

**On the Fringes of Formality:
Organizational Capability in Street-Level Bureaucracies in Brazil**

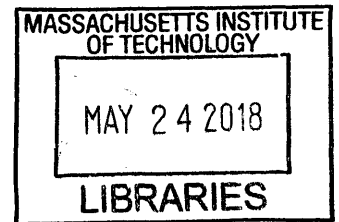
by

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Submitted to the Department of Political Science
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
at the
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ABSTRACT

Middle capability countries have over the last few decades implemented a range of reforms to improve their service delivery systems – and yet have made only marginal progress. Despite better macroeconomic conditions, service delivery outcomes are still lagging behind. This is more than a puzzle, it has been a cause for revolt. Millions and millions have risen in protest demanding improvements in the quality of basic services. When the state is unable to deliver on its core functions, then it highlights a fundamental crisis of the state in these countries.

My dissertation aims to unravel a piece of this puzzle by examining variation in the implementation of a comparable type of reform across the policing, education and industrial policy sectors in Brazil. It does this in particular by looking at intermediate outputs of front-line service delivery units (police units, schools, and innovation institutes), using this as a proxy for bureaucratic administration, which has been shown to be associated with service delivery outcomes. My research finds that there is much variation in these intermediate outputs and that this variation cannot be easily explained by structural factors. For instance, while some schools do very well on these bureaucratic administration metrics in poor neighborhoods, others do poorly in rich neighborhoods.

What lies behind this variation in bureaucratic administration in front-line service delivery units? Drawing on extensive fieldwork over the course of three years, I find that there is a particular behavioral profile among middle-tier bureaucrats – what I call the fringes of formality behavior – that is associated with more positive bureaucratic administrative outputs in the front-line units. Middle-tier bureaucrats practicing this behavior exhibit three main characteristics: initiative, a focus on strategic functions, and an ability to identify and make use

of bureaucratic zones of opportunity. I detail in the dissertation the different categories of action of how the fringes of formality behavior manifests itself in practice. I demonstrate how these categories are consistent across sectors, and then, drawing on case studies and surveys, I show the positive association between the fringes of formality behavior and bureaucratic administrative outputs both within and across sectors.

Ultimately, I argue that the way the fringes of formality bureaucrats behave differs from the “best practices” often advocated by the development and public policy communities. My findings suggest that there may be an alternative path to building a higher capability bureaucracy that does not necessarily involve adherence to top-down rationalistic approaches. Rather, they provide support for identifying those behaviors that are *already* meeting the genuine needs of the local units on the ground – even if they do not seem to adhere to preconceived notions of effective bureaucratic administration – and then nurturing and promoting those behaviors. These findings will have significant implications for how best to improve service delivery by bureaucracies in middle-income countries.

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INTRODUCTION

1. More Than a Puzzle, a Cause for Revolt

Why is it that, despite the abundant resources invested and the largely favorable macroeconomic conditions that have prevailed until recently, “middle-capability” countries have been unable to systematically deliver quality basic services to their citizens?¹ In spite of a wide variety of attempts to improve these crucial public services, from education to public safety, results have failed to meet expectations.

Efforts to build state bureaucratic capabilities have traditionally reflected practices found in developed countries, such as the establishment of large, Weberian bureaucracies, or more recently, models that emphasize less rigid approaches to bureaucratic administration and service delivery, such as those using the private sector as a rubric. Developing countries have applied various frameworks for improving service delivery and bureaucratic reform over the last 50 years – and yet there has been little to no significant convergence to developed country service provision levels.²

This is more than a puzzle. It has been a cause for revolt. Over the past few years, citizens have repeatedly risen in protest across the globe – notably in Brazil – to demand better service delivery and more efficient and fair government. What these protests highlight is actually a fundamental crisis of the state. If states cannot deliver on their basic functions – better quality services – in light of rising wealth, education levels, and expectations, how can they sustain legitimacy?³

This problem demands renewed scholarly and policy attention to how states can better perform these crucial functions, and thus to the performance of state bureaucracies. It also calls for novel approaches to how to resolve this problem. This dissertation responds to this call by focusing attention on the too-often-neglected role of bureaucratic administration in improving service delivery by state bureaucracies. In particular, I ask why there is variation in reform

¹ I define middle-capability countries as middle-income countries that have cumbersome bureaucratic structures and entrenched processes, and lack efficiency in their delivery of basic services.

² Lant Pritchett, *The Rebirth of Education: Schooling Ain't Learning* (Washington: Center for Global Development, 2013).

³ I owe this point to a conversation with Lant Pritchett.

implementation within and across state bureaucracies in middle-capability countries.

The problem of bureaucratic administration is an old one in developing countries. Reformers in earlier eras focused on creating relatively strict Weberian-style bureaucracies. These efforts had limited positive impact, however, on states' abilities to reliably delivery quality basic services. More recent reform initiatives departed from this "command and control" hierarchical model, focusing instead on applying management principles from the private sector to the public space in order to enable greater discretion and initiative in the public sector. Using the results-oriented approach common in the private world, new public management reforms defined targets and incentives without specifying precisely how they were to be met. This approach was intended to enable bottom-up bureaucratic innovation.

While this bottom-up approach has yielded some successes, there has nonetheless been much variation in the results of this reform implementation in middle-capability institutional and political contexts. Such high degrees of variation suggest that this kind of broad reform approach does not fully capture the constituent elements of effective bureaucratic administration. I want to understand why there is variation in the results of reform implementation in these contexts and to identify some of the key outstanding drivers of effective bureaucratic performance.

The literature has repeatedly shown that success in reform implementation is connected to effective bureaucratic administration.⁴ We now know that it is not only formal policy and accurate technical principles that matter – bureaucracy and organization matter as well. But while we know this broad point, we know less about why some organizational units are more successful in the bureaucratic administration of their respective units than others. While much has been written on bureaucratic administration, scholars are still unsure about which specific mechanisms enable effective bureaucratic administration. Indeed, we still do not completely understand why similarly-situated organizations can perform differently in terms of bureaucratic administration, especially in middle-capability environments.

There is considerable uncertainty, in particular, about so-called "street-level bureaucracies." These bureaucracies are tasked with providing services directly to their respective constituents – police departments deliver safety to communities; schools deliver

⁴ Imran Rasul and Daniel Rogger, "Management of Bureaucrats and Public Service Delivery: Evidence from the Nigerian Civil Service," *The Economic Journal* (April 2017), doi:10.1111/ecoj.12418; and Nicholas Bloom, Raffaella Sadun, and John Van Reenen, "The Organization of Firms across Countries," *The Quarterly Journal of Economics* (2012), doi:10.1093/qje/qje029.

education to students; and so on. As a result of their close interactions with the communities in which they function, “front-line” agents in these bureaucracies necessarily exercise substantial discretion in their day-to-day activities, as they innovate in response to new challenges.⁵ Street-level bureaucracies are increasingly understood as a crucial, but often neglected, part of research on bureaucratic administration.⁶ They stand in contrast to logistical and regulatory bureaucracies, such as the post office, social security, internal revenue authority, among others.

I investigate the challenge of improving bureaucratic administration in public sector organizations by looking closely at public sector performance in Brazil, a large, paradigmatic middle-capability country that has struggled with this very set of problems for a number of decades. In particular, I examine why there is variation in reform implementation in front-line service delivery units in three different sectors: policing, education, and industrial policy. These units are tasked with delivering goods directly to their respective constituencies – Police Pacification Units (UPPs) deliver safety to their local communities; individual schools deliver education to students in their jurisdictions; and innovation institutes provide support to local firms for local industrial innovation. In this role, they are the final points of contact between their respective street-level bureaucracies and the constituents.

The selected sectors – policing, education, and industrial policy – represent three different types of street-level bureaucracies in middle-capability countries like Brazil. I chose case studies in each sector in which two things were true: first, reformers sought to apply private sector principles to public sector bureaucracies; and second, there remained tremendous variation in the bureaucratic administration of the front-line service delivery units despite reform attempts.

My question is: Why do some police units, schools, and innovation institutes do better than others? To research the question, I have drawn on semi-structured surveys, with both open- and close-ended questions to examine the behavioral patterns of middle-tier bureaucrats in each of these front-line service delivery units. Having examined 153 units across the three sectors, I have found that purely structural explanations cannot account for this variation. For instance, I found units in the highly-resource constrained areas that far outperformed others in more

⁵ Michael Lipsky, *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services* (New York: Russell Sage Foundation, 1980).

⁶ Evelyn Z. Brodtkin, “Reflections on Street-Level Bureaucracy: Past, Present, and Future,” *Public Administration Review* 72, no. 6 (2012), doi:10.1111/j.1540-6210.2012.02657.x.

favorable settings.

I hypothesize instead that this variation can in part be explained by differences in the bureaucratic administrative practices employed by managers – including police commanders, school principals, and institute directors – in each of these units. Specifically, I argue that whether front-line service delivery units succeed in reform implementation depends in significant part on how these middle-tier bureaucrats approach their responsibilities, and in particular, how they interact with the rules and protocols under which they operate. My analysis shows that the most successful front-line service delivery units are often led by middle-tier bureaucrats who share a propensity for operating on what I call “the fringes of formality.”

Middle-tier bureaucrats who exhibit the fringes of formality behavioral profile share three defining characteristics. First, they are quick to take the initiative. These actors show a strong sense of *de facto* autonomy and are energetic in the pursuit of solutions to organizational challenges within their appropriate sphere in the bureaucracy. Second, fringes of formality bureaucrats very deliberately delegate as many administrative, or routine, functions as possible, so that they can focus on more strategic issues. Lastly, they show an ability and willingness to stretch the limits of protocol or exploit areas where guidelines are not available. These middle-tier bureaucrats identify or create what I term “bureaucratic zones of opportunity” as a way to bypass resource constraints or inadequate or inappropriate regulations. Critically, however, they do it in a manner that husbands their bureaucratic capital. And they do it in a way that aligns with the overarching street-level bureaucracy’s interests, rather than exploiting these “zones of opportunity” for personal gain. In sum, these bureaucratic actors are able to stretch the limits of protocol without violating any regulations, and they do it not for personal gain, but for the benefit of their respective units and organizations as a whole.

My research shows that the fringes of formality behavioral profile is present in the sectors that I study in Brazil. Moreover, the evidence shows that this profile seems to be associated with positive intermediate administrative outputs in front-line service delivery units across sectors. This finding is interesting, in part, because the fringes of formality approach is not typically understood to be “proper” or “optimal” bureaucratic behavior. Nonetheless, my research shows that this behavior does appear to yield positive bureaucratic administrative results, and it does so in a bottom-up fashion. In other words, there are practices currently being developed or evolved in the middle-level echelons of bureaucracies across Brazil – without guidance from senior

management – that are *working*, even if they do not really conform to what is usually understood as best practice. These practices can allow middle-tier bureaucrats to free their respective front-line service delivery units to overcome resource, regulatory, and other constraints particular to the middle-capability environment, and so in ways that are lasting and sustainable into the future.

2. Comparable Reforms across Three Sectors

To investigate this question, I analyze bureaucratic administrative practices in front-line service delivery units across three street-level bureaucracies in Brazil. These bureaucracies were each subject to recent reforms that attempted to apply private sector principles to public organizations. Each of the street-level bureaucracies has seen varied results at the front-line service delivery unit level as a result of the reforms.

2.1. Policing: Police Pacification Units

In policing, I examine variation in one especially important service delivery reform in the state of Rio de Janeiro: the Police Pacification Units (UPPs). The UPP reform initiative was designed to allow police to regain control of territories that had been effectively taken over by drug factions since the 1980s. A major reason that the police had not been able to do so prior to the reform was the fact that many of the police themselves were often connected or involved with these agents of crime. The idea of the UPP reform was to incubate a “healthy virus” within a systematically corrupted police force. The so-called Police Pacification Units were intended to be the virus that would positively “contaminate” the rest of the police force.⁷

The first UPPs were established in 2007. The UPPs were placed strategically within what were effectively besieged communities, away from existing police battalions, and given autonomy to run their counterinsurgency operations in their respective communities. In addition, they were authorized to manage their own career and recruiting strategies. These strategies parallel but are kept separate from those of the force as a whole, so as to provide UPP personnel with independent incentives and insulation from corrupted existing structures. In 2017, the

⁷ Claudio Beato, *Compreendendo e Avaliando: Projetos de Seguranca Publica* (Minas Gerais: Federal University of Minas Gerais, 2008).

program has expanded to 38 UPPs statewide. The units are responsible for 264 territories, involving 9,543 policemen, and policing 1.5 million people.⁸

The UPP reform initiative in Rio is a particularly fertile area of study for several reasons. First, this is a case where reformers attempted to use private sector principles to improve public bureaucratic administration. Specifically, they sought to decentralize authority away from senior officials in the state police bureaucracy. Instead, they empowered front-line service delivery units in the context of what many have referred to as a quasi-war with local drug factions.⁹ This means that the success of this reform – as compared to other reforms that placed less of an emphasis on decentralization – depended to a significant degree on how middle-tier bureaucrats at the front-line chose to fulfill their missions.

This makes the UPP case an appealing way to test the relationships between bureaucratic administration at the middle-level echelon of an organization and the overall effectiveness of reform implementation. This appeal is especially strong given the amount of variation seen in the impact of the UPP reform across different front-line service delivery units. That is, different UPP commanders employed their authorities in different ways, yielding a range of outcomes. This made the UPP case study an even more promising opportunity to better understand how different bureaucratic administration models influenced the success of reform implementation.

Lastly, the question of how to reform and improve policing, including with respect to its organizational aspects, has been explored in the literature. But, existing research has focused primarily on policing in developed-country contexts.¹⁰ Rio, by contrast, one of the largest states in Brazil, is a quintessential middle-capability environment. The UPP reform initiative in Rio therefore offers a useful opportunity to examine the effects of police reform in a developing setting.

⁸ “Unidade de Polícia Pacificadora,” <http://www.upprj.com/>.

⁹ Ignacio Cano, *‘Os Donos do Morro’: Uma Avaliação Exploratória do Impacto das Unidades de Polícia Pacificadora (UPPs) no Rio De Janeiro* (Sao Paulo: Fórum Brasileiro de Segurança Pública, May 2012), <https://riorealblog.files.wordpress.com/2012/07/relatc3b3riofinalcaf13.pdf>.

¹⁰ James Q. Wilson, *Bureaucracy: What Government Agencies Do And Why They Do It* (New York: Basic Books, 1989).

2.2. Education: Secondary School System Reform (2011-2014)

In education, I focus on a series of reforms carried out from 2011 to 2014 in the Rio state secondary school system. These reforms sought to improve the quality of education offered to students throughout Rio by integrating certain private-sector best practices into public school bureaucratic administration models.

The question of how to improve the quality of the education system is a perennial one in Brazil. By the early 2000s, the national government was able to provide access to schooling for most of the nation's school-age population. Soon after, the challenge became how to improve quality across a decentralized system to different tiers of government, with municipalities primarily responsible for primary school, states for secondary school, and the national government for higher education. In the effort to improve quality, local governments have experimented with different types of reforms. The most common among them have been new public management type of reforms that apply private sector principles to the public sector.

One such reform was implemented in the Rio state secondary school system. The main thrust of this reform package was to improve the quality of the school system management, with a particular emphasis on the selection and incentive mechanisms for school principals. This included introducing a series of changes: replacing the appointment system of principals with a meritocratic selection, introducing a school performance pay system, conducting more frequent and robust student evaluations, and setting management targets coupled with monitoring and evaluation systems.¹¹ Overall, the changes sought to strengthen accountability between the education secretariat and the schools as well as between the schools and the community.

This case of educational reform offers a valuable opportunity to test my hypothesis about the relationship between bureaucratic administrative practices and variation in the effectiveness of reform implementation. As with the UPP reform initiative, it does so for several reasons. First, as described above, the school reform agenda focused heavily on applying private sector principles to the administration of a major public bureaucracy. And second, there was substantial variation in the effectiveness of this reform effort. Indeed, from 2007 to 2011, the reform undertaken during the Wilson Risolia tenure scored notable successes. Of particular significance, Rio's students' performance in national standardized testing rose from the bottom of the rankings

¹¹ *Em Números: Transparência na Educação* (Rio de Janeiro: Secretaria de Estado de Educação, 2014).

to among the top five.¹² Yet, the success was uneven across the network of schools, with a wide disparity in results and conditions that are not easily explained by structural factors. Indeed, preliminary evidence from fieldwork showed that schools in rich neighborhoods did not always excel; meanwhile, schools in poor neighborhoods sometimes outperformed their wealthier peers.

As in the policing case study, the Rio state secondary school system is a classic street-level bureaucracy in which much discretion is given to individual schools for how to implement state educational guidance, and in particular, the reform directives. This means that middle-tier bureaucrats in the schools – namely, school principals – had substantial influence over the ways that the reform agenda was carried out. As a result, this case offers another useful opportunity to analyze how different middle-tier bureaucratic administration practices affect variation in the effectiveness of reform implementation.

2.3. Industrial Policy: SENAI Innovation Institutes

In industrial policy, I will examine the case of the SENAI Innovation Institutes. SENAI (Brazilian National Service for Industrial Training) is the vocational training arm of the government. As such, it offers training and professional education programs to firms and companies across the country.

SENAI has somewhat of a hybrid bureaucracy in that it is privately-run yet focuses on a public purpose. Like the systems in the other sectors, SENAI operates in a decentralized manner, with the regions and states having functions and responsibilities within their respective jurisdictions. SENAI delegates much of the responsibility for implementing its programs – that is, providing firms and companies with vocational training – to front-line service delivery units across multiple states in Brazil. As a result, middle-tier bureaucrats have frequent interaction with clients and ultimately have substantial discretion in determining how best to implement their programs in their respective states.

¹²Marcos Vinicius Ferreira de Godoy and Cristiane dos Santos Oliveira, *Experiências inovadoras na Secretaria de Estado de Educação do Rio De Janeiro: como o fortalecimento da gestão estratégica explica o avanço no IDEB* (Brasília: Conselho Nacional de Secretários de Estado da Administração, 2015),

<http://banco.consad.org.br/bitstream/123456789/1248/1/EXPERI%C3%84NCIAS%20INOVADORAS%20NA%20SECRETARIA%20DE.pdf>.

Also like Rio's state policing and education bureaucracies, SENAI recently undertook a major reform initiative: the establishment of innovation institutes across Brazil. These institutes were a response to the SENAI leadership's view that Brazilian industry needed a push toward increased innovation. According to this view, one of the reasons for lagging industrial innovation in Brazil was a lack of communication between academia and industry. The innovation institutes were created as an attempt to bridge this gap and foster increased cross-sector collaboration. Today, the innovation institutes serve a different purpose than the other segments of the SENAI bureaucracy – namely, to promote innovation rather than to provide vocational training. At the same time, however, they are still part of and report to the SENAI larger bureaucracy.

The innovation institute reform initiative offers another valuable opportunity to examine the impact of different bureaucratic administrative practices at the middle echelon of an organization on the effective administration of the front-line unit. As with the policing and education case studies, the innovation institutes are an example of a reform process that applied private sector principles to public bureaucratic organizations, including a system of incentives for best practices and comprehensive monitoring and evaluation mechanisms. And, as with the other cases, the innovation institute reform process has yielded varied results. That is, since their inception, the network of institutes has increased every year and their businesses and collaborations with industry and academia have, as well. However, like in the other sectors, success has not been uniform, with some institutes performing at a much higher level than others. The reasons for this discrepancy are also not apparent: the success cases are oftentimes in the least likely places, such as remote regions with little access to industry, and vice versa. This suggests that differences in bureaucratic administration practices between different institute directors may play a role in explaining variation in the reform's effectiveness across Brazil.

3. What Comes Next...

I have organized the dissertation research in five chapters. I begin by laying out the theory supporting the research. In doing so, I conduct a literature review that provides further, in-depth context for the research question and hypothesis. I then develop and explain my theory of bureaucratic behavior – “fringes of formality” – and why and how it is associated with better bureaucratic administration in the front-line service delivery unit. I provide an encompassing

framework of different bureaucratic behavior profiles in reform implementation for a more detailed prism through which to understand this behavior. Lastly, I discuss the research methodology that will be applied across the empirical chapters.

Drawing on the theory and methodology, in the second chapter I turn to the policing case study. This chapter allows me to test the theory in the most classic street-level bureaucracy. I implement the survey instrument on commanders across 36 of the 38 UPPs in Rio. In addition, I conduct in-depth qualitative case studies to complement the analysis.

In the third chapter, I focus on the education sector, and in particular, on the reform in the Rio secondary school education system. Similarly to the previous chapter, I test the association between the fringes of formality behavior and better intermediate administrative outputs by implementing a similar survey across 98 of the 100 schools in my sample. This time, I interview not only the heads of each respective unit – school principals, in this case – but also three other stakeholders in each school. The larger sample enabled by additional interviews in each unit allows for a more robust test of my theory of the relationship between the “fringes of formality” behavior and bureaucratic administration.

