Initial state responses to these protests varied from minimal law enforcement intervention to pre-emptive control. However, tighter media control was in effect in all cases. Considering the subnational nature of this analysis, I assumed that political system and past response success were controlled for in the comparisons. Upon initial participation, individuals were mostly mobilized through social network tools and participated spontaneously. I thus also assumed that individual antecedents, relational and organizational context were more or less similar across the board, as the events were triggered by the same cause and the mobilization did not significantly rely on any social organizations. The first task was to identify the collective efficacy mechanism and as such I focused on protest attributes, state capacity, state responses, civil society attributes, and the protest outcomes.

In terms of outcome and repression severity, Xiamen and Kunming experienced minimal policing and was offer either immediate public hearings/consultations or concession. In both bases, the project was canceled or relocated to another city. Based on rough approximations for civil society capacity from Figure 3.2, I observed that both cities had medium-to-low per capita disposable income of urban residents. Xiamen, in particular, is located in a province with relatively high social organization density. Although the civil society capacity in Kunming appears unobservable, Kunming was actually the only case where local environmental non-governmental organizations (NGOs) were actively involved in issue investigation and communication. This is consistent with Hsu, Hsu, and Hasmath’s (2017) recent finding that NGOs in Kunming seek supportive relationships with local government officials, and assist the state by “developing solutions to social problems that would then be adopted and implemented on a wider scale by the state” (p.1174).
On the contrary, Chengdu in 2013 received a pre-emptive control. Similar to other protests, activists in Chengdu preannounced a May 4th Saturday “group stroll” (sanbu) plan online. In response, the night before the announced date, Chengdu Municipal Public Security Bureau planned an earthquake protection drill over the weekend on May 4th and 5th, and lined up police around the proposed protest location. Chengdu government also requested local schools and universities to hold classes on Saturday to prevent students from participating in the protest. Police also requested identity verification for purchasing face masks. As a result, the proposed protest did not happen and there was no change to the project plan. Earlier in 2008, there was also a small on-street protest in Chengdu against a PX project in Pengzhou, a city nearby. Due to the lowered issue salience to the government and its small scale, only conventional policing was applied, with standard investigation and detention.

Four out of the eight cases experienced emergency policing. Armed police were deployed for crowd control, and tear gas was used in Ningbo and Maoming. There was violent confrontation between law enforcement officers and protesters. However, as shown in Table 3.2, the length of the protests ranged from one day (Dalian) to seven days (Ningbo). The outcomes also varied from no change of project (Maoming), to a fake concession (Dalian), and to project cancellation (Ningbo, Shanghai). In all three cases that lasted over one day, repressive policing seems to have triggered a larger protester turnout, from the initial less than five thousand participants to over ten thousand. I therefore ask why a similar scale of repressive responses led to permanent demobilization in Dalian, and yet an escalation of turnout in the other cities.

Comparing news coverage at the time of the protests, what characterizes the quick demobilization in Dalian is the immediate “opportunistic” response (i.e. the fake concession) from the Dalian government. In the other cases, it took longer for the local governments to come
up with a satisfying solution. For example, in Ningbo’s case, prior to the on-street protest, the government had addressed the environmental concerns raised by local residents near the proposed facility location. However, realizing that the government did not offer direct commitment to financial compensation, they brought the discontent to a larger scale and framed it as a serious environmental concern that mobilizes more citizens. Another significant difference is that the citizens in Dalian was essentially protesting against an existing facility when the environmental risk was exposed, while in other cases, citizens were protesting against a facility construction proposal. This suggests that the citizens who have persisted were more sensitive to the policymaking process and usually had more strategies, such as issue framing, to speak to the government. Persistence thus reflects a strong belief in getting demands met through collective action. Figure 3.2 demonstrates that the strengths of such belief perhaps positively correlates with the number of social organizations per million population.