In the fourth chapter, I examine the last empirical case, namely the SENAI Innovation Institutes. I apply a longer version of the survey, with more open-ended questions, to all but one of the 20 institute directors located throughout Brazil. These unstructured conversations allow for additional testing and insight onto the hypothesis from yet another sector.

I use the fifth and last chapter to summarize and compare the findings across sectors while explaining remaining questions. In doing so, I complicate the theory further, discuss potential extensions, and point to areas of future work and research. Lastly, I provide a set of policy recommendations, which are more principles than directions per se, for bureaucratic units that aim to nurture and foster the fringes of formality behavior.

CHAPTER 1: THEORY AND METHOD

1. Literature Review: The Missing Middle

What causes variation in street-level organizational performance in middle-capability¹ countries? Despite extensive treatment of this question in one form or another, the broader scholarly literature is still unsettled regarding why there are differences in organizational performance, including at the front-line units of social services—in other words, social service providers that interface directly with service recipients. Indeed, different strands of literature emphasize different aspects of the problem, and in doing so have helped to illuminate the extent of the challenge. However, the literature does not address other, key aspects of the problem, leaving the question unsettled and, indeed, under-investigated.

The economics and public sector literature, for instance, has focused on the role of incentives to overcome principal-agent² and collective action problems at the local level of service delivery.³ This approach has tended to focus on rationalistic models of individual behavior, often to the exclusion of political, organizational, and sociological variables.

The political science and public policy literature, meanwhile, has concentrated on the political economy of reform, emphasizing the salience of the broader conditions in which reform efforts have taken place. In particular, the literature has emphasized the role of decentralization reform in promoting increased autonomy in a context in which there is limited public sector

¹ Drawing on Pritchett (2013) definition, I use “middle-capability” to characterize countries that are middle income and have institutional and organizational structures that are comparable to developing countries. Examples of middle-capability countries are: Brazil, Indonesia, Turkey, India among others. See Lant Pritchett, *Folk and the Formula: Fact and Fiction in Development* (Helsinki: United Nations University World Institute for Developmental Economics Research, 2013), <https://www.wider.unu.edu/sites/default/files/News/Documents/Folk-and-formula-fact-and-fiction-Lant-Pritchett-5766.pdf>.

² Benjamin A. Olken and Rohini Pande, “Corruption in Developing Countries,” *Annual Review of Economics* 4 (2012), <http://hdl.handle.net/1721.1/73081>; and Ritva Reinikka and Jakob Svensson, “Local Capture: Evidence from a Central Government Transfer Program in Uganda,” *The Quarterly Journal of Economics* 119, no. 2 (2004), doi:10.1162/0033553041382120.

³ Elinor Ostrom, “Collective Action and the Evolution of Social Norms,” *The Journal of Economic Perspectives* 14, no. 3 (2000), <http://www.jstor.org/stable/2646923>.

capacity at the local level⁴ and the constructive role that the central government can play in decentralization reform.⁵ Another strand in this literature has spotlighted the salience of social capital and informal institutions in either complementing⁶ or substituting⁷ for public services in decentralized contexts. And a more recent strand emphasizes the role of politics at more centralized levels⁸ and with respect to more localized groups such as unions and associations⁹ in determining the success of reform implementation on the ground.

The most relevant literature, however, for this study is Wilson and the organizational literature he engaged with and profoundly influenced. Wilson focused on the organizational dynamics and specifics of public bureaucracies and sought to develop models to explain their behavior and variation. In his seminal book, *Bureaucracy*, Wilson laid out a framework by which to predict whether public bureaucracies, facing the substantial procedural and other constraints typical of government organizations, would achieve their designated substantive goals. In his model he emphasized the importance of three key features: a common understanding of the organization's critical task (i.e., the actions that, if performed effectively, would allow the organization to manage its critical environmental problem), a sense of mission, and autonomy. Wilson's account is the most compelling model for analyzing public bureaucracies.

Wilson's conceptual model, however, is incomplete. His analysis focused primarily on the higher levels of the bureaucracy, particularly investigating the way bureaucracies as a whole would perform and the considerations of senior executives within the organization.¹⁰ Other important literature in the field (including Wilson's own work on police) have concentrated on the bottom of the bureaucratic ladder, namely the relationship between the front-line provider

⁴ Gretchen Helmke and Steven Levitsky, eds., *Informal Institutions and Democracy* (Baltimore: Johns Hopkins University Press, 2006).

⁵ Judith Tendler, *Good Government in the Tropics* (Baltimore: Johns Hopkins University Press, 1998).

⁶ Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1994).

⁷ Lily L. Tsai, *Accountability Without Democracy: Solidary Groups and Public Goods Provision in Rural China* (Cambridge: Cambridge University Press, 2007).

⁸ Merilee Grindle, *Going Local: Decentralization, Democratization, and the Promise of Good Governance* (Princeton: Princeton University Press, 2007).

⁹ Alejandra Mizala and Ben Ross Schneider, "Negotiating Education Reform: Teacher Evaluations and Incentives in Chile (1990-2010)," *Governance* 27, no. 1 (2014), doi:10.1111/gove.12020.

¹⁰ Wilson, *Bureaucracy*.

and the citizen – in other words, the outward face and performance of the bureaucracy at the service provision level.¹¹ Another recent strand of this organizations and public administration literature has focused on how bureaucrats can leverage different relationships and social networks to develop and implement innovative practices and solutions within and across institutions.¹² Together, this literature has charted out and illuminated important sociological aspects of bureaucratic behavior in regulatory and other centrally managed agencies.

Yet, the literature is missing a crucial element when it comes to understanding and predicting organizational performance. First and most importantly, the literature has not adequately focused on the significant role that the interaction between the front-line actors (e.g., police officers, teachers and innovation institute professionals) and those at the middle tier (e.g., police unit commanders, school principals, or innovation institute directors) plays in determining bureaucratic performance. These middle-level echelons are themselves highly important in organizational behavior, as they often provide operational guidance and control as well as translate and interpret between the upper and lower levels. Moreover, their interactions with front-line elements can and often do have profound implications for broader organizational effectiveness. The way this middle level operates and the ways it interacts with the lower-level echelons are often different in nature, with different political dynamics, than those active at upper levels. These middle-level echelons often, for instance, have a higher degree of familiarity among members, fewer veto points, more fluid coordination, and different management technologies and situational imperatives. They also have a different political dynamic and pace of change than higher-level echelons do. This different dynamic in the middle level can result in significantly different service delivery outcomes.¹³

It is therefore clear that bureaucratic administration at this middle level has an important impact on organizational performance, and thus on outcomes themselves, yet we do not adequately understand what drives bureaucratic behavior in this echelon. This study takes as

¹¹ James Q. Wilson, *Varieties of Police Behavior: The Management of Law and Order in Eight Communities* (Cambridge: Harvard University Press, 1978); Brodtkin, “Reflections on Street-Level Bureaucracy”; and Lipsky, *Street-Level Bureaucracy*.

¹² Susan S. Silbey, “The sociological citizen: Pragmatic and relational regulation in law and organizations,” *Regulation & Governance* 5, no. 1 (2011), doi:10.1111/j.1748-5991.2011.01106.x; and José Claudio Linhares Pires, “The Reform Process within the Brazilian Electricity Sector” (undated paper), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.4377&rep=rep1&type=pdf>.

¹³ Rasul and Rogger, “Management of Bureaucrats and Public Service Delivery.”

demonstrated that improved administrative *outputs*, including at the intermediate level of bureaucracy, are associated with improved service delivery *outcomes*. This association has been shown in the broader literature,¹⁴ but also more specifically in the policing sector in Rio.¹⁵ Accordingly, the literatures needs to be refined to better account for the factors enhancing – or detracting from – middle-level bureaucratic administration. To that end, this dissertation focuses exclusively on the intermediate level of bureaucracy and better understanding how middle-tier actors' behavior affects bureaucratic administration.

Additionally, Wilson and associated authors focused much less in their analysis on developing country contexts and particularly in middle-capability contexts. As discussed above, these contexts exhibit different characteristics that complicate the application of Wilsonian models. Cultural norms, incentives, legal architectures, and resource availability are usually significantly different in developing countries (as opposed to developed ones) and thus generate different economic, political, legal, and institutional contexts that in turn often translate into different modes of bureaucratic administration and ultimately outcomes. For instance, the persistent lack of financial and human capital resources in developing countries often push bureaucratic actors toward coping mechanisms to make due with fewer resources. Frequent and often dramatic political transitions also cause organizational instability and even changes in management at the local level. In these contexts, bureaucracies often become an uneven combination of burdensome layers of formal rules on the one hand and the absence of rules or their enforcement on the other. This uneven nature of bureaucracies in these environments pushes bureaucratic actors toward informal and even extra-legal behaviors to achieve their goals, such as by circumventing rules or developing informal new norms and practices.

Thirdly and relatedly, the literature has discussed the important role of discretionary behavior by lower and middle-level echelon bureaucratic actors, for instance in Wilson's "coping mechanisms" and in Lipsky and Brodtkin's "discretion," but has not clearly identified particular kinds of behavior typical of such bureaucratic actors in developing country contexts. That is, the

¹⁴ Bloom, Sadun, and Van Reenen, "The Organization of Firms across Countries"; and Rasul and Rogger, "Management of Bureaucrats and Public Service Delivery."

¹⁵ Claudio Ferraz and Bruno Ottoni, "State Presence and Urban Violence: Evidence from the Pacification of Rio's *Favelas*" (working paper, November 2013), https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=SBE36&paper_id=120; and Claudio Frischtak and Benjamin R. Mandel, "Crime, House Prices, and Inequality: The Effect of UPPs in Rio," *FRB of New York Staff Report*, no. 542 (2012), doi:10.2139/ssrn.1995795.

literature has touched on a variety of types of behavior at the lower and middle levels of organization, but has been less attuned to the unique *types* of such bureaucratic behavior, especially in developing country contexts (i.e., where such behavior can be highly influenced by culture, history, and other factors that are harder to generalize across countries). For instance, the Brazilian behavior of *jeitinho* (i.e., the Portuguese term for deal-making and undermining rules) is commonly understood to play a large role in the performance (or under-performance) of Brazilian organizations, public and private, but this kind of behavior is not well factored into Wilsonian-style analyses.¹⁶

There has, however, been a somewhat distinct literature that has begun to shed light on these gaps in the Wilson and associated literature on bureaucratic performance, and in particular, on distinct types of behavior in organizations in developing country contexts. This more recent literature has concentrated on the dynamics of organizational capability in developing countries.¹⁷ This literature has attempted to explain the puzzle of why, despite years of effort by both states and development agencies involving both traditional and newer approaches to public management, many, if not most, developing countries have failed to converge to developed country levels on a range of economic and social indicators, including service delivery.¹⁸

A particularly important strand of this literature has identified as a core explanatory factor behind this continued divergence a strong tendency in such contexts for bureaucratic actors to report or conform to formal structures desired by higher levels, but for folk practice to continue in practice.¹⁹ That is, bureaucracies and actors in the developing world frequently report to the standard even though the actual behavior continues on as before. Thus, while things are reported as having changed, in reality things tend to remain the same or change in ways

¹⁶ Roberto DaMatta, *O que faz o brasil, Brasil?* (Rio de Janeiro: Editora Rocco Ltda., 1984).

¹⁷ Matt Andrews, *The Limits of Institutional Reform in Development: Changing Rules for Realistic Solutions* (Cambridge: Cambridge University Press, 2013); Matt Andrews, Lant Pritchett, and Michael Woolcock, "Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA)" (Working Paper 299, Center for Global Development, Washington, June 2012), <https://research.hks.harvard.edu/publications/getFile.aspx?Id=841>; and Lant Pritchett and Michael Woolcock, "Solutions When the Solution Is the Problem: Arraying the Disarray in Development," *World Development* 32, no. 2 (2004), doi:10.1016/j.worlddev.2003.08.009.

¹⁸ Pritchett, *Folk and the Formula*.

¹⁹ Ibid.; and Mary Hallward-Driemeier and Lant Pritchett, "How Business Is Done in the Developing World: Deals versus Rules," *Journal of Economic Perspectives* 29, no. 3 (2015), doi:10.1257/jep.29.3.121/.

unintended by the management reform. For instance, Pritchett points to a study by Banerjee et al which demonstrated that a program to promote attendance by nurses in Rajasthan, India registered formal compliance with the policy guidance, but only because the bureaucratic actors lowered formal “absences” by raising “exempted” days off.²⁰ This dynamic is likely to be particularly strong with respect to reporting requirements that are associated with rewards, penalties, and incentives; actors will tend to report what upper levels of management want or expect when they have an incentive to do so.

The implication of this literature is that we should be primed to expect direct reporting from implicated actors about formal performance, especially performance related to incentives such as promotion and reputation, to converge toward the expected norm. Yet, we should be skeptical about such reporting because it oftentimes is not a reflection of what is happening on the ground.

In part because of this, rather than seek to apply externally-derived models that are likely to be resisted or ignored, this strand of the literature is more positive about building upon positive folk practices to improve organizational performance. Better, in other words, to identify constructive organizational behavior and replicate or encourage it than try vainly to impose an outside approach.²¹ The literature therefore encourages further research into and charting and understanding of such organizational folk practices so that they can be better comprehended and potentially leveraged to improve outcomes.

In sum, though there has been an extensive literature on the type of problems raised here in some respects, the literature has failed thus far to fully account for why, despite numerous attempts to consistently apply organizational reforms, altered incentives, training programs, monitoring and evaluation schemes, and so forth, substantial variation in bureaucratic performance nonetheless remains common in these middle-capability environments. Broader structural, cultural, and economic factors certainly account for much of this variation, but not all of it; organizational dynamics are behind some of it.

²⁰ Pritchett, *Folk and the Formula*; and Abhijit Banerjee and Esther Duflo, “Addressing Absence,” *Journal of Economic Perspectives* 20, no. 1 (2006), doi:10.1257/089533006776526139.

²¹ Andrews, Pritchett, and Woolcock, “Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA)”;

The literature therefore leaves a puzzle: What are the drivers of organizational performance at this middle level and in its interactions with the front line in middle-capability country contexts? Why is there variation in performance? And, in line with some of the most recent research, what are the folk practices that define behavior in these contexts, particularly folk practices that are associated with positive administrative outputs (and ultimately outcomes)?

2. Hypothesis: Fringes of Formality and Bureaucratic Administration

My hypothesis is that this variation in organizational performance can be substantially explained by an underappreciated but significant and common type of behavior at the middle level of these bureaucracies in middle-capability environments. My contention is that this type of behavior is associated with superior administration of bureaucratic organizations and so improved intermediate administrative outputs – or administrative outputs delivered at the middle-echelon of a bureaucracy.

As noted above, I examine the association between this type of behavior and intermediate administrative outputs as opposed to how organizational performance affects service delivery outcomes. I argue that bureaucratic administration in the middle level of these organizations has an important effect on organizational performance overall. Bureaucratic administration, as the term implies, is the summation of actions taken by mid-level bureaucrats to resource and deploy their teams to accomplish unit objectives. Organizational performance is the overarching effectiveness with which the bureaucracies that these units inhabit are able to deliver services to their clients. I, then, explore a type of behavior that may be underlying variation in organizational performance in street-level bureaucracies. If we can identify what drives better intermediate administrative outputs, then, we can also find out at least some of what ultimately drives better outcomes.

Before discussing what comprises this behavior, I would like to highlight an important characteristic and a few definitions relating to the bureaucracies examined in the study. The selected bureaucracies in the case studies are ones in which the front-line provider is in direct contact with the citizen. A street-level bureaucracy, then, is an organization that interfaces directly with its constituents. For instance, a police department includes all offices within said department, from the Commissioner's office to the mid-level bureaucrats to the beat cop. So, too,

does a school district, again encompassing all offices within said district, from the superintendent's office down to the teachers in an individual school. And so does an innovation institute, from the overarching SENAI governance structure down to the institute employees who interface directly with entrepreneurs. More specifically, these are bureaucracies in which there is a large amount of discretion not only in how to operationalize functions, but also in the broader process in which these functions are conducted. In other words, these are not bureaucracies that are responsible for the delivery of mail or other applications of strict protocols. Rather, they are non-logistical in nature, meaning that they are highly context-dependent and often require discretion and judgment as providers deliver public goods such as education or public safety.

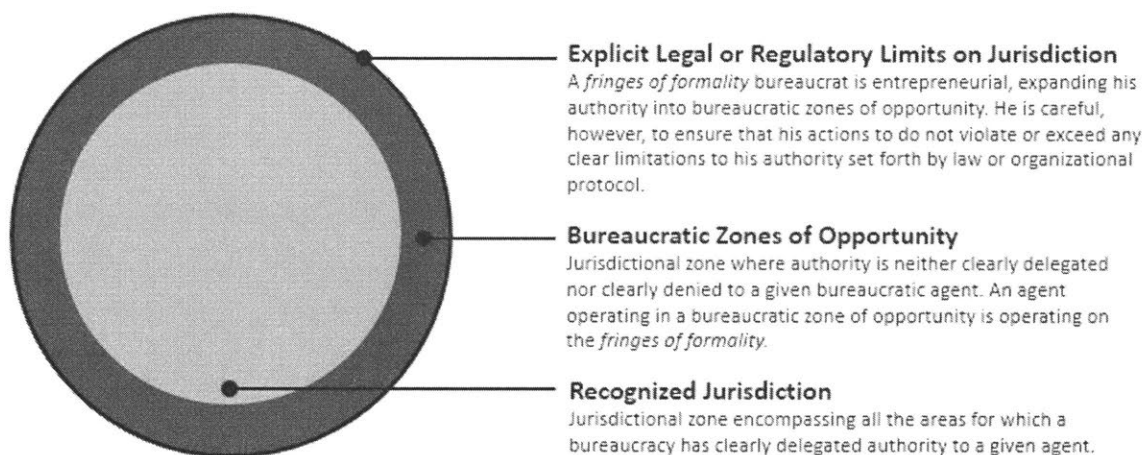
Most of this discretion occurs in the front-line service delivery unit, which is the unit of a street-level bureaucracy tasked with delivering goods to its constituency. In this role, it is the final point of contact between the bureaucracy and the constituents. By this definition, a UPP, school, or innovation institute constitute front-line service delivery units. A front-line agent is an employee of a front-line service delivery unit whose primary responsibility is to interact with the unit's constituents. These agents include police officers, school teachers, and innovation institute professionals, each of whom is tasked with delivering their unit's public goods to the constituents on a daily basis.

A middle-tier bureaucrat has command of the front-line service delivery unit and over the front-line agents that operate within it. These bureaucrats include police commanders, school principals, and institute directors. While middle-tier bureaucrats do interact with constituents, their primary responsibility is not direct service delivery; rather, it is managing the service delivery operation. Also part of this middle-tier are other agents, such as sub-commanders or vice-principals, who work closely with the manager of the unit on tasks related to the administration of the unit.

In doing so, each middle-tier bureaucrat, or manager, has a recognized jurisdiction. This encompasses all the areas for which a bureaucracy has clearly delegated authority to a manager. Just beyond the recognized jurisdiction, however, lie bureaucratic zones of opportunity. These zones encompass all the areas for which a bureaucracy has neither clearly delegated nor clearly denied authority to a manager. A manager operating within a bureaucratic zone of opportunity is operating on the fringes of formality in order to advance his unit's and organization's interests.

A middle-tier bureaucrat who mindfully operates on the fringes of formality – hereafter referred to as a *fringes of formality*²² behavioral profile or approach – has three defining characteristics. The first characteristic is initiative, meaning an active middle-level echelon operating autonomously within its jurisdiction. In the case of the police pacification units, the relevant manager tends to be the commander of each unit, in education the school principal, and in the innovation institutes the director. The managers who exhibit this behavior in the middle-level echelon are not passive recipients of delegated functions and responsibilities. Instead, they are entrepreneurial. They are actively engaged in their mission, deliberately seeking creative, more efficient ways to achieve the goals they are assigned or that they choose for themselves.

Figure 1: Zones of Bureaucratic Jurisdiction



What distinguishes the managers (e.g., police commanders, school principals, or innovation institute directors) in this middle-level echelon from those in higher or lower echelons is their unique perspective on bureaucratic functions. Situated as they are between front-line service providers (e.g., the police officer, teacher, or institute project leader) and higher authorities (e.g., the police commissioner, the school superintendent, and SENAI regional directors), they are singularly positioned to simultaneously understand the dilemmas that front-

²² I am grateful to Roger Petersen for this phrase.

line agents face while recognizing the limits accepted and imposed by higher authorities in the interest of the overall organization.

This perspective – unique to middle-tier bureaucrats – enables the second characteristic of the fringes of formality behavioral profile, which is a deliberate focus on strategic functions while having a dynamic view of all categories of functions. The middle-tier bureaucrats who exhibit this characteristic spend more time on particular types of functions that require judgment and deliberation (i.e., that are “strategic”) and less on more routinized functions that are logistical and operational in nature (i.e., the “administrative”) and that can be delegated.²³ These actors practice different categories of functions in a hybrid and dynamic manner: they are comfortable wearing different hats in a short period of time. The managers who fit this model are nimble in shifting gears and toggling in between functions.

In the SENAI case, I introduce interpretative functions as another category of functions that directors spend time on besides administrative and strategic functions. Interpretative functions follow the Lester and Piore framework and thus provide another category of functions that are a step further into abstraction and are far less programmatic than strategic functions.²⁴ An interpretive approach to problem-solving in the innovation institute context emphasizes brainstorming and creative thinking in a more open-ended manner. As opposed to having a specific goal that requires planning and strategy, interpretative thinking is about embracing the lack of structure to brainstorm new and often unprecedented solutions to different sets of challenges. In the context of innovation, in particular, it makes sense to include this additional category of functions.

In addition, this middle-level cadre has a managerial view of their functions in which they delegate parts of the work to others, namely subordinates who are also working in the same unit. This focus on strategy helps them to distinguish between the functions that cater to their comparative advantage as a manager of the overall unit and those that would be better served by others in their unit. This active and dynamic form of delegation allows middle-tier bureaucrats to

²³ I am adapting Lester and Piore’s analytic and interpretive functions distinction in the context of technological innovation to a context of service delivery. In this case, an interpretive function, or the “Word-like” kind of canvas thinking in the context of innovation, is adapted to reflect a strategic and planning function in the context of service delivery. See Richard K. Lester and Michael J. Piore, *Innovation: The Missing Dimension* (Cambridge: Harvard University Press, 2006).

²⁴ Lester and Piore, *Innovation: The Missing Dimension*

be more efficient in the use of their time, thereby granting them increasingly more time to focus on their strategic targets and objectives.

The third defining characteristic of the fringes of formality behavioral profile is a manager's ability and propensity to exploit his authority in areas regarding which a bureaucracy has neither clearly delegated nor clearly denied authority to them. Fringes of formality bureaucrats take the initiative and, drawing on their understanding of their unit's strategic role in the given organization, devise creative ways by which to exploit this ambiguity in order to achieve their goals. Middle-tier bureaucrats who have exploited this ambiguity have identified, developed, or created "bureaucratic zones of opportunity."

That is, these managers improvise to address problems and challenges, but within the scope of rules and the boundaries of protocol. They make positive use of any opening and flexibility in protocols, rules and regulations, consciously husbanding and employing their bureaucratic capital to achieve results. This type of middle-tier bureaucrat is able to get around restrictive rules and counterproductive protocols through imaginative methods, but they do so both legally and without hurting the organization. Their creation and exploitation of bureaucratic zones of opportunity are intended and used for the good of the organization, not for personal advancement or gain.

As a note, throughout the dissertation, I will refer to rules as written regulations or principles governing conduct, while protocols refer to the organizational regulations that govern processes and practices. Whereas the former relates to individual procedures, the latter relates to systems of procedures that can be interpreted jointly and likely have an influence on one another.

In particular, when middle-tier bureaucrats operate at the "fringes of formality," they avoid trying to solve problems by creating new institutional structures and procedures. They are thus frugal in the use of their bureaucratic capital. They look to solve problems by creating more tailored – and typically less formal and cumbersome – methods and procedures, even if more formalized structures would be more "by the book." They are thus able to identify, develop, or create bureaucratic zones of opportunity in order to operationalize their practices within the organization.

Yet, the managers practicing this behavior are aware that this informal behavior has to coexist with the formal protocols and rules of the bureaucracy as a whole. They have a keen sense of what the formal demands. As a result, while they are de facto practicing this behavior

within an identified zone of opportunity – their respective pacification units, schools, or innovation institutes – they are de jure projecting formality to the rest of the corporation or larger bureaucracy and the outside world. They are careful to show that they always abide by formal rules and protocols, while being quick to pragmatically or flexibly interpret any action at the “fringes of formality” in order to achieve their ends.

On this point, it is important to highlight that the concept of the “fringes of formality” inevitably implies a tenuous line in which it is oftentimes difficult to deliberately demarcate where to draw the line. Thus, there are many ways in which managers with the fringes of formality behavioral profile can relate to the law and the effective application of rules and protocols. In finding the zone of opportunity to act within the bureaucracy, they can enforce the law in a different manner or they can selectively choose not to enforce the law. Yet, in the latter case, it is important to highlight that it is not equivalent to breaking the law or conducting any activities that are in any form illegal. Instead, these middle-tier bureaucrats are able to develop and assert their power within the boundaries of what is legal in the service of the organization’s mission. I will further elaborate on what that actually means in practice through the examples in the next section.

It is also important to make clear what this behavior is not. This behavior is different from the *jeitinho* prevalent in Brazil. In Brazilian culture, the *jeitinho* is often glorified as a clever way to reach goals immediately rather than having to go through existing protocols and rules. Yet, while the *jeitinho* may sometimes advance the interests of the individual, its accumulation generally has a negative effect on institutions and organizations by undermining institutional authority and legitimacy and by ultimately resulting in the creation of more rather than fewer rules to try to control and channel this behavior.

In contrast, the behavior I identify is not a method of circumventing rules or undermining them, but rather a flexible and pragmatic way of working within often overly formalized and inflexible structures to achieve validated, proper organizational ends. It is a positive behavior that not only contributes to the middle-tier bureaucrat achieving his immediate goals as a designated organizational actor, but also to the overall healthy functioning of their respective unit and, over the long run, of the organization as a whole.

The hypothesis, then, is that a front-line service delivery unit has stronger bureaucratic administration when there is a middle-level echelon demonstrating initiative, practicing strategic

functions and operating at the edges of what is viewed as formal by the system. The independent variable is this bureaucratic administrative behavior – hereafter referred to as the “fringes of formality” behavioral profile – that is composed of the three characteristics described above.

Of note, the presence of one or two of these characteristics is not sufficient to produce improved intermediate administrative outputs for reasons described below. What this means in practice is that, for police units, schools, or innovation institutes in which only one or two of the three elements are present, then the practices exercised by the middle-tier bureaucrats are no longer as “organizationally constructive” as with the three elements together. The combination of these three variables itself – as opposed to one or two of them in isolation – is critical for the positive association with better intermediate administrative outputs.

The study’s dependent variable is bureaucratic administration, represented by indicators that measure bureaucratic effectiveness and efficiency within the front-line units of service delivery. Importantly, I hypothesize that this behavior is correlated with more positive intermediate administrative outputs, not directly to service delivery outcomes. Accordingly, this chapter focuses on outputs relating to subjects like order and discipline, levels of communication, management of resources, and the like (e.g., metrics of organizational effectiveness and efficiency of the service delivery unit), and not to ultimate outcomes (e.g., crime and robbery rates or school dropouts and enrollment). In particular, I examine the mechanisms through which intermediate administrative outputs can be affected through the implementation of these reforms. As noted above, such improved outputs have been demonstrated to contribute to improved service delivery outcomes.

In addition, although I examine three different case studies in three different sectors in the following chapters, the point of these cases is not to evaluate the reforms conducted in each respective sector. Rather it is to leverage these examples as a platform to examine a potential driver of variation. For instance, the next chapter will examine variation in organizational performance within the UPP reform. Yet, the goal is not to evaluate if the UPP reform yielded improved public safety outcomes, but to use this example as a case study to look at the variation in organizational performance across police units.

I must caution that this dissertation’s contention is not that this behavior is the sole or even the primary driver of overall organizational performance, let alone improved service

delivery outcomes. In other words, there could be other variables that could be playing a role in the link with intermediate administrative outputs, and especially with outcomes.

Nonetheless, I argue that the role of this particular behavior is *important* in these middle-capability contexts. Moreover, this study is likely to result in more concrete and implementable findings and recommendations because the behavior of actors in organizations is more susceptible to investigation and influence than deeper factors like culture, local politics, and the like. In other words, even if this is not a “silver bullet” – in fact, a central idea of this dissertation is to move away from this kind of thinking – it is nonetheless potentially a highly important piece of the puzzle.

3. The Four Faces of Fringes of Formality

As described above, fringes of formality bureaucrats find or create opportunities within the rules and regulatory framework to reach their goals in the organization. They have the initiative and spend time on strategic functions, but most importantly, they are able to either recognize or create an opportunity to be able to effectively operate and implement their strategies and goals in the organization. In doing so, they are approaching rules and protocols in a particular manner: they are able to interpret rules in a way that is favorable to their objectives. This oftentimes means that they find an opening in the rules – a bureaucratic zone of opportunity – by either stretching its interpretation or mixing different layers or sets of protocols within the organization’s regulatory framework.

Yet, in doing so, they are not breaking or even bending the rules. Instead, they work within the boundaries of what is formally expected, but do so in a creative and flexible way that is favorable to their organizationally valid objectives. In contrast to the *jeitinho* bureaucrats, their actions are not shortsighted; their main aim is not to find shortcuts. Rather, the fringes of formality bureaucrats are able to reconcile and oftentimes align their unit’s immediate goals and needs with those of the broader organization. As a result, their actions benefit not only their units, but also the whole of the organization. These actions usually consist of intermediate solutions that can be nurtured over time into constructive organizational change and reform. Unlike the short of the mark bureaucrats, the fringes of formality bureaucrats have the

organizational awareness and ability to put their good ideas into practice, especially when doing so takes time, patience and persistence.

In practice, the fringes of formality behavioral profile expresses itself in four different categories of action, namely different approaches to the environment in which the fringes of formality bureaucrat finds himself. These categories of actions occur in a range of organizational contexts that are fundamentally characterized by differences in the presence or absence of rules and protocols within the organizational regulatory framework. Fringes of formality bureaucrats react in characteristic ways to each of these four different environments. The first two categories of action (i.e., inventive satisficing and camouflaging) are most often seen in circumstances where protocols are present whereas the second two categories of action (i.e., freestyling and street-level diplomacy) are most often seen in circumstances where protocols are absent.

3.1. Inventive Satisficing

I term the first category of action in response to a particular environment “inventive satisficing.” It usually occurs in circumstances in the bureaucracy where rules and protocols exist, but there are simultaneously insufficient resources to draw upon to follow them in the way that is expected by the regulatory framework.

In this circumstance, fringes of formality bureaucrats are able to find or create approaches that allow them to fulfill the performance expectations set for them by their organizations – without violating any established rules or protocols – despite insufficient access to resources. They do so through the process of inventive satisficing, or the realization of new pathways – more simple and reaching a larger number of people – for accomplishing conventional goals within the organizational unit, especially by working with different stakeholders and building alliances both within and across units or finding alternative ways to leverage the unit’s resources.

Different examples from each sector can illustrate how inventive satisficing can occur in the daily operations of the front-line bureaucratic units. In policing, inventive satisficing mostly occurs in situations where the front-line actors are trying to accomplish their daily routines and timetables but are restricted in terms of the resources that are available to them. The absence of resources range from a general lack of human resources available (e.g., men on the streets) to limitations in basic equipment (e.g., ammunition and bullet-proof vests) and resources to manage

their unit's administration facilities. The fringes of formality bureaucrats who manage the front-line actors are neither intimidated nor discouraged by the lack of resources and the tall order of protocols. Instead, they manage to accomplish the tasks that are required of them despite the lack of resources. For instance, one UPP commander coped with the lack of bulletproof vests required to conduct community-patrolling timetables by creating a rotation schedule of vests among the policemen. This rotation schedule was highly sophisticated, drawing on intelligence data to weigh the probability of vest use, or the likelihood that a police officer would be attacked, given the intensity of conflict that a given policemen was expected to face during duty. In this case, the bureaucrat was able not only to cope with the lack of equipment, but also used the resource-scarce context as an opportunity to use intelligence data in a more creative manner in order to better understand his operational environment and use limited materials more efficiently.

Similarly, in education, inventive satisficing occurs as an approach to manage school operations without disruptions that often stem from the lack of resources available to meet protocols. This approach oftentimes translates into new ways to work around existing systems of technology that are not functioning in a way that meets the school's demands. For instance, the Secretariat established a protocol in which parents and students are both notified about student attendance. However, one principal found that they did not have the resources to be able to contact the parties involved in a frequent manner given the high number of students who were not attending classes in the proper manner. Since the Secretariat's protocol established that parents had to be "aware" of their children's attendance but did not delineate how this "awareness" was to be achieved, the principal leveraged this vagueness in the protocol to find a new, more effective manner to meet the protocol despite the constraint in resources. The principal decided to physically post on the school mural the attendance lists so that everyone could publicly see and comment on the lists. The open publication of the lists generated an increased awareness among students and parents who would comment on each other's attendance. As a result, the new strategy led to an overall decrease in student absenteeism and had a greater impact than the more conventional and human resource intensive manner to get in touch with parents. Other examples of inventive satisficing in schools are related to new and alternative ways to manage resources and raise funds to meet school obligations.

In the innovation centers, the institute directors who share the fringes of formality behavioral profile also practice inventive satisficing – yet they do so in a very particular manner.

They approach rules and protocols in a way that strategically avoids the unequal resource distributions or outright lack of resources that are present across the network of institutes. Since the units are strategically located across the country, they each have very different starting points depending on the region in which they are located. If they are located in a more industrially prominent region, they are bound to have more opportunities and structural conditions in place to be able to meet expected protocols and rules and vice versa. These inequalities across institutes stimulate inventive satisficing.

For instance, one director running an institute in which all the cards are stacked against it in terms of structural factors (e.g., it lacks geographical proximity to industrial poles and networks) had to import a range of equipment to be able to develop the unit's activities in the institute; yet, there were no mechanisms in place to be able to import this equipment. This means that there was not an established office to conduct the required imports. To confront this challenge, the director strategically avoided the apparent course of action which would have been to create the unit in the regional directorate. Going this route would entail a cumbersome implementation process. Instead, the director satisficed by creating a more modest and tailored unit structure that would abide by the import protocols while also coping with the lack of resources to develop a more comprehensive operation. The aim in this effort was to develop and demonstrate success in this new line of import activities and eventually be able to scale the operation to a full-functioning unit within the broader organization in the region. It was a step-by-step incremental approach that would gain traction as the operation evolved as opposed to starting with the large office and hoping that everything else would follow.

3.2. Camouflaging²⁵

I term the second category of action “camouflaging.” It usually occurs in an organizational context in which there are protocols but the protocols are counterproductive to some important degree. The middle-tier bureaucrat who exhibits the fringes of formality behavioral profile reacts in a way to adapt current structures and procedures to accommodate the challenge in a new – yet understated – way. In essence, what he does is to keep the form but

²⁵ The use of this term in this organizational context borrows from how DiMaggio and Powell and then Lant Pritchett have used it; Pritchett, *The Rebirth of Education*.

change the content of what is being done. He does so by absorbing and refitting new practices within the organization while apparently seeming to mimic the normal, conventional methods. As a result, by “clothing” the new practices in conventional organizational structures, the fringes of formality bureaucrat is able to subtly and effectively adapt existing counterproductive protocols without creating any major ripple effects within the organization.

For instance, in policing, commanders are frequently faced with competing demands given the pressing nature of their business – counterinsurgency – and the resource scarcity that they have to cope with in the implementation of protocol. Due to the unpredictable nature of counterinsurgency, many of the policing protocols have to be adapted depending on the demands of a given circumstance. For instance, one commander received an order from superiors to construct a barrier in the entrance of his community. Yet, he did not have the personnel required to man the barrier while also maintaining the safety of his unit and moving forward with his other operations. In response, the commander camouflaged the protocol by creatively arranging the police allocation timetables. For example, when he needed fewer men in his unit, he would send them to the entrance of the community and would have them rotate back and forth in between the unit and the barrier. These men were toggling between operational and administrative functions in the span of hours. Ultimately, the commander was able to maintain the semblance that the higher order protocol was being closely followed while also not detracting from the internal demands of his unit and the safety of his ongoing operations.

In education, fringes of formality principals practice camouflaging in a variety of ways: adapting rules, creating incentives to adapt policy, and mimicking formally established methods while doing something slightly different than protocol. For instance, the regional secretariat had deemed that schools had to develop social projects to promote increased integration and solidarity within their communities. Some of these projects are sports related and involve sending students to play sports in nearby locations. However, in one school, the principal thought that it was dangerous to do so because there were rival drug factions in the area, and exposing the school’s students to playing in a rival faction location could potentially endanger their lives. In order to manage the threat while also attending to the protocol, the principal camouflaged an internally administered championship in locations that would guarantee the student safety. Ultimately, the principal drew on her local knowledge of the scope of faction rivalry to effectively adapt the existing protocol to attend to the safety concerns of both her school and

those located in rival locations. In doing so, the principal was able to maintain the protocol in broad terms while also benefiting the students and the communities as a whole.

Camouflaging is also a common practice among the fringes of formality directors in the innovation institutes. This is partly due to the organizationally conflicting nature of the mission of the network of institutes. The institutes that are embedded within SENAI have to operationalize a new mission – promoting technological innovation – within the SENAI organizational structure originally designed for an old mission of promoting vocational training. The SENAI organization is 70 years old and has a robust bureaucracy that the institution has created to support its hundreds of vocational training hubs across the country. This bureaucracy, by definition, does not naturally lend itself to new lines of business, let alone to one that is as amorphous and sophisticated as the business of innovation. As a result, the directors of the institutes face much resistance within the organization when they try to reform conventional practices. To surmount this organizational resistance and the tyranny of counterproductive protocols, the directors draw on many types of camouflaging.

In practicing camouflaging, innovation institute directors draw on different strategies to maintain the same appearance and form of what the conventional organization does while introducing new content and practices into the bureaucratic structure. For instance, SENAI has a protocol that the new innovation institutes will not conduct training, given that is the business line of the conventional platform, but rather that they should focus on promoting innovation. Yet, one director thought of a manner to conduct business development for the innovation institutes that would leverage the conventional training platform. He developed a training center within the innovation institute. In doing so, he adapted the counterproductive protocol that the innovation institutes were not supposed to engage in training. Instead, this director saw training as an opportunity to leverage the reputation of SENAI and bring new clients into his institute's sphere of influence. The intention behind this approach was that the training would provide an opportunity within the formal structures to develop new relationships along the lines of innovation.

3.3. Freestyling

I use the term “freestyling” to characterize the third category of action in which the fringes of formality behavior occurs. This approach usually happens when a fringes of formality bureaucrat is confronted with a challenge in an organizational context where there are no written rules or protocols as guidance. In other words, freestyling happens in circumstances that involve uncharted territories and that have not been directly addressed in the regulatory framework. In these cases, the approach that the fringes of formality bureaucrats pursue is one that includes improvisation and a strategic audacity to create and develop solutions to these unanticipated challenges. They do so by toggling different sets of responsibilities and thus moving back and forth between different echelons in the bureaucracy. These solutions are usually based on long-term thinking and tend to evolve from intermediary and oftentimes ad-hoc solutions to more institutionally established and cohesive practices.

Each sector provides different examples of the freestyling category of action. In policing, for example, this practice usually occurs when policemen are pressed to conduct an operation in a certain way, mostly determined by intelligence and strategy, and yet they come across challenges for which there are no protocols available. For instance, one commander needed to position policemen in one place in the community where there was an ongoing conflict. It would not be strategic to have them in the UPP and thus he needed to find a temporary location where they could be based. However, there was no guidance in the regulatory framework about how to create temporary bases during counterinsurgency operations. The commander also lacked the resources required to set up a temporary base. As a result, he freestyled by using an abandoned structure (i.e., large container structure that used to hold water) that had been left over by the newly privatized water company, CEDAE. He drew on a structure that was somewhat unnoticed in the community to create an additional bunker for his men at no cost. In doing so, he independently reached out to the relevant municipal authorities to get permission to use the existing structure while also moving forward with the operation in a timely and cautious manner.

In education, the principals often have to manage situations that arise due to increased access to schooling and changes in societal values and technology for which there are no protocols. Over the past two decades, access to education has dramatically expanded and increasingly reached poorer segments of the population, whose parents have not had the same

exposure. As a result, principals oftentimes have to teach students basic elements of civility such as how to ask for things politely and how to relate to authority. The fringes of formality principals create protocols to respect a delicate balance between maintaining the school standards while also allowing the students to gradually absorb and conform to the new standards. For instance, one director found that students were always tempted to check their phones during class and that the temptation prevented them from paying attention. The director freestyled by creating a new protocol where teachers instituted a break in the middle of class for students to be able to check their phones and then go back to work. The new protocol led to increased attention spans and participation in class from students.