In terms of state capacity, Shanghai had the highest GDP per capita at the time of protest, followed by Ningbo and Dalian, with similar GDP per capita and total revenue/GDP ratio. Maoming, on the other hand, reported the lowest GDP per capita amongst all but high proportion of extractive fiscal resources. Based on density of social organizations, Shanghai and Ningbo beat the other two cities by a considerable margin. In addition, it is possible that the social organization density in Guangdong province was mainly driven by organizations registered in Guangzhou (province capital) and Shenzhen (sub-provincial level municipality), rather than Maoming. The actual municipality -level social organization density for Maoming could be significantly lower. Therefore, in the face of repressive responses, protesters in Dalian, though with a large turnout, disengaged after the first day of protest. Although the government promised to relocate the project, the chemical plant resumed PX production after a temporary shut-down.
There was no mass mobilization following the resumed plant operation. In the Maoming protest, the emergency policing was employed due to violent confrontation initiated by some protesters. After the escalation, activists in Guangzhou and Shenzhen remotely supported the anti-PX claim by small-scale on-street procession. With the available statistics, Maoming presents a case with relatively low state capacity in terms of economic development but high in extracting fiscal resources for public use. Therefore, the government was able to obtain an ideal resolution. However, local residents, not perceiving the full picture of state capacity, did not foresee the persisted force in repression, and may have believed that as the protest continues, it could lead to their desired outcome. In the cases of Ningbo and Shanghai, we observe strong civil society capacity and mobilization capacity; and the protests ended with government concession. Using the CGSS 2012 data, I also found that Kunming and Xiamen reported the highest provincial efficacy and were also able to obtain government concession sooner than other cases; in addition, between Ningbo and Dalian, the one with higher efficacy did last longer in the protest.

Addressing the endogeneity: Xiamen, Dalian, and Ningbo

Cases above illustrate that indeed a weak civil society tends to disengage from protests in adversity, whereas a strong civil society tends to persist through the protest until the desired outcome is met. Interestingly, the cases with the longest on-street protest length took place in a strong state with a strong civil society. One hypothesis is that strong states may have overconfidence in addressing non-antagonistic protests and perceive less willingness to use control strategies, such as co-optation, negotiation, and bargaining, that are more sophisticated and require more financial resources.
Although I attempted to control for several mechanisms, with a closer look, one may argue that collective efficacy was not the only mechanism at work that leads to variations in protest trajectory. For example, these cities differ in administrative and financial autonomy: Shanghai is a provincial level municipality; Chengdu and Kunming are the provincial capital of Sichuan and Yunnan Province; Xiamen, Dalian, and Ningbo are not provincial capitals but enjoy sub-provincial-level administrative autonomy and provincial-level financial autonomy; relatively, Maoming holds a lower municipality status in Guangdong Province. Therefore, there were potentially differences in mobilization’s organizational context, society’s ability to catch national or international media attention, PX project’s salience to the city’s economic development, and significant distinctions in other state capacity dimensions. Moreover, the cases span from 2007 to 2015, and China’s most recent presidential transition happened in 2013. We may expect change in national-level political climate after 2013.

Considering these endogeneity sources, we now focus on three cases: Xiamen (2007), Dalian (2011), and Ningbo (2012). The benefit of doing so is to control for Central Government leadership as well as the level of economic and administrative autonomy. These three cities shared a similar level of total revenue/GDP ratio at the time of protest (see Figure 3.2), but Ningbo had the highest GDP per capita, which was about 10,000 RMB higher than that of Dalian and almost 30,000 RMB more than Xiamen. From a fiscal perspective, Ningbo had better economic performance and would cost to cancel the project would be lower than the other two cities. Xiamen had a higher level of extractive fiscal resources, but not by a substantial margin. Based on the repression literature, both cities were less likely to use violent repressive tools, as they possess resources to pacify the protesters. But in reality, only Xiamen responded to the protest with tolerance. It took a long time (around six months) for Xiamen government to
implement a strategic environmental assessment with a public commenting period. The negotiation took place in a public hearing shortly after the public commenting period, and consisted of members of the public, and members of Xiamen Municipal People’s Congress and Xiamen Municipal People’s Political Consultative Conference (Gu, 2016). Since it was also the first incidence against PX projects, it set a precedent for peaceful issue resolution on anti-PX project protests.

On the contrary, Ningbo and Dalian governments resorted to emergency policing. I hypothesized that a weak society tends to have weak long-term collective efficacy and is vulnerable to the repression shock; and that a strong society tends to have strong long-term collective efficacy, and is more likely to persist even in adversity. I therefore compared the civil society capacity between Ningbo and Dalian (Figure 3.2) and found that Dalian had lower consumption capacity than Ningbo and the lowest social organization density at the provincial level amongst the three cities. Different from the cases in Ningbo and Xiamen, the public opposition in Dalian was fueled by previous oil pipeline explosions and as such citizens were sensitive to risks of explosive chemicals. In the beginning, the government attempted to implement the PX project quietly so as to avoid possible opposition. However, once the protest started, the government took firm action immediately to control the crowd. It is possible that local governments in close proximity to Beijing were hyper-alerted about mass mobilization events. But the protesters’ disengagement demonstrates a distinct contrast from the Ningbo protest. The government’s promise to relocate the project may also have temporarily pacified the crowd. Nevertheless, even after the public learned about the resumed operation through news, there were no similar follow-up protests (Gu, 2016). Ningbo protest presents a case where strong society persists until the demand is fully met, even with repressive policing and the detention of
over fifty citizens. The government concession came after the escalation of the protest, and it was a result of both protesters’ persistence and the pressure of solving the conflict prior to the Eighteenth National Congress of the Communist Party of China.