In the innovation institutes, as well, the directors are often confronted with circumstances for which they have to create new protocols. The reason is that they are working to absorb a new mission of innovation within a platform that was originally designed for a different set of activities: vocational training. As a result, they find themselves in situations where they have to invent new protocols to deal with the new circumstances that the organization has not had experience dealing with before. In those circumstances, in which there are no protocols and no resources, they frequently freestyle. For instance, one director was developing a patent proposal with a client, yet the SENAI conventional platform did not have any protocols on how to proceed and had somewhat vague rules that did not allow for the innovation institute to be able to hold a patent. As a result, the director freestyled by setting up an arrangement where the researchers would individually co-share royalties with the client. Given the constraints of the conventional model, the director was able to create a “new label” within the formal structure so that they could still move forward with the innovation process.

3.4. Street-Level Diplomacy

I term the fourth and last category of action “street-level diplomacy.” Street-level diplomacy involves situations where the fringes of formality bureaucrat creates space within the formal structures to deal with informal and unstructured situations *outside* the organization. In other words, while freestyling occurs with internal stakeholders, street-level diplomacy occurs with external stakeholders. Fringes of formality bureaucrats are not taking over jobs heretofore done by street-level bureaucrats. Instead, they are *complementing* them by creating entirely *new*

modes of interaction between the bureaucracy and external stakeholders. These external stakeholders usually comprise the client of the service delivered, namely either the community in policing and education or the firms in the innovation institutes. In this category of action, the middle-tier bureaucrat who exhibits the fringes of formality behavioral profile goes out of his way to be able to integrate a relationship with the informal into the formal structures of the bureaucracy. In doing so, the bureaucrats see the interaction with the informal as a means to a broader and more sophisticated end than the simple one off interaction. The bureaucrats understand these interactions with external stakeholders as a repeated game, and that these external stakeholders have to be nurtured and worked with – that they can be allies to the bureaucratic unit's overall purpose. Instead of seeing these stakeholders as a challenge or even as a nuisance that has to be dealt with or appeased, the bureaucrats see them as necessary stakeholders – and potentially allies – in the reform process. Drawing on this perspective, they find creative ways to build bridges between them. In doing so, they leverage commonalities to build alliances and gradually nurture the relationship to diplomatically engage them in problem-solving and other activities that affect the unit and ultimately the community as a whole.

Street-level diplomacy has many varieties, but in policing, it primarily either relates to circumstances that engage with residents of the community or with the drug lords and their gang members. For instance, it is common for there to be rave parties in these communities. These are events disguised as “community parties,” but their real purpose is to sell drugs and for the most part they create much havoc and oftentimes lead to violence and conflict that endanger community residents. Since these events are informally authorized by politicians who also benefit from the narcotics trade, the commanders are often effectively powerless to interfere.

However, one commander acting on the fringes of formality did not stand by apathetically in the face of such a situation. Realizing that he did not have the resources or the authorizing environment to root out the drug problem in its entirety, he decided to focus his scarce resources on containing the problem and avoiding violence. While he deliberately looked the other way on the drug dealing, he managed to find a specific envoy close to the drug lord to explain that the party had to be peaceful and not put anyone in harm's way. To ensure that his request would be respected, the commander made a credible threat that he would confront any disorderly conduct and as deterrence left a number of his men strategically placed near the party. Ultimately, the commander in the example above was able to manage a disorderly situation to

preserve the goal of peace despite the drug dealing that would occur in the party. In this case, he did not actively enforce the law, but he also did not break it. Instead, he was able to find power – as opposed to an exchange of personal favors (e.g., a monetary kickback in exchange for looking the other way) – in the relationship to support his strategy to maintain peace in the community.

In particular, the previous example highlights the question of the precise demarcation of the boundaries of the fringes of formality behavior. In other words, at which point does the fringe become the illegal? Where do we draw the line? Answers to these questions are highly dependent on local circumstance and the manner in which these relationships develop and evolve. Indeed, the texture of the relationship matters. If the commander in the example above had developed a relationship with the drug lord based on an exchange of favors, then his behavior would have crossed the line. For instance, if the commander had offered to do something illegal that would benefit the drug lord or his trade, then he would have gone beyond the fringes of formality. This means that fringes of formality is necessarily within the boundary of what is legal irrespective of whether the means justify the ends. Thus, the process of getting things done is as important as the end goal itself. The examples contained in the following chapters will further clarify the elements that demarcate the precise boundary of the fringes of formality.

In education, street-level diplomacy also relates to circumstances in which principals have to navigate the pressing reality of violence and drugs in the school. For instance, there was one case in which a principal found a student with drugs in the school. The protocol would have been to call the police and the parents. However, the principal knew the boy was involved with the drug lord and the drug trade in the nearby community. If she denounced the boy to the police, she would immediately place the entire school in danger. She would be denounced as a traitor, or “X9,” as they call it, and both she and the boy, if not the entire school, would likely be punished by the gang. Instead, the principal diplomatically approached the student, explained the situation, and placed the school’s peace in his hands. In doing so, she gave him responsibilities and showed him that he could trust her. She brought him close so that she could more deliberately monitor his activities, thus protecting him and the school as a whole from the influence of the drug gang and their trade.

In sum, the fringes of formality middle-tier bureaucrats operate in practice according to these four categories of action that correlate to four different sets of circumstances. Yet, some

categories seem to be more prominent than others depending on the sector. For instance, the middle-tier bureaucrats who are in the policing and education sectors practice more street-level diplomacy and inventive satisficing while those in the innovation institutes are prone to practice more camouflaging and freestyling. Ultimately, the emphasis on the categories of action varies depending on the interaction between the type of street-level bureaucracy and the specific kind of reform that it is undergoing.

Policing and education are more akin to classic street-level bureaucracies where the front-line agent is interacting directly with the end-user of the service. In this case, the agent interacts directly with the citizen, either as the community in policing or as the students and parents in education. This interaction is a large component of the job and so inevitably street-level diplomacy will play a significant role in these interactions. In addition, they are also sectors in which resources are scarce and thus the middle-tier bureaucrats have to manage their respective units with very little funds, thereby giving more opportunities for inventive satisficing to occur.

In contrast, the innovation institutes are part of a somewhat hybrid street-level bureaucracy that lends itself to a different set of categories of actions than education and policing. As in classic street-level bureaucracies, the middle-tier actor (e.g., the director of the institute) has much discretion and power. However, their interactions are not with citizens per se but with the client firms. As a result, the nature of the interaction is different – more formal and structured – than in the other sectors. This more structured interaction, where there are more formal protocols involved, naturally provides fewer opportunities than in education and policing for street-level diplomacy to occur.

4. Encompassing Framework: Behavioral Profiles in Reform Implementation

This section lays out an encompassing framework that explains the different behavioral profiles that are possible in the implementation of reform and why each of these alternative types of behavior is suboptimal from an organizational point of view compared to the model behavior. The fringes of formality behavioral profile entails three main characteristics: middle-tier bureaucrats who exhibit initiative, who spend time on strategic functions, and critically, who are able to identify, develop, or create bureaucratic zones of opportunity. The other pathways result

in behaviors that have either one or two of these characteristics but not the three of them at the same time, and produce suboptimal intermediate administrative outputs as a result.

The “time server” behavioral profile in reform implementation refers to middle-tier bureaucrats who are simply keeping chairs warm and completing timetables to get their paychecks at the end of the month. This profile is in essence the “control” profile in which none of the three characteristics presented in the hypothesis are present in the behavior of the middle-tier bureaucrat responsible for reform implementation. They thus do not exhibit initiative, do not spend much time on strategic functions, and are not cognizant of bureaucratic dynamics and opportunity zones. For instance, time servers are likely to be passive and mostly shy away from the challenges facing the organization. Instead, they will spend their time making sure that they are minimally complying with the organization’s basic goals and objectives.

The “jeitinho” behavioral profile refers to middle-tier bureaucrats who find or create exceptions to the rule to accomplish their own personal goals and objectives. When they cannot find or create exceptions, they are willing to break the rules and go beyond the regulatory framework. They do so in a manner that maximizes their own benefit and that of their respective organizational units, without considering the effects that their actions may have on the larger organization. They are, in essence, always trying to find shortcuts to expend as little energy as possible to reach their targets. In addition, they spend very little time on strategic functions since by definition their actions are mostly trying to mend or mitigate challenges in unconventional ways, thus requiring minimal planning or strategic vision. Yet, they are extremely aware of bureaucratic dynamics and zones of opportunity in the organization and thus mostly draw on this awareness to reach their objectives. These actions are usually of two forms: one-off exceptions to the rules or stillborn intermediary solutions that are a burden on the organization in the long run. These intermediary solutions meet the middle-tier bureaucrat’s objectives in the short run but present challenges to the organization in the longer run.

The “short of the mark” behavioral profile is shared by bureaucrats who spend time on strategic functions and know how to operate within the bureaucracy, but are not persistent enough to implement different projects, policies and activities. The bureaucrats who share this behavior spend time on strategic functions and also understand the bureaucracy and its complexities. They are often involved in productive and organizationally enhancing initiatives that not only benefit their respective units but also the broader organizational architecture. Yet,

the short of the mark bureaucrats demonstrate limited follow through to implement their actions in a sustainable manner. For instance, these bureaucrats are likely to push through an idea through the first bureaucratic hurdle, but they do not have the organizational stamina to persist in getting the solution through all the hurdles. This is usually because forming alliances within the organization does not come naturally to them. They are neither persistent nor do they have the patience to nurture solutions through the organization. As a result, they usually discuss and present solutions that look good in theory but that have not really been able to take off within the organization. They are inherently proud of their initiatives, which are mostly well-thought out ideas, but are not really disturbed by the fact that they have not been effectively implemented. Instead, they rationalize the limited institutional absorption of their ideas as stemming from factors that are exogenous to their control, namely organizational politics or other structural factors such as the timing of policies or the lack of readiness of the organization.

The “barking up the wrong tree” behavioral profile is shared by middle-tier bureaucrats who have initiative and spend time on strategic functions, but who are not effective in finding zones of opportunity within the bureaucracy. This means that they have the energy and the vision, but they are not well adapted to the bureaucracy. They are not aware of bureaucratic dynamics and do not fully understand how to move decisions through the organizational structure. As a result, they face steep hurdles in the operationalization of their good ideas whereby they are frequently banging their heads against organizational silos as opposed to finding the right sphere to operate in within the organization. For instance, they frequently tend to move formal and written complaints up the organizational hierarchy to try to change rules or protocols. Yet, the line of command is not always clear in these cumbersome bureaucratic structures and they are usually left with either an ambiguous response or a request to delay decisions. They tend to persist in trying to get policies and changes implemented through the same channels and are not able to see opportunities that may appear in alternative pathways. Ultimately, they fail to achieve their goals despite having a strong sense of autonomy and spending much time on planning and strategy because they do not understand the best bureaucratic pathway through which to operationalize their demands.

“Free radicals” are middle-tier bureaucrats who demonstrate very strong initiative, but who spend very little time on strategic functions and who also lack an understanding of the most productive places to operate within the bureaucracy. In contrast to the barking up the wrong tree

bureaucrats who maintain the status quo and produce inertia, the free radicals implement changes through sheer force, without real regard for proper lines of authority. They sidestep rules whenever necessary and have a complete disregard for the character of the means through which they accomplish their goals. To be able to operate in this forceful manner, these bureaucrats are usually either well connected politically within the organization or they have somewhat limited stability in their respective authority positions. They oftentimes have a difficult relationship with their peers, are feared by their subordinates, and are kept at a cautious arm's length from their superiors. Their superiors often turn a blind eye to their practices while they produce results, but as soon as there are complications, they are quick to react and thus shift them around to other positions.

“Energizer bunnies” are middle-tier bureaucrats who demonstrate initiative and are operating in a productive place within the bureaucracy but have no strategic vision. Drawing on their energy and initiative, they are running around to get ideas and activities implemented and they are doing so in the appropriate places within the bureaucracy. Their actions indeed combine energy and awareness of bureaucratic dynamics and zones of opportunity. However, they lack the ability to develop and reflect on an overall strategy, and thus, spend the vast majority of their time on administrative functions that have a strategic essence to them at the superficial level. Their ideas often result in mundane projects and activities that focus on immediate and short-term issues related to the operational and administrative constraints in the unit. These initiatives, then, may be immediately relevant to the daily operations of the unit, but they have negligible impact and consequence in pushing forward the unit or the organization as a whole. The energizer bunny bureaucrat, however, is not able to see beyond those immediate needs and persists in channeling time and resources to accomplishing these oftentimes trivial concerns that could be otherwise delegated to more junior professionals in the same unit.

In contrast, “armchair general” middle-tier bureaucrats spend most of their time on strategy and planning but do not show the initiative or the ability to operate in an effective space within the bureaucracy. While the energizer bunnies are constantly active and trying to get their mundane ideas implemented, the armchair generals are the opposite in that they have good ideas but lack the stamina and knowledge of the bureaucracy to implement them. It is not even that the armchair generals do not understand the bureaucracy, but that they find themselves to be above the small politics and operational constraints. Instead, they prefer to pontificate and

propose plans as opposed to “putting their skin in the game” and trying to identify the best channels to implement a certain plan. As a result, these plans regardless of their quality are ultimately stuck on paper and are not easily implementable. Since they lack the energy and initiative, they are unable to find champions or build alliances to convince others of their ideas.

Table 1: Summary of Behavioral Profiles in Reform Implementation

Behavior Profile	Initiative	Strategic functions	Bureaucratic zones of opportunity
Time server			
Jeitinho			✓
Short of the mark		✓	✓
Fringes of formality	✓	✓	✓
Barking up the wrong tree	✓	✓	
Free radical	✓		
Energizer bunny	✓		✓
Armchair general		✓	

5. Methodology

How do we measure something like bureaucratic administration? And how do we understand what is “better” bureaucratic administration? This is a difficult question, but the recent literature on state capability and bureaucracies has developed established survey measures to gauge effective bureaucratic administration.²⁶ These papers have developed tangible and readily quantifiable metrics to measure the effect of different types of reforms and policies on the administration of different units. This represents important progress in quantifying the effectiveness of a given model of bureaucratic administration.

Nonetheless, while these tangible and quantifiable metrics are often good indicators of administrative effectiveness, they do not adequately register critical elements of bureaucratic behavior, especially in areas where administrative outputs are more subjective and vague, and

²⁶ Bloom, Sadun, and Van Reenen, “The Organization of Firms across Countries”; and Rasul and Rogger, “Management of Bureaucrats and Public Service Delivery.”

particularly in middle-capability environments.²⁷ It is a well-established point that quantifiable measurements are often limited in how much they can measure that is truly relevant. For instance, many public bureaucracies with broad missions in areas like public safety and welfare do not lend themselves to this form of measurement.²⁸

In addition, most new public management type reforms, such as those employing pay-for-performance or monitoring and evaluation systems, have not produced the same result in different contexts and are not as easily replicable. Moreover, there is much variation in the results of the implementation of these reforms on the ground. This variation in the application of these reforms lends further strength to the observation that there are crucial missing elements that are not being sufficiently captured in these more quantifiable and tangible measures of bureaucratic administration.

Furthermore, the findings in the literature indicate that more formalistic and readily quantifiable metrics may be – and often are – more likely to be circumvented or reported as being in compliance while in reality they are being ignored or minimized.²⁹ Accordingly, we need measures of bureaucratic administration that are robust to such methodological challenges and that can get at measuring *real* bureaucratic administration.

So, what are these missing – often intangible – elements that are missing from the current survey measurements? The older literature on bureaucracy sheds light onto some of what these missing elements might include.³⁰ This literature points to several important characteristics that are key determinants of a well-functioning bureaucracy. Unlike the more recent literature, these indicators are of a less tangible nature and not as readily quantifiable. Yet, they point to how well a bureaucracy may be performing at classic intermediate tasks in the administration of a front-line service delivery unit.

²⁷ Pritchett, *Folk and the Formula*.

²⁸ Wilson, *Bureaucracy*.

²⁹ Pritchett, *Folk and the Formula*.

³⁰ James G. March and Herbert A. Simon, *Organizations* (Hoboken: Wiley-Blackwell, 1993); Philip Selznick, *Leadership in Administration: A Sociological Interpretation* (Oakland: University of California Press, 1984); Paul J. DiMaggio and Walter W. Powell, “The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields,” *American Sociological Review* 48, no. 2 (1983), <http://www.jstor.org/stable/2095101>; Lipsky, *Street-Level Bureaucracy*; and Wilson, *Bureaucracy*.

Drawing on this literature and fieldwork, I have assembled a set of six characteristics that contribute to the effective administration of bureaucracies. This dissertation employs surveys and case studies to determine the presence of these characteristics across the three bureaucracies examined.

The first measure is a *sense of mission* among the staff who work in the front-line service delivery unit, from the front-line agents up to their managers, the middle-tier bureaucrats. Staff members who feel a sense of mission are not only aware of but also understand and embrace the central aim of the unit in which they work. In other words, an organization's personnel exhibit a sense of mission when they take pride in and ownership of what an organization is seeking to do and how it is seeking to do so.³¹

Closely related to the first characteristic, the second aspect of an effective bureaucracy is a *shared definition of a critical task*. A critical task, according to Wilson, is the kind of behavior that, if successfully performed by key organizational members, would enable the organization to manage its critical environmental problem.³² This means that the people working in the unit have an understanding of both what specifically the organization should be focused on doing and what their specific role is in working toward the accomplishment of that purpose.

The third characteristic is *corporate autonomy*. This means that the unit as a whole has sufficient freedom of action and external political support to permit it to define or redefine its tasks as it sees best and to infuse that definition with a sense of mission.³³ In other words, a unit with sufficient autonomy is not only de jure allowed to make decisions on key issues related to resource allocation and personnel management. It is also able to de facto exercise this autonomy on a regular basis.

The fourth measure is *order and discipline* in the unit, meaning that those in the unit subscribe to certain standards referring to norms and protocols about how to relate to each other and to the broader corporation of which their unit is a part.

The fifth attribute is *communication* in the unit. In practice this characteristic refers to whether the members in the unit are aware of what is happening in the unit of relevance to them and whether there are any breakdowns in communication on a regular basis.

³¹ Wilson, *Bureaucracy*.

³² Ibid.

³³ Ibid.

The sixth and last characteristic is *growth and learning* in the unit. This last attribute refers to the opportunities for professional development available for those working in the unit. These opportunities can either occur internally through interactions with colleagues and professionals or externally through organized workshops and other comparable professional development events that are organized by the unit itself (as opposed to by other units in the broader organization).

In order to measure whether there is an association between the posited three-pronged fringes of formality behavioral profile and improved intermediate administrative outputs, this dissertation will draw on a two-fold approach methodologically, using both surveys and qualitative case studies across the three different sectors. The survey will be semi-structured with questions that will measure both the effectiveness of bureaucratic administration (the dependent variable) and the presence of the three different elements of the posited bureaucratic behavior discussed above.

This survey will be applied strictly to the middle-level echelon in each front-line service delivery unit across the three sectors. In each sector, the respective cases were chosen for two reasons. First, they were comparable reforms across sectors in that reformers sought to apply private sector principles to public sector bureaucracies. Second, there remained tremendous variation in the bureaucratic administration of the front-line service delivery units despite reform attempts.

The first part of the survey will measure the different aspects of bureaucratic administrative behavior that are related to the hypothesis (e.g., level of initiative, the practice of different categories of functions, and the identification or development of bureaucratic zones of opportunity). This first part will draw on both close-ended and open-ended questions to gauge the extent to which police commanders, school principals, or innovation institute directors share these three characteristics in the manner hypothesized.

The second part of the survey, which will focus on measuring the performance of the administrative bureaucracy, will concentrate on the more intangible aspects but possibly significant aspects of this phenomenon. This part of the survey will aim to measure the six characteristics described above in order to gauge the performance of the administrative bureaucracy. It will draw on mostly close-ended questions.

Drawing on the data collected from the survey interviews, I will then test whether the different elements of bureaucratic behavior (first part of the survey) are associated with the metrics of the performance of the administrative bureaucracy (the second part of the survey). This will provide a direct testing of the hypothesis using the sample of operational units across the three sectors. It will thus allow me to explore both variation within and across sectors.

While the core structure of the survey and its aim will remain consistent across sectors, it is important to note that there will be slight variations in design across sectors. The main reason for this variation is to exploit different research opportunities that are present in each sector. For instance, in education, I was able to run the survey in a larger sample of schools and thus was able to interview additional players in each unit besides the school principal. These variations in survey design and implementation will be discussed in their respective chapters.