Discussion and Conclusion

This article seeks to fill the gap in the state-society interaction during a protest. I aim to extend our theoretical understanding on protest trajectory by analyzing the causal effect between state responses and the persistence outcome. And thus, I argue that the missing link to making sense of persistence lies in the collective efficacy mechanism. I applied the framework to unpack the state-society interaction in eight anti-PX project protests in China. Such subnational analysis on one specific type of protest cause allows us to control for multiple contextual and individual level characteristics, while analyzing variations on factors related to the collective efficacy mechanism.

Among the eight cases, strong states are usually coupled with a strong civil society. When states adopted repressive tools, protesters in these cities were more likely to persist. On the other hand, protesters from a weaker civil society were more likely to disengage. Through the analysis, I argue that the distinct reactions resulted from the collective efficacy mechanism: because civil society capacity positively affects long-term collective efficacy, and state repressive responses could impact short-term collective efficacy as a negative shock. The theoretical contribution of the article is to highlight collective efficacy as an intermediary
mechanism towards protesters’ persistence outcome, which has been under-explored in the literature.

The model also suggests that the level of collective efficacy changes based on civil society capacity and state repressive responses. In the past few years, local social organizations (as well as media) in China has faced tighter control. Subsequently, the willingness and the belief in making a difference through collective action have also faded. In fact, in 2019, there were two major PX facility construction proposals in Dalian and Zhoushan (a city with close proximity to Ningbo), and no voice of concerns from society has been heard.

I also observed that NGOs played an important role in reaching peaceful resolution and government concession in Kunming’s case. Even though in our analysis, Kunming arguably belongs to the weak civil society group, the intervention of environmental NGOs was a crucial factor that made the outcome in Kunming different from Chengdu, Dalian, and Maoming. Indeed, in state-society conflicts, NGOs have the potential to act as policy fixers that provide information, consultation, and even solutions. Why does the state hesitate to relax regulations on NGOs? As Young (2000) suggests that NGOs/nonprofit organizations may have three different relationships with government: supplementary, complementary, and adversarial. While the state may benefit from NGOs’ supplementary and complementary roles, the state interests may collide with nonprofit advocacy and social movements (Smith & Grønbjerg, 2006). Statistics from 2008 to 2013, from Chinese Ministry of Civil Affairs, show that the total number of registered environmental NGOs in China was around 8,000 for years and they only constituted less than two percent of all social organizations. According to Beijing Non-Profit Incubator (2010), most environmental NGOs were stationed in Beijing, Shanghai, Sichuan Province and Yunnan Province. Their service foci mainly covered environmental protection education, environmental
survey and research, biodiversity and water resources; Chinese environmental NGOs historically had limited and controlled presence in environmental policy-making, legal assistance, and policy advocacy. Nonetheless, Zhan and Tang (2013) pointed out that after Sichuan earthquake in 2008, environmental NGOs did become increasingly visible in policy advocacy field. In recent years, as local governments experience tightened administrative resources, it opens up political opportunities for these NGOs to engage in policy process in collaboration with government agencies.

Many of the existing discussions in social movements and conflict focus on the interaction between Central Government and society/NGOs, as laws and regulations over civil society are mostly shaped at the national level (Hsu, Hsu, & Hasmath, 2017). However, regional differences do emerge, and such variation in protest interactions is not unique to China. For instance, in resource extraction-related protests in Peru, the author found disparities in political opportunity and economic competition at the mobilization stage, which eventually led to different protest outcomes (Arce, 2014). Therefore, future research may explore regional differences in local state responses and protesters’ reactions beyond the mobilization stage in other subnational contexts.