6. On the Fringes of Formality

In this chapter, I described the theory that this dissertation aims to examine. In doing so, I presented the hypothesis that a certain type of behavior – the fringes of formality profile of behavior – among middle-tier bureaucrats is associated with better bureaucratic administration in front-line units of service delivery in non-logistical street-level bureaucracies. The fringes of formality behavioral profile necessarily comprises three main characteristics: initiative, focus on strategic functions, and the identification of bureaucratic zones of opportunity. In practice, this behavior occurs according to different categories of actions depending on the presence or absence of rules and protocols. In addition, I have also provided an encompassing framework for different profiles of behavior in reform implementation that include different combinations of the characteristics necessary for the fringes of formality behavioral profile to exist. Drawing on the survey methodology outlined, I now turn to examine in the following chapters the empirical tractability of the hypothesis across different street-level bureaucracies in three sectors.

CHAPTER 2: POLICING ON THE FRINGES OF FORMALITY

“You know what you have to do. When there is nothing written, then that is the opening. You draw on the opening to construct something in the manner that you as the commander understand it as opposed to a way that is systematized by your superiors.” – UPP Commander

1. Introduction

Of the 50 cities in the world with the highest homicide rates, nearly half of them are in Brazil.¹ Despite rising income levels and a growing middle class, crime and insecurity continue to haunt Brazilian citizens. In Rio de Janeiro, in particular, the crime problem has received the highest attention from the city and state governments, and has been the subject of major organizational initiatives.

Policing in Rio therefore offers an especially fertile area for investigating the drivers of variation and effectiveness in organizational behavior. Rio, one of the largest states in Brazil, is a quintessential middle-capability institutional environment and the police are a classic street-level bureaucracy, namely an organization that interfaces directly with its constituents. In this case, discretion is clearly in the hands of the front-line agent, who is a professional in the front-line service delivery unit interacting directly with the citizens or the clients of the services.

In particular, I will investigate one especially significant policing organizational reform effort undertaken in Rio over the last decade to deal with the city and surrounding area's serious crime problems. This is the Police Pacification Unit (UPP) program. This effort has received a great deal of high-level attention and support, and has been implemented in an ambitious way across the state with the aim of diminishing the endemic crime problem in the city and its suburbs.

The logic of the initiative is straightforward: to incubate a healthy virus within a corrupted police force. Competing drug factions had asserted control over territories throughout Rio de Janeiro state since the 1980s. Police proved unwilling or unable to regain control of that

¹ Kenneth Rapoza, “Brazil Is Murder Capital Of The World, But Rio Is Safer Than Compton, Detroit, St. Louis...,” *Forbes*, January 29, 2016, <https://www.forbes.com/sites/kenrapoza/2016/01/29/months-before-rio-olympics-murder-rate-rises-in-brazil/#7aaa41ed2790>.

territory primarily due to a lack of an authorizing environment from the previous governments. The UPP program sought to change the dynamic – and enable the police force to secure and hold territory – by fighting corruption within the police institution. It effectively provided the authorizing environment for the police to formally occupy territories that had been taken over by drug factions since the 1980s, but did so by introducing uncorrupted elements within the police organization. A key problem facing the state was that the police as an institution were oftentimes connected or involved with drug gangs and other criminal enterprises. As a result, this internal association with crime precluded any significant efforts to address the problem. Accordingly, the idea behind the reform was to incubate a “healthy virus” within what was judged to be a systematically corrupted police force. The so-called Police Pacification Units were supposed to be the “virus” that would positively “contaminate” the rest of the police force, and would pacify crime-ridden areas through their presence and uncorrupted approach.²

The reform commenced in 2007 and since then has been implemented, with 38 UPPs across the state. These units have recruitment strategies and promotion schemes that are parallel to those of the force as a whole, designed to provide independent incentives and insulation from corrupted existing structures. The UPPs were placed strategically within what were effectively besieged communities, away from existing police battalions, and given autonomy to run their operations in their respective communities. Almost 10 years later, the 38 units are responsible for covering 264 territories, involve 9,543 policemen, and police 1.5 million people.³

This reform initiative and its effects offer an ideal opportunity to study the drivers behind variation in organizational performance in a middle-capability context for several reasons. First, policing has been established as a particularly productive area for the study of street-level bureaucracies and how to reform them. Indeed, the question of how to reform and improve policing, including with respect to its organizational aspects, has been amply explored in the literature by some of the leading social scientists of recent decades. Yet, these studies have primarily focused on developed country contexts.⁴ The pacification reform in Rio de Janeiro, then, offers the opportunity to investigate how street-level bureaucracies vary and operate in a middle-capability environment.

² Beato, *Compreendendo e Avaliando*.

³ “Unidade de Polícia Pacificadora.”

⁴ Wilson, *Varieties of Police Behavior*.

Second, the UPP reform included the implementation of new public management principles to the organization of the front-line unit. For instance, as part of the reform, they implemented performance incentives and a new system of targets and metrics of evaluation across units. In essence, this was a comparable type of reform to that implemented in the other two sectors. In addition, street-level bureaucracies played an especially prominent role, as the reform completely decentralized important powers to front-line service delivery units in the context of what many have referred to as a quasi-war with local drug factions.⁵

Third, even though the UPP program was a major political initiative with a high degree of effort in implementation, the results of the program have been uneven across Rio state in ways that are not fully explainable through structural or other exogenous factors. In brief, some UPPs have been successful in high-threat and challenging areas, while others have lagged or even failed in neighborhoods that seem more favorable. The aim of this chapter is to help understand why some units have been successful and others have not – why have some UPPs thrived under harsh conditions while others in much more propitious ones have failed? Importantly, this chapter is agnostic about the *advisability* of the UPP program as an approach to promote pacification and consolidate the rule of law in the selected communities that were a part of the program. Rather, the chapter assumes that there is at least some rationale for this program.

Needless to say, the success or failure of the various UPPs has many causes, only some of which are connected to organizational performance. The contention of this paper, however, is that organizational performance of the front-line service delivery units *is* important, and that the drivers of the relative success of the various UPPs in this respect is inadequately understood. This case study seeks to uncover better what these factors are by investigating the UPPs in detail. In doing so, it will draw on the UPP program as a case study to extract broader lessons about what makes for successful street-level bureaucracies in middle-capability institutional environments, and how those successes can be replicated.

⁵ Cano, '*Os Donos do Morro.*'

2. Hypothesis

My hypothesis is that this variation in bureaucratic administration among UPPs can be substantially explained by an underappreciated but significant and common type of behavior at the middle level of these bureaucracies in middle-capability environments. As in the other cases, my contention is that this type of behavior – this type of folk practice – is associated with superior administration of bureaucratic organizations and so improved intermediate administrative outputs, and thus ultimately with improved service delivery outcomes.

As in other contexts, the fringes of formality behavioral profile I have identified has three main characteristics. The first characteristic of this behavior is initiative, namely an energetic and active middle-tier echelon that aims to do as much as possible within their jurisdictions. In the case of the UPPs, the relevant agent tends to be the commander of each unit. In this case, commanders who exhibit this behavior in the middle-tier echelon have a sense of de facto autonomy within their jurisdiction, defined within the explicit legal and regulatory limits set forth by the overall police corporation, and are active and energetic in pursuing their goals. They are aware of the aforementioned constraints on their authority and they operate effectively *within* those boundaries. Concretely, these are UPP commanders who understand their communities, the police forces at their disposal, and look to capitalize on what they have to use and what is possible in the neighborhoods for which they are responsible.

What distinguishes the commanders in this middle echelon from other echelons is their broader view of functions, their understanding of the bureaucracy and the hierarchy that is not shared by other echelons. In other words, this echelon has a view of the importance of achieving immediate goals, but not at the cost of the overall functioning of the unit. They are the “field level” police commanders – neither the “tip of the spear” policemen at the very front line, who usually lack the strategic perspective, but neither the “generals” at police headquarters, who have only an indirect and episodic view of the situation in the neighborhoods.

The second characteristic of this behavior is a focus on strategic functions while having a dynamic view of all categories of functions. Commanders who exhibit this characteristic spend more time on particular types of functions that require judgment and deliberation (that are “strategic” or “tactical”), for instance, planning out police engagements with the community or tracking progress in different parts of the neighborhood, and less on more routinized functions

that are logistical and operational in nature (the “administrative”) and that can be delegated, such as filling out forms for higher headquarters.⁶ These actors also practice different categories of functions in a hybrid and dynamic manner: they are comfortable wearing different hats in a short period of time. UPP commanders who fit this model are, then, nimble in shifting gears between getting out in the field with their troops, but also in engaging with higher headquarters to ensure the UPPs and the communities they serve get the resources and support they need.

The third characteristic of the fringes of formality behavioral profile is an ability and propensity to find bureaucratic zones of opportunity – improvising within the boundaries of protocols – in order to effect change. In other words, these actors deliberately take advantage of the full scope of their recognized jurisdiction, or those areas for which a bureaucracy has clearly delegated authority to an agent. At the same time, however, they are aware of – and able to exploit – bureaucratic zones of opportunity that exist just beyond their recognized jurisdiction. Those zones refer to all the areas for which a bureaucracy has neither clearly delegated nor clearly denied authority to an agent. Commanders who exhibit this behavior tend to exploit bureaucratic zones of opportunity to improvise to address problems and challenges, but within the scope of rules and the boundaries of protocol imposed by the overarching police and security architecture. In this identified zone of opportunity, these commanders make positive use of any openings and flexibility in protocols, rules and regulations, consciously drawing on their bureaucratic capital to achieve improved intermediate administrative outputs. This type of commander is able to get around restrictive rules and counterproductive protocols through creative approaches, but they do so both legally and without hurting either the UPP or the broader organizational structure. These strategies and efforts take into account the good of the organization as opposed to a focus on personal advancement or gain.

In particular, when commanders operate on the fringes of formality, they avoid trying to solve problems by creating new, more institutional structures and procedures in or affecting the UPPs. They look to solve problems by innovating more tailored, often less formal and cumbersome new methods and informal procedures, even if more formalized structures would be more “by the book.” In doing so, they use their bureaucratic capital in a judicious manner: they

⁶ I am adapting Lester and Piore’s (2006) analytic and interpretive functions distinction in the context of technological innovation to a context of service delivery. In this case, an interpretive function, or the “Word-like” kind of canvas thinking in the context of innovation, is adapted to reflect a strategic and planning function in the context of service delivery. Lester and Piore, *Innovation*.

are frugal and thus do not create additional structures to address problems within the organization.

Commanders practicing this behavior are aware, however, that this informal or semi-formal style of behavior has to coexist with and indeed even support the formal protocols and rules of the police force as a whole. Indeed, commanders in this vein have a keen sense of what the formal demands. As a result, while they are *de facto* practicing this behavior within their respective pacification units, they are *de jure* projecting formality to the rest of the police corporation and the outside world. They are careful to show that they always abide by formal rules and protocols, while being quick to pragmatically or flexibly interpret any action on the fringes of formality in order to achieve their ends.

As in the context of the schools and SENAI in the upcoming chapters, this fringes of formality behavioral profile is different from the *jeitinho* behavioral profile that is prevalent in Brazilian culture. Unlike the *jeitinho* behavior found among some UPPs, which involves subverting, ignoring, or otherwise undermining the rules of the overall police corporation and city, usually for some degree of personal gain, the fringes of formality behavior among UPP commanders is focused on improving the performance of the police in the neighborhood, and ultimately the security of the community, and doing so through a creative exploitation or interpretation of the rules rather than an undermining of them.

The hypothesis in this chapter, then, is that a UPP, a classic example of a front-line service delivery unit in a middle-capability environment, is more effective in its bureaucratic administration when the UPP commanders operate on the fringes of formality than when they do not. The independent variable, then, is the fringes of formality behavior, as described conceptually in the theory chapter and specified for the UPP case above. As discussed earlier, fringes of formality behavior requires three elements. The presence of one or two of these characteristics is not sufficient to produce successful intermediate administrative outputs for reasons described earlier. What this means in practice is that, for pacification units in which one or two out of the three elements are present, then the practices exercised by commanders are not as “organizationally constructive” as with the three elements together. As a result, the presence of the three elements is the positive force behind their contribution to intermediate administrative outputs.

The chapter's dependent variable is bureaucratic administration, represented by indicators that measure organizational effectiveness and efficiency within the front-line service delivery unit, the UPP. As elsewhere in this study, it is important to emphasize that the hypothesis is that this behavior is correlated with more positive intermediate administrative outputs, not directly with service delivery outcomes. Accordingly, this chapter focuses on intermediate administrative outputs relevant to the UPPs relating to subjects like order and discipline, timeliness, corporate autonomy, learning and growth, and the like (that is, metrics of organizational effectiveness and efficiency of the pacification unit), and not to ultimate outcomes (e.g., crime and robbery rates). In particular, the chapter examines variation in reform implementation to understand the mechanisms that contribute to variation in intermediate administrative outputs. As explained earlier, such improved outputs have been demonstrated to contribute to improved service delivery outcomes.

It is also important to caution once more that this chapter's contention is not that this behavior is the sole or even the primary driver of overall organizational effectiveness for the UPPs, let alone improved service delivery outcomes. Nonetheless, I argue that this factor is *important* in explaining the variation in intermediate administrative outputs across front-line service delivery units.

3. The Fringes of Formality Behavioral Profile in Practice⁷

What does this behavior of operating on the fringes of formality look like in practice? As noted previously, it tends to express itself in four different sets of circumstances in the UPP and its respective community. These four possible responses are defined by whether or not protocols exist regulating the middle-tier bureaucrat's behavior. For each of these two scenarios – situations where there are and where there are not protocols regulating the bureaucrat's behavior, respectively – there are essentially two possible types of behavioral response by the bureaucrat. In addition, resource scarcity characterizes these four categories of action and is a prevalent factor in shaping how the fringes of formality behavior operates in practice.

⁷ For anonymity purposes, I have assigned different names to the UPPs. They are all names of former Nobel Peace Prize winners.

To recap, the first scenario is one in which a given problem or challenge arises and there are rules and protocols clearly authorizing and limiting the actions that a middle-tier bureaucrat may take – the sum of which make up his jurisdiction – to confront and engage with the problem. In this scenario, in which there are rules, the bureaucrat exhibiting the fringes of formality behavioral profile can act in one of two basic ways: what can be called “inventive satisficing” or “camouflaging.” The decision to act in one or the other way will depend on whether the available rules and protocols make sense given the nature of the request. If they do, the bureaucrat will engage in inventive satisficing and if they do not, then the bureaucrat will engage in camouflaging.

The second scenario is one in which a given problem or challenge arises and no rules and protocols exist to guide the actions and decision-making of the bureaucrat concerning how to address the problem. In this second scenario, the reaction of the bureaucrat exhibiting the fringes of formality behavioral profile can be placed into one of two categories of action: “freestyling” or “street-level diplomacy.” The decision to act in one or the other way will depend on whether the middle-tier bureaucrat assesses that the dilemma is best resolved by adjusting or developing new internal bureaucratic processes or seeking a resolution directly with external actors in the service-delivery units’ respective communities of interest. The remaining part of this section will describe these four categories of action in detail with respect to the UPP context, namely how and when they tend to arise, and illustrate the variations among these four categories of action through select examples from the dissertation’s fieldwork.

3.1. Inventive Satisficing

The first circumstance occurs when an official is faced with the challenge of addressing a problem for which a protocol exists, but for which there are insufficient resources to implement the formally-approved solution. This is a common case. The police hierarchy provides ample rules, guidance, and protocols to solve different problems, but very frequently commanders are not given adequate or even any resources, financial or human, to apply the protocol’s dictates in practice. The inventive satisficing practices most commonly relate to the management and allocation of resources, such as man-hours for patrol, surveillance, and counterinsurgency operations as well as the maintenance of unit infrastructure and weaponry.

For instance, the police force has standard protocols dictating which weapons and other equipment policemen are supposed to carry while on duty. Sometimes, however, there are not enough weapons or equipment for these requirements to be carried out. And sending policemen out without such gear in the context of a quasi-war with local drug factions would be highly dangerous and could well compromise unit morale and confidence. So one commander addressed this problem by creating a “shift for reserve weaponry” to deal with the scarcity of equipment. As he explained, “I try to follow a shift of reserve weaponry that is very strategic and has to work well...When I have a problem with weapons, for example, and the work shift has to be 24 hours for every 48 hours, I can use 3 policemen. But, if I change the shift to 24 hours for every 72 hours, then I gain one extra policemen and it makes a difference in the quality of service given the weapons available.”⁸ Drawing on this strategy, the commander is able to change the work shift times according to the kinds of weapons that he has available in storage.

3.2. Camouflaging

The second circumstance occurs when a middle-tier bureaucrat recognizes an applicable protocol, but deliberately adapts and expands on its definition and scope in order to better achieve the spirit of its intent. In the UPP context, this occurs when a commander adapts existing policing protocols based on the needs of the community – a kind of bottom-up responsiveness. More specifically, it occurs when a commander stretches the boundary of the existing protocol to create an opening – a bureaucratic zone of opportunity – to adapt to a new, unanticipated, or ill-fitting scenario. Similarly to above, camouflaging often occurs in circumstances that relate to the management and allocation of resources.

In one instance, an interviewed UPP commander explained that he had been ordered to conduct surveillance in one of the streets that serves as the entrance to the community. But, he faced a dilemma in that focusing his surveillance resources and efforts on this task would invariably result in his not being able to meet the other operational tasks demanded of his unit. To deal with this problem, the commander adjusted how he carried out the order for surveillance. In his words: “I play with the timing of the work shifts and the needs of the community...When I need more men near my unit I create a surveillance barrier that requires fewer men in the street

⁸ Interview with the commander from the Kofi Annan UPP.

[the one he is expected to guard] and it ends up working out.”⁹ In this case, the commander perceived that strictly complying with surveillance order would detract from the safety and success of his own unit. So, instead, he found a way to toggle both priorities without falling short either on the surveillance task or on the needs of his own unit.

3.3. Freestyling

The third circumstance occurs when officials develop solutions to deal with an absence of protocol or guidance. In this case, there is no guidance from higher levels of the organization about how to proceed in a given activity and there are no resources to cope with the challenge or problem. Commanders exhibiting the model behavior tend to confront this type of situation by quickly identifying the scope of action and embracing the “openings” or creating the bureaucratic zones of opportunity to meet the challenge while also developing a sequence of positive institutional externalities from the experience. This means that while this effort starts as a “folk” practice, it oftentimes – though not always – develops into actual changes to the current legal framework.

The experience of one commander in the sub-group of fringes of formality bureaucrats is illustrative of how these commanders behave in this type of circumstance. As he explained, “Recently I received a judicial mandate to formalize the ownership of a piece of land located in a central area of the community. I never had any training on how to handle this. Yet, when you carry out this process in the community, it is always a shock to the residents.” In this instance, the commander was given the order to provide a regulatory framework to formally determine ownership of an informally-held piece of land that was highly visible in the community, but without any particular guidance or training on how to fulfill this politically risky and contentious order. This was difficult, given that the formalization of property rights in these communities is still an ongoing process marked by incomplete legislation, missing and contradictory records, and an absence of resources to effectively survey the land. Thus, executing this task would already be difficult under normal circumstances in the highly cumbersome legislative process in Brazil, but was even more so in a red zone community where well-armed drug dealers expect to exercise control and effective ownership of real estate.

⁹ Ibid.

The commander embraced this challenge, however, in a fashion typical of the freestyling type of fringes of formality behavior, in part as a way to dialogue with other stakeholders in the community. “I went to the neighborhood association,” he reported, “called the president, and had a meeting with the officials and all of those involved to hear everyone’s point of view.”¹⁰ He brought everyone to the table, including informal players, even drug faction representatives (the real “chiefs,” as they are called, never show up to such encounters) disguised as lawful residents, and as such developed buy-in to the process within the community. By bringing people together who under ordinary circumstances would not have participated in such activity, he opened the way for a peaceful and successful resolution of the property issue. He effectively adjusted or developed a new bureaucratic protocol for dealing with this type of situation. While that protocol did involve interfacing with the community, what was most important about his decision was that it showed his willingness to develop and apply existing bureaucratic practices to a new context in order to fulfill his mission.

3.4. Street-Level Diplomacy

The fourth and last circumstance in which the fringes of formality behavior manifests itself in situations in which the bureaucratic actor has no guidance for how to proceed regarding issues external to the organization and thus beyond the actor’s area of control and direct influence. In such circumstances, a fringes of formality bureaucrat draws on his diplomatic skills to create and mediate solutions, oftentimes in the Brazil context in difficult and dangerous circumstances for all the parties involved. In the UPP context, these circumstances particularly include those that are extra- or quasi-legal in essence yet important to the effective functioning of the organization, such as dealing with and even relating to drug dealers and others that operate *beyond* the boundaries of what is formal and legal. In these cases, the commanders in the subgroup have a tendency to deftly and creatively find “bridges” to form a channel of communication and information exchange to deal with the informal. They are “realists” about the need to deal with the extra-legal, but operate extra-legally in a way that is constructive for the UPP’s purposes rather than a compromise of them. The commander plays a vital role in this bridging.

¹⁰ Interview with the commander from the George Marshall UPP.

One commander who exhibited a street-level diplomacy style of behavior explained that an important component of his most trying challenge in the core mission of pacifying the neighborhood for which he was responsible was to instill in the community the notion that people cannot live outside the boundaries of what is legal in society. He recognized, however, that this would be a process, one in which too sharp of a shift would be unrealistic and counterproductive, but in which change needed to begin. To jumpstart this process of changing norms, then, he felt that he needed to send a strong signal of strength and resolve to the community, which was made up of citizens still living with the underground presence of different drug factions. The commander decided to use the president of the neighborhood association as an envoy to speak with the head of the main drug faction and explain that he could not walk around armed in the community. Through his envoy he practiced deterrence: the commander made it clear that if the drug faction “chief” walked around armed, then the commander would have to use force to protect his community.¹¹ In this instance, the commander recognized that, to best achieve progress on the UPP’s goals, he had to deal with the reality of the existence of drug gangs and communicate with them, but while contributing to his overall mission of encouraging compliance with the formal – the law – in order to help pacify the community.

Another common example of this dynamic in the UPP context is when commanders have to deal with the effects of illegal or para-legal actions by other political forces, for instance by allowing drug-dominated parties such as funk raves to occur in the community. It is common knowledge that these events are oftentimes a venue for different factions to sell drugs. Besides the illicit sale of drugs, the more immediate challenge is that oftentimes there are fights in between the drug factions during these raves. This violence can overflow to the rest of the community, even risking lives. Many commanders outside of the sub-group turn a blind eye to these parties and go on with their formal duties in their respective units, focusing on the de jure fulfillment of their tasks to the detriment of the community.¹² After recounting one of these instances, the commander explained, “I prefer to omit myself, it is a lost game, a game of

¹¹ Ibid.

¹² Interview with the commander from Henri La Fontaine UPP.

interests, so I have to be a coward because they are cowards with us... In those moments, you have to become blind.”¹³

In contrast, the commanders who exhibit the fringes of formality behavioral profile tend to cope with the political influence protecting and promoting these raves in a different manner, by addressing the issue, albeit in a cautious and deliberate fashion. For instance, one commander explained that he had sought to address the problem by negotiating with multiple envoys in his community to define a common ground between the drug factions so that it would be safe for people in the community to attend the party.¹⁴ He practiced deterrence through diplomacy as he had the envoys communicate that if any violence occurred, then the police would have to go in to confront the challengers. This represented street-level diplomacy in that he engaged with the reality of the situation in a way that promoted the goals of the UPP, even by dealing with the reality of the involvement of drug gangs in the funk raves.

4. Methodology

To measure whether there is an association between the posited three-pronged fringes of formality behavioral profile and improved intermediate administrative outputs, this chapter draws on the two-fold methodological approach, using both survey and qualitative case studies, detailed in the previous chapter.¹⁵ The survey is semi-structured with questions that measure both bureaucratic administration (the dependent variable) and the presence of the three different elements of the posited bureaucratic behavior discussed above. In this context, the survey was given strictly to the UPP commanders – meaning the effective heads of each front-line service delivery unit – across 36 out of the 38 UPPs in the state of Rio de Janeiro.¹⁶ It is, thus, consistent and comprehensive in the designated research area.

¹³ Ibid.

¹⁴ Interview with the commander from the George Marshall UPP.

¹⁵ As described in the theory chapter, the six administrative indicators at the unit level are: sense of mission, definition of the critical task, corporate autonomy, communication, growth and learning, and order and discipline.

¹⁶ I was not able to reach the last two UPPs in the sample because one of the commander's was absent from the UPP due to illness in the family and the other commander did not return calls.

As in the other surveys, the first part of the survey for the UPPs measures the different aspects of bureaucratic administrative behavior that are related to the hypothesis (e.g., echelon activity, the practice of different categories of functions, and use of bureaucratic zones of opportunity). This first part draws on both close-ended and open-ended questions to gauge the extent to which UPP commanders practice these three elements in the manner hypothesized.

The second part of the survey focuses on measuring the bureaucratic administrative performance of the UPPs. This part of the survey aims to measure the six administrative indicators in order to gauge the performance of the UPPs' administrative bureaucracy, focusing on identifying less tangible but significant aspects of such performance. It draws mostly on close-ended questions.

Drawing on the data collected from the survey interviews, I test whether the different elements of bureaucratic behavior (first part of the survey) are associated with the metrics of the performance of the administrative bureaucracy (the second part of the survey). This provides a direct testing of the hypothesis using the sample of operational units.

I implemented the survey across the sample with three other fellow researchers. I recruited the researchers from local universities' programs in economics, political science and sociology. I then trained the researchers to apply the survey in the same manner, drawing on similar protocols and practices. I also distributed a written version of protocols, summarizing the training, to team members. Training sessions lasted two hours. I then applied the survey at least once with each one of the team members to be sure that they were applying it in a correct and comparable manner across units. In general, the interviews were mostly conducted by a pair of interviewers wherein one person conducted the interview and the other took notes.

Based on the survey results, I select UPP case studies to complement the analysis. These case studies were selected based on their status as outliers; that is, they are significant because they represent cases of UPP commander success that are otherwise hard to explain. This means that I draw on the examples that reveal surprising results in administrative performance in light of the broader conditions of both the units' respective communities and the UPPs themselves. The interviews in these cases – as distinct from the broader survey – include all the heads of the sub-units within the organizational unit (i.e., personnel, intelligence, logistics and planning, organization, and public relations). Ultimately, this triangulation of data allows for a further verification of the robustness of the analysis.

The purpose of this case study effort is to complement the survey data and thus deepen the analysis of the underlying mechanisms responsible for the variation in organizational capability. Focusing on this smaller number of cases allows for additional in-depth interviews with the directors of each unit, for example, as well as interviews with other players in the unit, which deepens and enriches the data collection and analysis.

5. Results

The survey data show that the fringes of formality behavioral profile argued in the hypothesis is present in a sub-group of six UPPs.¹⁷ The commanders in this sub-group are distinct from the others in the sample in that they act in a particular, specific way that conforms to the hypothesized model in a way that cannot be explained by typical structural variables. Their answers in the survey show that they fit the model of bureaucratic behavior in the hypothesis: they exhibit initiative, practice strategic functions, and operate within bureaucratic zones of opportunity.

This is demonstrated by the fact that this sub-group's answers to both the close-ended and open-ended questions conform to the three behavioral elements. In terms of the active middle-tier echelon element, for instance, this sub-group of commanders answer that most of the ideas and proposals emerge from their echelon and that they have the ability to make decisions individually on their daily tasks, thereby confirming their *de facto* autonomy. In terms of the strategic functions element, they answer that they spend most of their time on such functions and also confirm that they spend relatively more time on this type of function when given a list with different categories of functions (including administrative and tactical tasks, as well). Lastly, in terms of the bureaucratic zones of opportunity element, the sub-group answers that they improvise to meet targets set out by the police force and also provide responses to different procedural situations that conform to the theory about the behavior.

Moreover, the behavior is not a product of background factors or other contextual circumstances as the six commanders exhibiting this type of behavior lead UPPs in very different circumstances. There are significant differences in the socioeconomic status of the respective

¹⁷ The six UPPs with fringes of formality commanders are: Jane Addams UPP, George Marshall UPP, Oscar Arias UPP, Kofi Annan UPP, Mother Teresa UPP and Nelson Mandela UPP.

UPP communities, for instance. Some of these communities are in wealthy neighborhoods while others are in communities suffering from extreme poverty. The communities in this sample also show differences in crime rates and overall levels of violence. Some communities are in hazardous “red zones” still combating drug gangs while others are in pacified “green zones.” Lastly, the experience levels of the commanders in the sub-group differ. While some commanders have more than twenty years of experience in the police force, others have only recently joined the police, with less than five years in the profession. This variation indicates that the behavior in question is not simply associated with external circumstances.

5.1. De Facto Autonomy yet Starved for Resources

The survey data sheds light on what the hypothesized behavior and its three main elements look like in practice. The first element – namely whether the commander is active within a defined, appropriate sphere of activity – is demonstrated very clearly in the rhetoric used and the examples of actions provided by the commanders. Their rhetoric and actions show a de facto command of the unit. They explain that they can decide how to run their daily tasks, such as managing the policemen in the unit and planning field operations, and they are able to make decisions on important operational issues without consulting other organizational units. In fact, they explain that they only consult other organizational units when they themselves – as opposed to their superiors – feel they need to. For instance, some said that they choose to consult oftentimes primarily to share the responsibility for some risky operations.

Importantly, the commanders in this sub-group show a de facto sense of autonomy even though they do not always or even regularly enjoy de jure autonomy. But, the commanders in the sub-group are not confined by the restrictions on their de jure autonomy – indeed, they even appear to use these restrictions to their advantage. For instance, in interviews they rarely mentioned constraints on their autonomy, and when they did, they gave them a positive and constructive spin, providing examples of how they exercise their autonomy irrespective of whether they are explicitly given it or not. Commanders in this group noted that a particular level within the police force hierarchy places restrictions on the form in which they implement the activities in their unit, but that these constraints did not significantly hinder them in their work. For instance, as one commander explained, de jure they have to consult the Central Pacification

Police Unit (CPP) – the central headquarters unit for all UPPs – on the scope of field operations, on hiring and firing of personnel, and on resource management and allocation.¹⁸ Yet, immediately following an enumeration of the restrictions on their de jure autonomy, the same commander emphasized that he is able to make significant decisions in his unit and ultimately has de facto autonomy over the daily dynamic of his work, including in these crucial areas.

The more evident and consequential limitation on the de jure autonomy of the commanders is the lack of funds allocated to the UPPs. The interviews show that most of the units are in fact starved for resources across the board. All of the commanders explained that they are not given resources adequate to effectively fund their respective units. Several commanders noted that the CPP provides the UPPs with a modest amount of funds per month (500 reais, or approximately 150 dollars). Commanders are then expected to work with these limited funds to run the administration of their unit. For other expenses related to personnel, equipment, and field operations they have to petition for resources from the CPP.

What is noteworthy, however, is that the commanders in the sub-group exhibiting the model behavior are not frustrated in their efforts by the lack of resources. These commanders see this limitation as a hurdle they can jump over to accomplish their goals rather than an impassable roadblock, and are adept at quickly finding solutions and creating initiatives to compensate for the lack of resources. For example, commanders in the sub-group oftentimes pool money from colleagues in the unit to purchase basic operational supplies, such as pens, paper, and ink for the print toner. In one of the units there was a little box for donations to buy coffee for the coffee machine that was purchased by the commander. The commander explained that he used his own money to purchase the machine. He pointed out that he was ready to buy it because it contributed to the wellbeing of policemen in the unit. He further explained that to get things done he had to go beyond what was considered normal in other police units.¹⁹

Nor is this type of activity confined to basic supplies. The commanders in this sub-group also demonstrated their willingness and ability to go beyond their strict role as policemen to support important social programs in the community. For instance, one commander developed and implemented a martial arts program designed to introduce formalized fighting to the children and teenagers in the community. To continue supporting the program, however, the commander

¹⁸ Interview with the commander from the Jane Addams UPP.

¹⁹ Interview with the commander from the George Marshall UPP.

has been compelled to find different mechanisms to raise funds. His challenge is to fulfill his policing obligations while running after donations to gather the uniforms and other equipment needed to maintain the program.²⁰

More fundamentally, the commanders in this sub-group also have to find inventive ways to cope with the lack of resources in terms of personnel and equipment. Although central headquarters is supposed to provide the UPPs with a designated number of policemen, the number of personnel actually provided change frequently depending on the needs of other UPPs and activities within the police force, more broadly.²¹ As one commander explained, “I have a workforce of 190 policemen on the books, but in practice have to cope with a deficit of 14 policemen, and another 22 policemen who are stationed here but work in other parts of the organization outside of my unit.”²² In order to manage this deficit, the commander has drawn on different policing strategies, including changes in stationing positions, policing dynamics, and work shift time schedules. In addition, the commanders have to manage the fact that they do not have enough bulletproof vests or ammunition for their men. In response, one commander created a system of rotation of vests among the men according to the timing of different operations and work shifts.²³

One of the interviews sums up the juxtaposition between the significant lack of resources and the pragmatic and results-oriented attitude identifiable in the commanders in the sub-group. The unit of this commander lies in a red zone and is housed within pallets. These pallet units are made of a thin material that bends at even a slight gust of wind. Thus, those working in the unit are extremely vulnerable to any attack from the drug factions that are still active in this community. The commander observed, “I have a big problem with space. The staff work in pallets, but we don’t really fit inside them. If only I had another pallet, I would have a better productivity in the middle activity that would improve the conditions of the end activity.”²⁴ The commander showed an understanding of how a well-functioning operational aspect is an important factor in achieving his unit’s goals and mission in the community. It is further

²⁰ Interview with the commander from the Oscar Arias UPP.

²¹ Interview with the commander from the Jane Addams UPP.

²² Interview with the commander from the George Marshall UPP.

²³ Interview with the commander from the Jane Addams UPP.

²⁴ Interview with the commander from the Kofi Annan UPP.

illuminating that he discussed his unit's precarious situation in a pragmatic manner, with a passing request for another pallet to work in, and yet returned quickly to talk about the activities and actions that are the mission of his unit. Despite being in a state of physical vulnerability and under-resourced in the midst of a war, the commander still demonstrated a clear focus on his mission as opposed to becoming resigned in the face of or defeated by the severe material constraints he and his team face.

Ultimately, the evidence shows a distinct type of behavior among the sub-group of commanders – that is, a real sense of de facto autonomy and a desire to make use of the limited resources available despite the serious material constraints. This is different from the resignation and fatalism that is present among other commanders. Nonetheless, there is a “tug of war” between the sense of de facto autonomy among the sub-group with the model behavior and the limited autonomy granted by the police hierarchy. Fundamentally, the commanders are fighting to do their jobs despite the police hierarchy providing only limited support. Yet, what is noteworthy about this sub-group is they are not defeatist or bitter about this situation. They simply acknowledge it and move forward: directly managing the problem if possible or focusing on specific actions to operationalize the larger mission of the unit in their respective communities.

5.2. Aware of a “Political Minefield” but Undeterred from Decisive Action

Commanders are aware of their field of action and the precise restrictions to that space. They recognize that these restrictions are often imposed and maintained through exogenous political forces. Commanders frequently mentioned the role of politics in the system and how politicians tend to get involved in the decision-making process within the community. One commander openly acknowledged that such influence occurs, and that he is forced to accept the interference. He related, “For example, we have vetted some events like funk raves based on intelligence data that so and so or so and so financed the rave or that the rave was being organized to sell drugs. We then vetoed it, but some outside political factor intervenes in a way that eventually allows the rave to occur.”²⁵ Another commander further elaborated on what this interaction with political forces through the state actually feels like in practice: “It is like a tug of

²⁵ Ibid.

war that we always lose. A request from the Secretary to revert a situation that I denied is an order for me to authorize. I always end up losing.”²⁶

Besides external political forces, the commanders in the sub-group are also keenly aware of internal politics in the unit. They draw on many strategies to maintain the morale and *esprit de corps* among the cadre in their respective units. In doing so, they emphasized the importance of addressing the potential lack of motivation among the men and how the commanders frequently use informal conversations and interactions to work with the men to address issues and maintain or improve morale. As one commander explained, “Even if you talk to the policeman, if you don’t talk to him on a daily basis, then he loses his essence. This unfortunately happens because of the day to day dynamic. Many times he is humiliated in the slum. If you are not focused, he loses himself.”²⁷ In this case, when he says “talk” he means an informal conversation oftentimes not in the unit itself but outside. This “talk” is unstructured and highly personal. The commander further explained that this informal talk allows him to tailor the conversation to the individual.²⁸ This commander had a “missionary” approach, emphasizing the importance of this daily exchange as if the policeman’s life and wellbeing depended on this interaction. This sort of sensibility is typical among the commanders in the sub-group.

In addition, these commanders in the sub-group act as effective intermediaries within the bureaucracy, for instance, by explaining directives from higher authorities to UPP personnel, on the one hand, and reporting conditions on the ground up the chain of command, on the other. In doing so, these commanders tend to aim to avoid sending or passing unclear messages to or among the police force. They fear that these messages could lead to misunderstandings with political or organizational ramifications within the force. For instance, as one commander explained, “Sometimes the orders arrive obscured [from higher ups]. Today with WhatsApp [a social messaging application very common in Brazil] the gossip arrives before the information.”²⁹ These commanders seek to get ahead of and positively shape such rumors. Commanders also frequently organize discussions to understand the views from the other policemen in the unit. Through these discussions, they are able to “translate” the orders that

²⁶ Interview with the commander from the Henri La Fontaine UPP.

²⁷ Interview with the commander from the George Marshall UPP.

²⁸ Ibid.

²⁹ Interview with the commander from the Oscar Arias UPP.

come from above in a way that is more palatable to their colleagues. As a result, they seek to mitigate any internal political consequences that might have otherwise happened in the unit due to the news.

5.3. Shifting Gears with a Strong Focus on Strategic Functions

Commanders in this sub-group of UPPs practice different categories of functions – strategic, tactical, and administrative – in a hybrid and dynamic manner. They characteristically switch from one category of functions to another in a span of minutes. Commanders who fit this model appear nimble in shifting gears, meaning that they tend not to see functions in a compartmentalized manner. Instead, they seem to have a more “fluid” view of functions in which they are continually switching from one type of function to another, thus toggling among them in a sequential manner. At the same time, they have a broad view of the importance of all types of functions to the effective operation of the unit. For instance, one commander in the sub-group explained that it would be very hard for him to conceptually separate the time he spends on the different categories of functions because in a typical day his work routine incorporates the three kinds of functions constantly in ways that intertwine.³⁰

The interviews showed that commanders tend to spend time on multiple types of functions for two primary reasons. The first is the unique position of the UPP within the hierarchy of the police force. The UPP is a specific unit in the force in which the commander is directly liable for anything that happens in the unit. This is very different from the context of a battalion in which the responsibility for any actions is jointly shared by more men in the unit besides the commander (as well as by other units). As one commander explained, “I am the one responsible for any stupidity committed by anyone inside the unit, from soldiers to officials.”³¹ This responsibility compels him to involve himself in the three different kinds of functions in order to remain engaged and avoid negative incidents for which he will be held responsible.

The second driver is a clear tendency for the policemen to judge commanders negatively if they are not active in the field, in the streets, together with the other policemen. If they are working inside the unit only on more administrative and strategic functions, then their

³⁰ Interview with the commander from the Jane Addams UPP.

³¹ Ibid.

subordinates do not view them as favorably. These are front-line service delivery units that are often in dangerous situations. UPP commanders who do not share in these risks tend to lose their subordinates' respect and lack credibility. This reputational concern and its repercussions on the unit's morale is another compelling reason for commanders to include tactical functions, including taking an active part in field operations, in their daily routine even when there is no immediate need for such engagement.

Despite recognizing the importance of all categories of functions, commanders in this sub-group nonetheless spend more time on particular types of functions that require judgment and deliberation – strategic and tactical functions – and less on more routinized functions that are logistical and operational in nature and that can be delegated (administrative functions). The commanders in this sub-group unanimously responded that they spend more time on strategic functions such as the planning of an operation or the development of strategic plans for their unit.

These commanders also tend to try to delegate more routinized functions so that they can spend time in the unit on strategic-level challenges. In doing so, they have a managerial view of their functions in which they often delegate specific parts of the work to others. As one commander explained, “This [allocation of responsibilities] changes from unit to unit. It depends on the relationship between the commander and the sub-commander... But, here the strategic part is more the responsibility of the commander and the administrative part that of the sub-commander.” This commander then proceeded to explain that this division happens due to the trust and the affinity that exists between the two officers. Indeed, the units with fringes of formality commanders all had this kind of work arrangement in which the commander delegated more administrative functions to sub-commanders while focusing on strategic functions.

5.4. Bureaucratic Zones of Opportunity

The third characteristic of the commanders with the model behavior is that they all have a strong tendency to improvise to address problems and challenges, but do so within the scope of the law. In other words, they operate within bureaucratic zones of opportunity that are in the boundary of the legal. Commanders in this sub-group appear able to get around restrictive rules and counterproductive protocols through imaginative and innovative methods, but do so legally

and for the benefit of the organization. In doing so they make use of available “openings” or “gaps” in protocols, or bureaucratic zones of opportunity, to carry out their duties.

As one commander explained with respect to addressing a challenge, “You know what you have to do. When there is nothing written, then that is the opening. You draw on the opening to construct something in the manner that you as the commander understand it as opposed to a way that is systematized by your superiors.”³² Commanders in this vein seek to find or create an opening in the rules and protocols and make positive use of this flexibility by deploying their bureaucratic capital to achieve results. This commander further explained that he actively searches for these openings, “There are many opportunities for which we have openings. In these cases, we have to know how to act in a way that it is the best for the unit.” When making use of these openings, commanders in this sub-group avoid trying to solve problems by creating cumbersome new institutional structures and procedures. They aim to solve problems by innovating more tailored, often less formal new procedures. In doing so these commanders also maintain a broader understanding of and focus on longer-term targets and goals.