Finally, the study is limited, especially in accurately measuring state capacity and civil society capacity, due to data availability issues; and it also opens more unanswered questions. For example, the analysis presents some evidence against the inverse relationship between state capacity and repressive responses (Bell, Cingranelli, Murdie, & Caglayan, 2013; Yan & Zhou, 2017). Perhaps a follow-up question to ask is “Does state strategy vary by protest type?” Additionally, in the study I was only able to measure collective efficacy through a question framed in a “natural disaster” scenario, future research may explore a more complete picture of
collective efficacy through multiple dimensions such as collective political efficacy, and examine whether the effect of collective efficacy is issue-specific.
Figure 3.1. A Theoretical Model of Protest Persistence

- **Initial participation**
  - Individual antecedents
  - Relational context
  - Organizational context

- **State Responses**
  - Political system
  - Past response success
  - Protester attributes
  - State capacity

- **Intermediary mechanisms**
  - Experiences
  - Identity
  - Social ties/Integration

- **Intermediary mechanism**
  - Collective efficacy

- **Outcome**
  - Persistence
  - Disengagement
Figure 3.2. State capacity (GDP per capita and total revenue/GDP ratio) and civil society capacity (number of social organizations per million population at provincial level and per capita disposable income of urban residents) by protest event


Note: All data were collected for the year of the protest. GDP per capita and per capita disposable income of urban residents are in real RMB values, calculated using the China consumer price index (2010 = 100) from World Bank Open Data (2018).
Table 3.1. Coding Scales for State Repression and Protest Outcomes

<table>
<thead>
<tr>
<th>Severity of state repressive actions (Repress)</th>
<th>Outcome in protests against the para-xylene project (Outcome)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Concession/No policing: Minimal use of law enforcement means; reliance on other state control strategies such as information publication, negotiation, initiation of collective bargaining processes, persuasion.</td>
<td>+2 Civil society win: The project was canceled.</td>
</tr>
<tr>
<td>1 Conventional policing: Use of conventional law enforcement means including non-violent crowd control and standard investigation.</td>
<td>+1 Civil society near-win: The project was relocated to a further location.</td>
</tr>
<tr>
<td>2 Emergency policing: Use of emergency law enforcement means including the presence of military and/or armed police for crowd control, investigation and detention without due process.</td>
<td>0 Outcome indeterminate: Negotiations still in progress.</td>
</tr>
<tr>
<td>3 Preemptive control: Proactive use of emergency restrictive policies and law enforcement means including the presence of military and/or armed police, prior to the protest.</td>
<td>-1 State near-win: The state appears to make concessions in order to demobilize the crowd, but has no intention to follow through.</td>
</tr>
<tr>
<td>-2 State win: No change in the project.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Adapted from Gurr & Moore (1997)
Table 3.2. Anti-PX protests case summaries (2007-2015) ordered by protest outcomes and repression severity

<table>
<thead>
<tr>
<th>Province</th>
<th>Sichuan</th>
<th>Guangdong</th>
<th>Sichuan</th>
<th>Liaoning</th>
<th>Fujian</th>
<th>Yunnan</th>
<th>Zhejiang</th>
<th>Shanghai</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>-2</td>
<td>-2</td>
<td>-2</td>
<td>-1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Repress</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>On-street Length (Day)</strong></td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td><strong>Est. Day 1 Turnout</strong></td>
<td>200</td>
<td>1,000</td>
<td>0</td>
<td>12,000</td>
<td>15,000</td>
<td>3,000</td>
<td>5,000*</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Est. Max Turnout</strong></td>
<td>200</td>
<td>10,000</td>
<td>0</td>
<td>12,000</td>
<td>15,000</td>
<td>3,000</td>
<td>15,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

*The protest started with hundreds of participants in a prefecture-level city in Ningbo. The estimates reflect the first-day turnout when the location of protest was first moved to the central business district in Ningbo.

3. Discussion and Conclusions

I have argued in my project that the recruitment and retention challenges are also subject to the influence of government actions, —which could be either restriction and repression, or collaboration and coproduction. Nesbit, Christensen, and Brudney’s (2018) presented a comprehensive framework identifying factors that shape the use of volunteers. These factors include organizational level characteristics, individual volunteer’s decision-making, and environmental level contexts such as public policy. The authors argue that government support through organizations or by providing improved community infrastructure has a positive effect on volunteering. However, the relationship between the government and nonprofit organizations, or the government and citizens, is not always friendly, and know little about the relevant implications. For example, given that nonprofits can mobilize citizens, when the government intervenes with public funding or regulatory tools, what could happen to the use of volunteers on average? Does such intervention only affect one type of organizations (in other words, would it affect nonprofits that engage in lobbying activities, and how)? When citizens directly confront the state and the state reacts, what could be the role of nonprofit organizations? In addressing these questions, I have found that a collaborative relationship between nonprofits and the government generally presents more participation opportunities for citizens in either volunteering or making their voice heard; at the same time, such effects may differ by nonprofit activity type.