5.5. What Distinguishes the Commanders with the Fringes of Formality Behavioral Profile?

The commanders who are part of this sub-group exhibit a set of unique traits that make them prone to develop this behavior. They have deep local knowledge to develop projects, norms, and strategies that are tailored to their own community. In the words of a commander, the fringes of formality commander understands the recipe but adds his own flavor.³³ In this case, the “recipe” is the formal framework that they receive from above or outside, while the “flavors” are their personal touches based on their experience and knowledge of the needs of the community and their UPP.

This is especially important because often the targets set out by the police force hierarchy do not appropriately or realistically reflect the needs of the community. As one commander explained, “If I accomplish 100% of the targets [set by the police hierarchy], I will not meet the demands of the community.”³⁴ In this case, this commander’s local knowledge and

³² Interview with the commander from the Nelson Mandela UPP.

³³ Interview with the commander from the Muhammed Yunus UPP.

³⁴ Interview with the commander from the Kofi Annan UPP.

understanding lead him to adapt the external priorities through the prism of his own judgment of what is best for the community, a judgment informed by his daily engagement with it. In sum, the commanders who fit this model are able to adjust and tailor orders and protocols to the reality of their respective communities based on their local knowledge.

In addition, the commanders who fit this model of administrative behavior are improvisers. Indeed, improvisation is the norm. As demonstrated by the examples above, when there are no rules or protocols, these commanders do not run away from the problem or remain passive. Instead, they nimbly confront problems and address them according to their own strategies, as opposed to deflecting them to superiors or to other organizational units and expecting them to be solved there. As one commander explained, “If I do not improvise, things don’t happen – 100%.”³⁵ Another commander commented, “I do what is most productive. For example, on specific issues you see that the protocol is not up to date. So, I have to do things differently.”³⁶

Despite their improvisational approach and their willingness to thwart convention and a strict interpretation of the rules, commanders in this sub-group frequently demonstrate a highly developed legal and hierarchical awareness. These commanders do not operate *without regard to* formality and rules – rather they operate on the fringes of formality. Precisely because they are aware of the consequences of their actions, they are able to find crucial “openings” and to pragmatically cope with the challenges they face. Moreover, when they are not aware of or do not fully understand a given rule or protocol, they are avid researchers. In this case, they are like detectives and are able to carve out information and work with superiors and other sources to develop solutions.

Drawing on this awareness and appreciation of rules and hierarchy, commanders exhibiting this type of behavior work within the boundaries of legality to implement their plans. In doing so, they understand the military structure and its positives and negatives; they therefore tend to approach the system with common sense and pragmatism, as well as a certain amount of caution, especially in cases where the line between the formal and the informal is ambiguous.

Lastly, the commanders who fit this model share a view of protocol that allows for evolution and adaptation – a kind of organic sense of the evolution of protocol. They show an

³⁵ Ibid.

³⁶ Interview with the commander from the Oscar Arias UPP.

understanding of what is required to nourish new practices into rules and protocols over time. This means that these commanders are able and seek to draw on the “openings” to develop new practices that will work for them and are adapted for their particular communities or units and their challenges. Importantly, they do not disdain or discount the role of protocol. Rather, they have an understanding that these adapted practices can and should eventually themselves become rules and protocols. As one commander explained, “I look at other protocols before taking new actions that are always within legal boundaries. Then, I wait until I can turn them into protocol or until someone else does. When I started in the George Marshall UPP, we were defining how the policing strategy should be done given the ins and outs of the community. Our developed practice became standard and now these are the protocols that we are using in the police force as a whole. But, this process took a while – about four years since the implementation of the initial practice.”³⁷

As this example shows, this sort of commander has an “institutional patience,” but also a commitment to breeding and nourishing protocols from ground-level best practices. Commanders exhibiting this set of behaviors tend to start by creating and developing their own practices depending on what works on the ground and then nourish their development into standard protocols over time. This form of approach matches closely with Pritchett’s focus on identifying and building from positive folk practices – the effort to find working and well-adapted practices and to replicate those, rather than the attempt to force formal exogenous solutions on circumstances that are likely to resist them either immediately or at a later stage of implementation.³⁸

5.6. Relationship with Intermediate Administrative Outputs

The results of the first part of the survey positively identified the presence of the bureaucratic behavior posited in the hypothesis. A sub-set of commanders were, in fact, characterized in their behavior by the three criteria, making this a distinct sub-group within the survey population, with its own distinguishable style of operating.

³⁷ Ibid.

³⁸ Pritchett, *Folk and the Formula*.

The results of the second part of the survey that measured intermediate administrative outputs did not, however, show much variation. The results provided by the commanders showed responses indicating average or above average results in terms of intermediate administrative outputs across the indicators measured. In addition, the question regarding overall organizational capacity also does not show much variation in the commanders' answers. In sum, while the survey answers show variation in the type of bureaucratic behavior shared by commanders, it does not show variation in their perception of administrative performance of their respective units.

As a result, on one level, I cannot relate the bureaucratic behavior identified in the earlier part of the paper to these intermediate administrative outputs. As seen from the survey answers, there is very little variation in the commanders' responses. Given the small amount of variation, any attempt to run a correlation between the bureaucratic behavior variables and the administrative output variables will be statistically insignificant.

This at first glance appears something of a puzzle for, if not a stumbling block to, my theory. But, at a deeper level this lack of variation in the commanders' answers regarding the intermediate administrative outputs is actually evidence of my theory. My theory is that the commanders who exhibit the model bureaucratic behavior, including acting on the fringes of formality, contribute to better intermediate administrative outputs in their respective units. Indeed, I was able to demonstrate that the behavior exists through the results of the first part of the survey. The answers to the questions concerning behavior showed much variation, and a subgroup of the commanders did in fact fit the model of the behavior hypothesized. What is crucial is that these questions are not the type that we would expect respondents to respond strategically about. Such questions about their inputs are unlikely to elicit the kind of projection, shaping, or even dissembling that Pritchett and others have shown to be endemic in developing country contexts. That is because they do not pertain explicitly and directly to performance and outputs, metrics that are directly tied to interview subjects' chances to receive promotions, rewards, and other incentives.³⁹ In other words, we should expect these answers to be more accurate, since the commanders have no "skin in the game" on these issues.

As Pritchett and others have described, when such surveys or other mechanisms ask for information on issues about which officials will be judged, however, such strategic answering is

³⁹ Ibid.

actually more like the norm than the exception. Unsurprisingly, then, for the questions concerning intermediate administrative outputs in my survey that touched on matters that they would likely be measured and evaluated upon, all of the commanders responded in a similar manner irrespective of the kind of behavior shown in the first part of the survey.

Yet, *we know* there is variation in these outputs, as is evident from the case studies and previous fieldwork that motivated the research question of the paper.⁴⁰ This shows clearly that the commanders have a strong sense of what the formal bureaucracy and world beyond demands and that they are *projecting* those formal expectations on to the answers regarding the intermediate administrative outputs – even though the reality is often quite different.

This assessment is strengthened by what we know about the police force in Rio. Indeed, the police force, including in the UPP context, communicates a strong sense of what is expected to those working in the organization. The structure and hierarchy of the police force is already conducive to clarity on outputs and what is expected from the officers. This sets a strong incentive for officers to report to this standard or to the norm.

This hierarchy and clarity of mission is coupled with a new public management reform that also lays out very clear goals and targets. What both levels, meaning the organization itself and the reform, are less clear on is how to accomplish these targets within the unit. It is here, in the bureaucratic administration of the UPP, where different mechanisms arise to manage work in the organization. One of these mechanisms is the bureaucratic behavior explored in this paper. This behavior is found to be present in those units that also seem to demonstrate stronger bureaucratic administration. Indeed, the units showing stronger bureaucratic administration were better organized. Offices and policemen appeared busy and bustling, order and discipline appeared to prevail more, communication was more fluid, and, overall, there appeared a healthy work dynamic among policemen. Yet, because of this strong sense of what the formal demands, both the commanders with and without the behavior project formality into their answers on intermediate administrative outputs, thereby providing similar responses across the board.

Thus, on the one hand, the commanders who fit the model of bureaucratic behavior in the hypothesis are willing to provide answers to report positive deviance, meaning the posited behavior, yet within limits. When there is a strong sense of what the formal demands, as is the

⁴⁰ Please refer to summary of interviews in preliminary fieldwork notes (December-April 2015) and document outlining analytical framework of dissertation (May 2015).

case given the reasons above, then they projected formality. This conformity to the formal can occur either due to functionality or isomorphism.⁴¹ If the answer implies functionality, then they are in fact producing similar outputs as those that they have expressed in their answers. If the answer implies isomorphism, then they are projecting similar structures and frameworks as they expect formal organizations to exhibit in practice even though they might have comparable structures but of a different nature.

On the other hand, the commanders who do not fit the model of bureaucratic behavior in the hypothesis project formal answers for reasons that are not as benign as those described above. In this case, they are likely not generating as good intermediate administrative outputs as the others who conform to the bureaucratic behavior model, but because of this strong sense of what the formal demands, they project answers to conform to what is expected by the police force overall as well as UPP reform supervisors.

Ultimately the application of the survey shows that both positive deviators and other types of commanders are *de facto* doing things differently when questions relate to their practices while *de jure* projecting formality when there is a sense of evaluation and there is a strong sense of what the formal demands. This happens for different reasons depending on each case, but the uniformity in answers shows that inevitably the informal behavior has to find ways to co-exist with the formal in practice. The qualitative case studies in the next section will provide further evidence for the theory and the association between the hypothesized behavior and intermediate administrative outputs.

5.7. Robustness Tests

As laid out earlier, the bureaucratic behavior described above has three elements: an active middle-level echelon, practicing strategic functions, and operating within bureaucratic zones of opportunity. My contention is that the presence of these three elements in the behavior of commanders is associated with positive intermediate administrative outputs. Yet, some may ask, to what extent is it necessary that all three criteria be present for this to be the case? For instance, could it be the case that a commander who shares one or two of these criteria could preside over a middle-level echelon producing comparable intermediate administrative outputs?

⁴¹ This insight was based on a conversation with Lant Pritchett.

And to what extent are these units with this model behavior in fact associated with better intermediate administrative outputs? I will address these questions in turn.

In this section, I seek to show that all three criteria are necessary for the commanders to fit the described model of behavior and thus to exhibit the relationship specified between bureaucratic administrative style and better intermediate administrative outputs. In doing so, I work through each of the six potential combinations of the three criteria and show how the resulting profiles of behavior are distinct from the model profile described in the sections above, distinctions that cause them to differ in the degree to which their behavior is correlated with positive intermediate administrative outputs. As an overall matter, the presence of only one or two of the three sub-behaviors tends to result in a commander with a particular style of organizational behavior, one that may have positive aspects but is distinct in crucial ways from the integrated behavior I posit to be of particular value for successful administrative performance.

5.7.1. Initiative Only: The “Free Radical” Profile

The commanders who fit the initiative criterion only tend to have an assertive profile of behavior. They tend to have a strong sense of what the formal system demands and are attuned to the police hierarchy’s “party line,” but they tend to make decisions in an impulsive manner. These decisions oftentimes include resort to the use of force in the policing context. The rhetoric of those falling into this category among the 38 UPP commanders tended to verge on the or even be belligerent and combative. For instance, one commander who fell into this category emphasized that his approach to the local community was basically that of war. He elaborated that, while his UPP is successful, it is because they “are using war to accomplish these results.”⁴² This group differs from those exhibiting all three elements of the model behavior in that the people working in their respective units are constantly under the pressure – sometimes what seems a nervous and unproductive energy – to act impulsively and forcefully to solve problems that arise in the middle-tier echelon.

⁴² Interview with the commander from the Kim Dae-jung UPP.

5.7.2. Strategic Functions Only: The “Armchair General” Profile

The commanders who practice strategic functions only tend to have a technocratic profile. They lean toward a highly technical and formalistic style of decision-making, meaning that they look for as much information as possible before making decisions. They also strictly follow rules and protocols. As one commander who fits this technocratic profile explained, “Sometimes I want to do something, but my superior disagrees. I, in turn, as a subordinate have to submit to his orders.”⁴³ Commanders with this profile understand their autonomy as being circumscribed within strict limits. As one such commander put it, “It is not an autonomy per se... it is an autonomy that is within the limits of regulation.”⁴⁴ When episodes occur that are out of the ordinary or they do not know of a rule or protocol that they can follow, they tend to register the problem in writing, and drawing on formal mechanisms, submit the question, issue, or claim to other organizational units. They thus differ considerably from commanders exhibiting all the three elements of the model behavior in that they run their respective units in a relatively passive manner.

5.7.3. Bureaucratic Zones of Opportunity Only: The Jeitinho Profile

The commanders who are operating within bureaucratic zones of opportunity only tend to have an “operator” profile. Commanders who fit the operator profile oftentimes verge on practicing, if they are not simply examples of, the counterproductive jeitinho approach so typical of Brazilian organizational behavior. To be more concrete, the Brazilian jeitinho approach involves either going around or breaking rules, often for personal gain. The accumulation of these tactics to circumvent formal structures ultimately undermines the consolidation of institutions over time. One commander who fits this operator profile started instituting different, inconsistent kinds of punishments for the policemen in his unit if they did not conform to certain standards, rather than going through more formal and fair procedures of punishment.⁴⁵ While

⁴³ Interview with the commander from the David Trimble UPP.

⁴⁴ Ibid.

⁴⁵ Interview with the commander from the John Hume UPP.

more formal procedures take more time and can be somewhat cumbersome, this commander created punishments that lacked transparency and fairness, and thus risked undermining morale.

For instance, this commander created different penalties of community service for those policemen who did not wear the uniform in the manner he thought appropriate. He relayed the story very proudly and explained that he had created new norms in his unit through the use of punishment. Though he was accomplishing his goals, the manner in which he did so was institutionally troublesome. First, it could set the precedent for higher-level officials punishing other officials for reasons that are at their sole discretion rather than having any formal or legal basis, and, second, it could be perceived as unfair. Moreover, the commander created additional structures in his middle-level echelon to be able to execute these penalties. The motive for his action was to establish his authority quickly by avoiding the cumbersome filing process of complaints in the police force as opposed to advancing the common good of the unit. Commanders exhibiting all three characteristics of the model behavior on the other hand, tend to draw from the *jeitinho* style and approach, but do so clearly within the applicable rules and regulations and make use of this style for productive organizational ends within their respective units.

5.7.4. Initiative and Strategic Functions: The “Barking up the Wrong Tree” Profile

The commanders who are active and practice strategic functions but do not operate on the fringes of formality tend to have an active technocrat profile. Commanders who fit this profile follow the rules very closely, but are constantly making written complaints when problems arise. They transfer problems to superiors and, while active, tend to stick to formal processes and procedures. In other words, they lack the tendency to draw on their bureaucratic capital to develop innovative and creative solutions to organizational problems that is typical of those operating on the fringes of formality. One commander who fits this profile showed me a folder in his computer with all of his written requests, all of them highly technical, that he had prepared over time.⁴⁶ But, when asked how many of these written requests had been put into practice, he answered in a matter of fact manner that none of them had been operationalized. It seemed as if he derived enough satisfaction from simply having the virtual folder of complaints in his

⁴⁶ Interview with the commander from the Elie Wiesel UPP.

computer. In addition, commanders with this profile have a tendency to exaggerate their sense of autonomy. They draw on their knowledge of the law as an element of power and superiority over others as opposed to having this knowledge be a vehicle for change as in the model type of behavior. As this commander explained, “I have total autonomy. I have versatility within my little space. I am a feudal lord, a despot.”⁴⁷ In summary, commanders falling into this category lack the crucial ability to put into practice their formal requests and complaints and thus operate flexibly and creatively in an often dysfunctional bureaucracy.

5.7.5. Initiative and Bureaucratic Zones of Opportunity: The “Energizer Bunny” Profile

The commanders who are active and are operating within bureaucratic zones of opportunity have an assertive operator profile. Commanders with this assertive operator profile operate on the fringes of formality in an assertive manner. They are sometimes even belligerent in their approach and manifest this behavior in such a way that shows a lack of vision of what is good for the unit. They are not afraid to talk about their practices and at times openly recognize their belligerent profile. As one commander who fits this assertive operator profile explained, “In 90% of the cases, I follow orders and in 10% of the cases, I do not follow. I am really testing the system on purpose.”⁴⁸ They are thus close to the *bad* jeitinho inside the organization. Their practices do not necessarily lead to the common good of the unit. In sum, then, these commanders tend to differ from those with all three elements of the model behavior in that they lack a strategic vision for their activities. Their approach is geared toward short-term and immediate results without an understanding of the ramifications of their current actions for the future of the unit and the police force as a whole.

5.7.6. Strategic Functions and Bureaucratic Zones of Opportunity: The “Short of the Mark” Profile

Lastly, the commanders who are practicing strategic functions within bureaucratic zones of opportunity have a technocratic operator profile. Commanders who share this profile have a

⁴⁷ Ibid.

⁴⁸ Interview with the commander from the Dag Hammarskjöld UPP.

strategic vision and are finding bureaucratic zones of opportunity, but they do so in a passive, almost sluggish manner. They do not really take initiative to propel different ideas forward in their respective units or, more broadly, in the UPP or police force. They are able to recognize challenges and devise clever solutions that are on the fringes of formality, but they are not persistent enough to push through to implementation. One commander, for example, explained that his unit started developing a social program for the community in which each policeman would adopt one family per month and in doing so would form thicker ties to this family and help them change their lives.⁴⁹ He spent a good part of the interview detailing the entire program and showing how despite it being beyond their assigned duties it would be another way to accomplish the mission of pacification. The other policemen in the unit later commented that he has been talking about the program a long time and yet had failed to start implementation of the idea. The tone of their storytelling seemed to imply that this is a recurrent habit of the unit's commander. In summary, the technocratic operator profile has a strategic vision and an ability to operate on the fringes of formality, but unlike the commanders who share the model behavior, they lack initiative and persistence in the implementation of different actions within their respective units.

Table 1: Summary of Behavioral Profiles in Police Pacification Units

Element(s) of Model Behavior	Behavior Profile	UPP Unit Example
Initiative only	Free radical	Kim Dae-jung
Strategic functions only	Armchair general	David Trimble
Bureaucratic zones of opportunity only	Jeitinho	John Hume
Initiative and strategic functions	Barking up the wrong tree	Elie Wiesel
Initiative and bureaucratic zones of opportunity	Energizer bunny	Dag Hammarskjold
Strategic functions and bureaucratic zones of opportunity	Short of the mark	Muhammed Yunus
Initiative, strategic functions and bureaucratic zones of opportunity	Fringes of formality	Mother Teresa

⁴⁹ Interview with the commander from the Muhammed Yunus UPP.

6. Case Studies

This section draws on case studies to test the hypothesis further and complement and deepen the analysis above. The case studies allow for a more in-depth analysis of whether the posited administrative behavior is associated with good intermediate administrative outputs, and conversely, how the lack of behavior is associated with bad intermediate administrative outputs. In particular, given the strategic behavior to which the surveys are subject, especially on questions of outputs and those that will affect rewards and penalties for the higher-level officials, these case studies allow a more careful look at what kind of organizational behavior is and is not associated with positive administration in these units.

In order to conduct this task, the case studies focus on outliers – situations where we would expect the UPP to be doing differently than it actually is. The analysis, in particular, draws on two outliers to analyze the strength of the hypothesis in greater depth in a surprisingly successful and a surprisingly unsuccessful case. The first case study is of a UPP in challenging circumstances (a red zone community in war-like conditions) but that shows good administrative capacity. The commander in this unit conforms to the posited bureaucratic model of behavior, and the study shows the association between the model behavior and the positive intermediate administrative outputs. The second case, conversely, is of a UPP in favorable conditions (a green zone community that has already been pacified) but that shows weak intermediate administrative outputs. The study demonstrates how the absence of the model behavior is associated with the lack of administrative effectiveness.

The case studies apply a shorter version of the original survey to the heads of all the sub-units within the UPP (i.e., personnel, intelligence, logistics and planning, and organization). This allows for a more comprehensive analysis in that it includes different perceptions of the middle-level echelon in the unit. This survey is semi-structured and includes both open-ended and close-ended questions.