Beyond volunteering, citizens’ voluntary participation in nonprofit organizations generally falls into two categories: monetary contribution (giving) and time contribution (volunteering). On activity type, service and advocacy, as discussed previously, can be distinguished by whether the goods provided is tangible or intangible. I also argue that the
advocacy provision is a unique function of the nonprofits. These two types of nonprofit provisions can be differentiated broadly by the recipients of the goods. In the Ostromian sense, “service” is likely to fall under the toll/club good, as it is usually offered to a defined population, even though the service buyers do not necessarily match the service recipients. On the other hand, “advocacy” has the potential to affect everyone in the public sphere, and reflects characteristics of a public good.

On the nature of voluntary action dimension, nonprofit-type activities draw both donors and volunteers. Mobilizing both populations, is thus of great importance to nonprofit organizations. The existing literature shows that a significant difference between donors and volunteers in terms of motivational factors is that volunteers tend to seek emotional meaning, whereas donors are more likely to be utility-driven (Liu & Aaker, 2008). For a similar reason (the benefit of emotional sense-making), when individuals are highly motivated by a cause, they would prefer to volunteer than to donate money (DeVoe & Pfeffer, 2007; Reed, Aquino, & Levy, 2007).

Building on these insights, I developed a motivational model of citizen participation in nonprofit-type activities (Table 4.1) to be tested empirically in future research. The model conceptually differentiates donors for service activities, donors for advocacy activities, volunteers for service activities, and volunteers for advocacy activities; however, a single citizen may contribute in multiple forms simultaneously. This dissertation project focuses only on volunteering (type (c) and (d) in Table 4.1), as its effect on good citizenship is more direct (Musick & Wilson, 2008, pp. 459-462). In future research, empirically I expect to examine motivational factors that are possibly unique to each type, such as performance efficiency versus policy outcomes for donors, and recognition versus efficacy for volunteers. For example,
focusing on the donor-volunteer differences, experimental studies may be able to gauge donor and volunteer preferences over organizational means of recognition, nature of work, and visual/text characteristics. On the service-advocacy distinction, we can examine how individual and collective efficacy shapes one’s willingness to persist in advocacy/political activities, including grassroots lobbying, public consultation, voting, and protest. For instance, one design to manipulate the level of efficacy is through veto-player voting games. Furthermore, by controlling the nature of the task (service or advocacy), I hope to test whether efficiency-based factors (such as recognition) and democracy-based factors (such as efficacy) are indeed more effective only for one particular task type.

Table 4.1. Citizen Voluntary Action Type and Motivation Alignment

<table>
<thead>
<tr>
<th>Type of Nonprofit Provision</th>
<th>Nature of Voluntary Action</th>
<th>Monetary contribution</th>
<th>Time contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service (Efficiency)</td>
<td></td>
<td>(a)</td>
<td>(c)</td>
</tr>
<tr>
<td>Advocacy (Democracy)</td>
<td></td>
<td>(b)</td>
<td>(d)</td>
</tr>
<tr>
<td>Utility-/Result-oriented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional meaning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivational Differences</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
4. Bibliography

Section 1


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Essay 1


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Ruodan Zhang
Indiana University-Bloomington rz3@iu.edu
Paul H. O’Neill School of Public and Environmental Affairs ruodanzhang.github.io
1315 Tenth Street Skype: rundazhang1990
Bloomington, Indiana 47405 Phone: +1 (812) 272-1466

Education
Indiana University-Bloomington
Ph.D., Public Affairs, June 2020.
Committee: Jill Nicholson-Crotty, Matthew Baggetta, Sean Nicholson-Crotty, Brad Fulton

Indiana University-Bloomington

The University of Hong Kong
Bachelor of Social Sciences, June 2012.
Majors: Politics and Public Administration, Philosophy

Research/Teaching Interests
Public and Nonprofit Management, Organizational Theory, Volunteerism,
Civic Participation, Advocacy, Leadership, Diversity, Public Policy Analysis

Publications


Awards and Fellowships
O’Neill Outstanding Teaching Award for Associate Instructor O’Neill School, Indiana University, 2019

Roy W. Shin Fellowship
O’Neill School, Indiana University, 2019

Social Impact Doctoral Fellow, University of Pennsylvania, 2019

Best Reviewer Award, the Public & Nonprofit Division (PNP)
The Academy of Management, 2019

American Political Science Association Conference Travel Grant, APSA, 2019

Departmental conference travel grants
O’Neill School, Indiana University, 2016-present

Doctoral Fellowship Seminar A, ARNOVA, 2019

Diversity Scholars Award, ARNOVA, 2016-2017

Hatfield Resident Fellowship (Finalist), Portland State University, 2015

HKU Worldwide Undergraduate Student Exchange Scholarship
The University of Hong Kong (HKU), 2011

Serena Yang Award, Global Citizenship Summer Institute Faculty of Social Sciences, HKU, 2010
<table>
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<tr>
<th>Manuscript Under Review</th>
<th>Zhang, R., Haohan Chen, &amp; Jill Nicholson-Crotty. “A new bureaucratic effect: Does government funding to nonprofit organizations crowd out or crowd in volunteers?” (revise and resubmit)</th>
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</table>
| Conferences & Presentations | **2019:** MPSA (presenter), PMRC (presenter), AOM (presenter), APSA (presenter), APPAM (presenter), ARNOVA (presenter & panel chair).  
**2018:** ISTR (presenter), AOM (PNP doctoral consortium), ARNOVA (presenter).  
**2017:** WEAI (presenter), MPSA (presenter), ARNOVA (non-presenting co-author).  
**2016:** ARNOVA (presenter & panel chair). |
| Other Research Experience | O’Neill School, Indiana University-Bloomington  
Research Assistant: Brad Fulton, 2015-2017  
Research Assistant: Anh Tran, 2015  
Research Assistant: Haeil Jung, 2015 |
| The University of Hong Kong | Department of Politics and Public Administration,  
Research Assistant: Helen K. Liu, 2011-2012  
*Mapping Social Service Networks in Hong Kong* |
| Teaching | O’Neill School, Indiana University-Bloomington  
Guest Lecturer, *V336 Management Concepts & Applications II*, Fall 2017: “Introduction to the Nonprofit Sector”  
Guest Lecturer, *N525 Management in the Nonprofit Sector*, Fall 2017: “Ethics” (MPA-level)  
Teaching Assistant to Sarah Larson, *K300 Statistical Techniques*, Spring 2014 |
Service


**Professional Development Chair**, 2017/2018
**Conference Committee**, 2016/2017
**Organizer**, Acting for Presentation Workshop Series, 2017
Association of SPEA Ph.D. Students, Indiana University

**Faculty Facilitator**, Big Questions Program, Office of First Year Experience Programs, Indiana University; 2018

**Student Representative**, Strategic Planning Committee, Division of Residential Programs and Services (RPS), Indiana University, 2018-2019

**Treasurer**, Apartment Community Council, RPS, Indiana University, 2016-2017
**Treasurer**, Student Staff Development, RPS, Indiana University, 2016-2017

**Vice President**, 2017-2020
**Treasurer**, 2014-2017
Apartment & Family Student Council, Indiana University

**Reviewer**, Grameen Foundation Fellowship Review Committee, 2013

Professional Memberships

Association for Research on Nonprofit Organizations and Voluntary Action
Public Management Research Association
The Academy of Management
International Society for Third-Sector Research
American Political Science Association
Midwest Political Science Association
Association of Public Policy Analysis and Management

Professional Experience

**Associate**, Yinzhou Women’s Federation, Ningbo, China

May 2013 – July 2013

Project Associate, Teneo Strategy (Beijing Office), Beijing, China
November 2012 – January 2013

*Planned and coordinated the Rockefeller Foundation’s centennial event Global Health Summit “Dreaming the Future of Health for the Next 100 Years” in Beijing, China*

Intern, Grameen Foundation USA (Hong Kong Office)

June 2011 – November 2011

*Participated in the translation of the "Grameen Guidelines" and the creation of China’s 1st Poverty Scorecard*

Intern, World Vision International (Honghe Project Office)

June 2010 – July 2010

Languages and Skills

Chinese (native), Cantonese (fluent), English (fluent)

LaTeX, Qualtrics, R, SAS, Stata