6.1. Case Study: UPP A

6.1.1. The Fringes of Formality Behavioral Profile

The commander of UPP A demonstrated the fringes of formality behavioral profile. He showed initiative despite the resource and bureaucratic restrictions that he faced. The commander explained that he usually had to consult other organizational units to make decisions, but it was evident that he understood how to expand his sphere of influence within the bureaucracy to get to where he wanted. In other words, he knew both what he could and could not do and where and when to push and expand boundaries. For instance, as he explained, “I can get certain types of non-procured equipment, but have much difficulty to reallocate the costs. Now I am trying to get non-lethal armament.” We learn from this quote that the commander is aware of the resource constraints that he faces, and yet is proactive in trying to solve the problem in a non-traditional manner within his sphere of influence within the organization.

Several aspects of this quote are worth further highlighting. The commander has the initiative to find a non-conventional way – non-procured equipment – to get basic inputs to be able to arm himself and his unit to effectively fight the war in his community. In theory, the CPP has to provide these inputs to the front-line service delivery unit. Instead of complaining about the lack of resources and equipment as do most other heads of units, the commander has already internalized the scarcity of resources and operates in a proactive manner to maneuver solutions within his bureaucratic sphere. In doing so, he is operating on the fringes of formality in that he is finding an opening within the organization to get this equipment. He is thus freestyling to “reallocate the costs” of this weaponry acquisition. Moreover, he is developing solutions in a context where there are neither resources nor protocols to follow. And lastly, we also learn that this is not a one-off incident, but that the commander applies the same adaptive behavior to multiple categories of equipment including “non-lethal armament.”

Despite acting in an unconventional manner, the commander exhibits a keen awareness of the formal circumscription of his actions. He knows where the formal rules end and where the informal begins. He shows this awareness as he discusses the involvement of politicians and politics more broadly in the activities of UPP A as a whole. He has the strength of conviction to keep going despite the numerous adverse personal consequences that doing so will inevitably

entail. Ultimately, the commander shows an awareness of the political-economic context of the organization as a whole and is able to walk a thin line: he is able to push the boundaries of the organization when it is necessary to accomplish his immediate task while simultaneously rigorously maintaining the formal rule-enforcing boundaries of the organization.

In order to maintain his footing on this fine line, the commander spends more time on strategic and tactical functions as opposed to strictly administrative ones. He has a very clear idea of the hybrid nature of his work and which kind of management focus and skills are demanded by each functional category. He provides a detailed account of the percentage of his time spent on work entailing more planning and strategic skills, such as the planning of field operations, monitoring of intelligence data and the prioritization of different tactical choices in a given period of time. This percentage is further coherent with how he rates the time spent on the prepared list of examples of functions that were given to him in the survey.

Evidence from the interviews with other front-line agents in his unit show that this practice requires delegation and that this kind of strategic thinking inevitably trickles down to the lower-level professionals in the unit hierarchy. In particular, the sub-commander in the unit shows that critical thinking and developing judgment about different forms of evidence is a fundamental component of his work program. For instance, as he explains, “We think about the different data points that we receive from the dial-complaint and others, and we have evaluated the extent to which they are true. This has to be done on a moment by moment basis, in real time, and it is our responsibility and our risk.”

Moreover, it is important to note that the above description by the sub-commander involves a sophisticated awareness of the complexity of these evaluations in terms of their oftentimes “gray” nature. The sub-commander chooses the phrase “the extent to which they are true” implying that they are generally neither black or white, but instead that there is judgment and deliberation involved in the evaluation of these complaints. His diction further demonstrates a mature sense of the consequences decision-making in terms of both the “responsibility” and the inevitable “risk” that an incorrect judgment might entail for not only his professional career but also for the unit, and most importantly, the safety of the community as a whole. Ultimately, as evidenced by the sub-commanders’ practices, the commander is able to transmit a careful and deliberate understanding of the types of functions and what their effective practice entails to key members of his team.

The commander and sub-commander's adherence to the fringes of formality behavioral profile shaped the behavior of subordinates within the unit at large. The commander sets the example and explains that he is only able to meet the targets set out by higher organizational units when he manages to improvise. The rhetoric and examples provided by others in the unit reflect a similar kind of behavior in their respective roles within the unit. For instance, the officer responsible for human resource management (P1) explains, "We have to improvise, with personnel, for example, we have difficulties, we have to re-manage from place to the other so that we are never with a deficit." This is an example of inventive satisficing in which the officer is trying to make ends meet by re-working shifts and timetables in a context of limited resources. The officer responsible for maintenance of resources and real estate (P4) further voluntarily provides a working definition of the same principle: "To improvise for me is for them [CPP] to determine what has to be accomplished but not give you the means to accomplish them [the mandated objectives], and then you have to develop other artifices to meet the target and there are things that I cannot tell." The rhetoric of the P4 policeman shows that he not only practices improvisation, but is also keenly aware of what and why he is doing what he doing to accomplish his work program.

It is also important to note the hesitation with which he described his behavior. In the quote above, the P4 policeman's statement, "I cannot tell," shows that he is also aware that it is "organizationally smart" not to make explicit all of these practices. In other words, the fringes of formality behavior – and inventive satisficing, in particular – is not one that necessarily invites exposure due to the oftentimes messy and unconventional nature of the practice. The similar vagueness in examples is expressed in another description of activity by another officer: "The police work not to mess up a location when someone is shot, such as by not removing the body, and I maintain the formal rules, never breaking them, but when it is not possible, we have to work in a more efficient manner." In this example, the officer is clear that he does not break the rules, but he also does not go into details about how he solves the problem. Instead he provides a somewhat vague description: "more efficient manner."

The interviews also showed evidence of other elements of the fringes of formality behavior in practice. As the P4 policeman explains, "Politics is always a constraint and we always have to bang our heads against the CPP walls. At one point we needed rifles, but there was no weaponry and we could not get them because it was the policy that the UPP could not

have rifles.” This case shows the P4 policeman and others as toggling protocols in the sense that they were able to continue their work while also managing to insist on changing the course of different policies and practices, such as for instance, the acquisition of rifles for the UPP. As they recount the story, they acted opportunistically in a strategic manner: going back numerous times in an intermittent manner to higher levels of the organization to approve their requests. They did so by maintaining certain protocols while also insisting on others and thus toggling back and forth between them.

In other moments when there are no rules or protocols and no resources, they freestyle their way to different solutions. As the officer responsible for instruction and professional training of human resources (P3) explains, “It has happened here that we talk to the commander and we pass on our ideas and if he authorizes, ok, then we can go ahead with the [homicide] report. I base my actions on the existing publications [of rules and regulations] available, but there is not a category for a harmed policeman, for example, so I kept reading, got material from other colleagues, and developed a solution that I could later show to the commander for his approval.” In this case, the officer is trying to develop a solution to the problem without having any protocol to draw upon. Yet, it is important to note that he is trying to do so within the boundaries of what is legal (“based myself on existing publications”) and also within the formal hierarchical approval process (“show to the commander for his approval”). The latter shows evidence of the time spent to develop solutions that are approved by the chain of command and institutionalized in the system as opposed to developing one-off solutions and exceptions to solve particular unit-specific challenges.

The commander of UPP A showed further evidence of his fringes of formality behavior when recounting his future plans for the unit. As shown in the background section, the unit is located in a red zone where it was constantly under gunfire and officers’ lives were threatened on a daily basis. In the context of this challenging environment, the commander, through the practice of fringes of formality, was able to find a way to protect his unit and officers from the dangers of the community while also being able to carry forth the UPP mission. Faced with a lack of the resources and organizational support needed to protect his unit, the commander chose to develop a partnership with a local university that allowed him to base his unit within the university headquarters that is adjacent to the community. He assessed that this would be a win-win situation: the university would benefit from additional security due to UPP A’s presence;

and the UPP would have a more secure location from which to conduct operations in the community. In doing so, the commander made use of bureaucratic zones of opportunity (i.e., there are no explicit protocols about this type of partnership) to freestyle and develop a “bureaucratic bunker.” This new setting for UPP A would provide the unit with additional protection – despite bureaucratic resource constraints – while also allowing the officers to continue with their work program in the community.

6.1.2. Relationship to Intermediate Administrative Outputs

Evidence from the surveys shows that UPP A performs on average relative to other units on most intermediate administrative outputs measured. For instance, similarly to an average unit, they have a sense of mission, but not everyone understands the mission; they have corporate autonomy despite having a sense that they receive no support and face many restrictions; and levels of communication, growth and learning, and order and discipline are average when compared to other units. Yet, in a context where there are low expectations given the contextual challenges (high crime and incidence of poverty) that the UPP faces, then the fact that we see average outcomes should be interpreted in a more positive light. In other words, while UPP A performs on average relative to other UPPs, it does so in a much harsher environment than that most of the other units face. Thus, taking its operational environment into consideration, its ability sustain an average level of performance is itself a notable achievement.

What is important to note in the analysis of the interviews is that the responses are candid and open while at the same time being both internally and externally consistent. The survey respondents demonstrate critical awareness and understanding of the complexity of the challenges they face as they work to sustain and improve their respective units’ performance. They are not strategically picking responses, but instead are thinking through answers based on their respective experiences as working professionals in the unit. The internal consistency of their answers shows this as they are able to illustrate their answers with clear examples that speak to the level at which they rank their responses. The external consistency of their answers further confirms this interpretation. That is, both commanders and sub-commanders answer in a similar way to that of the lower rank officials in the unit. Most questions do not reveal large

differences of opinion in terms of how well the unit is performing according to the different indicators measured.

Another highlight is that the unit seems to be performing extremely well on particular indicators that are not only critical but also provide further evidence of the fringes of formality behavior. For instance, all interviewed provide unanimous evidence of a strong sense of critical task. This means that they are able to both describe the most significant challenge in the unit and to identify their role in confronting that challenge. They are able to do this effectively regardless of the scope of their activity. The commander of UPP A, for example, shows a broad understanding of the challenge in explaining that although the police are technically capable of opening the way for the other services to operate in the community, those services still have not arrived. The sub-commanders provide answers that also support this interpretation of the deficit of the state in the area. Together, they all describe how they are going beyond their roles as police to be able to cope with this deficit and move forward with the task of fully pacifying the community.

The unit's front-line agents have a narrower sense of their respective critical tasks, which is consistent with their respective roles in the police corporation, and demonstrate consistency in their interpretation of what they are supposed to do to accomplish their assigned tasks. For instance, the P1 policeman describes the challenge of needing more policemen to combat the drug trafficking problem in the community. He then proceeds to describe his role as that of managing different timetables and work schedules to be able to meet that challenge in the most administratively effective manner.

When discussing the overall capacity of the unit, a recurrent feature of the answers given was an ability to draw a distinction between factors that are endogenous to the unit and those that are structural and beyond their control. In other words, unit respondents were readily able to distinguish administrative capacity from other elements that may be affecting their evaluation of intermediate administrative outputs. They recognize that they are doing well on the administration of the unit given exogenous challenges that are inextricably linked to the economic and political context in which their unit is embedded.

6.2. Case Study: UPP B

6.2.1. A Non-Fringes of Formality Approach

The commander of UPP B shows a very different profile of behavior than that exhibited by the commander of UPP A. He seems to be there to complete the timetable and receive his paycheck at the end of the month, without much regard to the real challenges involved in making progress in the formal occupation of his communities of responsibility.⁵⁰ Yet, this interpretation does not come across directly from his responses, which are mostly characterized by strong rhetoric. Rather, it is based on the contradictions found between his responses and those of the other professionals working in the unit. His responses generally qualify as isomorphic mimicry: he tries to meet the expectations for the best answer for each survey question. Yet, the other members of the team do not seem to play the same game.

For instance, the commander tries to demonstrate that he has strong initiative and is actively stimulating progress in the unit, while his subordinates' responses show that the reality is much different. When he is asked if he has *de jure* autonomy to reallocate resources for an unexpected expenditure, the commander responds: "Each UPP group has a policeman that is responsible for this function. For example, the battery of my car broke this week, and it was just a matter of asking the CPP that they resolve it for us." The commander's answer to this question is interesting because he starts out with the *pro forma* arrangement ("each UPP group has a policeman that is responsible for this function") and when he relates it to his reality, he provides a personal example ("battery of my car") that is likely not to generalize to other varied expenses in the unit. His interpretation is somewhat passive and paternalistic ("they resolve it for us"), as opposed to being proactive and showing initiative on his part to resolve problems and reallocate expenses.

He further continues to provide stories and examples that relate to *pro forma* arrangements as opposed to relating it to his experience in his unit. When asked about *de facto* autonomy, he explains, "The superior commander of the UPP is very clear in relationship to this. We are all responsible, do you understand? We have autonomy, but in case someone pushes the

⁵⁰ This profile of behavior would be equivalent to the time server behavior described in the Theory Chapter.

limits of authority, they will be held responsible. Every commander has his own internal autonomy.” The diction in the response (“we,” “they,” “every commander”) emphasizes the generality of his answer. He provides comments and scenarios that are theoretical and is unable to translate what ‘internal autonomy’ means in practice.

In contrast, the other professionals working in the unit generally provide a different picture of what is happening in practice and are forthcoming with clear examples about the lack of autonomy and support from other organizational units. The P1 policeman says that he has support in terms of HR, but that financially they have no support. Others say that they lack policemen to carry out their work. Indeed, the officer responsible for intelligence functions (P2) explains that they “lack the material resources to be able to work.” In this case, their answers are not qualified. Nor do they imply conditionality. For instance, according to other professionals in the unit, it is not that they lack resources to “work effectively,” but that they lack resources to work at all. It is important to note that the tone in the narrative and answers indicate passive resignation to a situation that seems to be lost. Thus, the commander’s rhetoric is not corroborated by the responses of other professionals, who seem to demonstrate a lack of initiative – replaced instead by passive engagement – with the immediate challenges facing the unit.

Another example of the passive nature of the commander is how he describes the role of politics and its influence in the activities of the unit. The commander of UPP B describes the role of politicians in a somewhat fatalistic manner: “These leaders [in the community] relate to politicians and in the end the decisions are political. The politicians are worried about their votes, but they are not present [here] and do not understand the surprises that occur. They might have a notion of what happens, but they ignore it.” His description almost sounds like it relates to another community – any community – but not his own. It lacks a sense of ownership and responsibility on what his role should be in this political economy context of reform. When discussing the specific example of funk parties, he explains, “Sometimes... in the end I do not see much of this here... I don’t see it much, but in some units, the community leaderships say that they know so and so... and then the commanders become less worried about the community than with the events themselves.” The initial defensive disclaimers (“I do not see much of this here”) and the purposely vague description about what actually happens (“less worried about the

community than with the events themselves”) suggests that this might also be the *modus operandi* of his own unit.

The lack of internal cohesion in the commander’s responses extends to the questions about how he spends his time. When asked how he divides his time between administrative and strategic functions, he answers: “The work of the commander is hybrid; he works in the administrative as well as on the operational. I arrived as a sub-commander and it was operational, but the commander has to have a broader view.” Again, his answer is theoretical and in the third person (“the commander”) and even when he relates it to his personal experience (“arrived as a sub-commander”), the tone is still removed and passive. His answers in the next question proceed to differ from the postulated behavior in that he marks his answers as equally spending time between the list of administrative and strategic function examples. Moreover, the answers from his team further confirm the heavy focus on administrative tasks when the P2 policeman, who is responsible for intelligence, says that he focuses primarily on “administrative (office) tasks and only sometimes walks out into the street.”

It was in the questions about his approach to rules and protocols where the commander became less passive and rhetorical and really expressed the character of his work style. When asked if there are any rules that he finds counterproductive, he answers: “It is not a question of providing an example...damn it... the military police follow a hierarchical chain, follows militarism, is composed of positions and a series of promotions, the position below is subordinate, the orders from the top I have to follow. I have autonomy, but based on these directives, and I have to follow, or else I am punished. In the police, we have a saying: illegal orders we don’t follow, all the others we follow.” The use of curse words (“damn it”) and the direct and rigid manner that he described the reality was different in tone and substance from the other more rhetorical answers. His description was clear and detailed and, for the first time, was in the first person for part of it (“I have autonomy based on these directives,” “I have to follow or else I am punished”). The irony is that the rhetoric only became “more real” to describe the militarism and rigorous nature of the organizational structure. In doing so, he again showed that he is passive and bound to follow rules and punch the clock as opposed to trying to operate outside of his recognized jurisdiction and finding bureaucratic zones of opportunity in which to operate within the organization.

The same unchecked military deference and passive approach to counterproductive rules is also expressed in the responses of others in the immediate hierarchy of the unit. The P2 policeman explains, “I follow the counterproductive rule; I am against, but I follow the norms.” The P3 policeman answers the same question saying that “I never thought about this,” thus demonstrating not only a passive approach, but also a complete lack of critical ability to see beyond the immediate constraints of militarism on his work program. Although the P3 policeman recognizes what could be changed in practice, he still ends up following the protocols. The P3 policeman reports: “I think the hierarchy impedes us from doing certain things like placing policemen in a fixed place or placing them in rotation and not leaving the system fixed. But, we have to obey the hierarchy.” Ultimately, under the guidance of the commander and the strict nature of the hierarchical structure imposed the answers demonstrate that they are acting strictly in a formal space – strictly within their recognized jurisdiction – with no intention to create or develop alternatives that are beyond established norms and protocols.

6.2.3. Relationship to Intermediate Administrative Outputs

The same isomorphic mimicry that the commander’s answers exhibited in the responses to the questions about his own behavior is also present in his responses about how his unit fares on a series of intermediate administrative outputs. In contrast with the first unit, given the background of the community, one would expect the unit to be faring above average on these outputs and yet they seem to be on average or, at times, below average. For instance, when he explains whether his unit has a mission, he explains: “Here we are able to develop a work that is of the essence of the UPP which is that of proximity, a rescue of the image of the [police] corporation, forming social projects as a result. There are people who want to professionalize themselves so we have extra help classes, informatics classes, hair salon clinics. The policemen themselves work on these projects, which are prevention projects because they are able to occupy the minds of the children.” His answer mimics the mission that the UPP program formally describes; his presentation sounded almost as though he were dictating from memory the kinds of things that I would expect to hear. The examples of social projects were specific; yet, none of the other professionals interviewed in the unit made any mention of the same examples.

The responses also show no internal consistency in terms of how they perceive the critical task of the unit. The commander starts out again with a highly rhetorical interpretation of the critical task in which he says that the greatest challenge stems from those who are sympathizers with the drug trafficking in the community. He, in turn, describes his role as “winning the hearts and minds of the residents” by developing social programs, such as “helping an old lady cross the street, playing soccer with the young people, and always punishing in the rigor of the law when a policeman acts in a violent manner.” Here the rhetoric seemingly deliberately addresses each of the issues that have been highlighted in the media, such as the lack of UPP involvement in social programs and the violence attributed to policemen. It is worth noting that the social program examples given are not “programs” per se, but social “attitudes” and almost cliché and picturesque (“helping an old lady cross the street”).

Others in the unit also express a lack of consistency in their definition of the critical task of the unit. The P1 policeman, for instance, says that the population in the community is the biggest challenge but that he has nothing to do with it. The P2 policeman says similarly that the work is already done and that he mostly focuses on administrative tasks. Ultimately, they are unable to define a task, regardless of the scope, and an internally consistent role for them in accomplishing that task. In addition, the responses express a general apathy and fatalistic attitude toward important challenges – such as enhancing community participation – that lie at the core of the UPP’s mission.

The remaining indicators corroborate the same lack of consistency between the commander’s perception of what is happening and that of his subordinates. Although the commander says that the unit has corporate autonomy, others say that they always have to consult other organizational units on some issues. In terms of degrees of communication, the commander says that he is always aware of what is happening in the unit and in the community. He goes further to explain that if he does not find out through his own means, the community is forthcoming with the information missing. Yet, the character of this openness and close ties with the community lie in stark contrast to the recurrent challenge mentioned in the responses to other questions about the resistance from the community to the UPP program as a whole. The same contradictions are present in the responses about learning and growth in the unit. While the commander mentions that he learns something new once a day, his subordinates’ answers are much less favorable.

It is important to note that the only answers that showed consistency in these intermediate administrative outputs were those related to the enforcement of order and discipline in the unit. In this case, both the commander and his subordinates answered that order and discipline were always enforced in the unit. Yet, given the previous answers, this is no surprise. Drawing on the examples and anecdotes expressing strong military deference and rigorous hierarchy, it is intuitive that one would expect that order and discipline would be strong among the professionals working in the unit.

Ultimately, the findings from UPP B are diametrically opposed to those of UPP A, both in terms of the behavioral profile of the respective commanders and the ensuing intermediate administrative outputs. The commander in UPP A exhibited the fringes of formality behavioral profile and oversees a unit that performs on average on all intermediate administrative outputs in a highly challenging (both in terms of violence and poverty) community context. The answers from both the commander of UPP A and his team were highly consistent and candid in their appreciation and interpretation of the challenges facing the unit. The examples provided expressed the creative initiative to think about solutions at the margin and to operate in zones of opportunity within the bureaucracy.

In contrast, the commander in UPP B exhibited the time server behavioral profile and oversees a unit that performs on average or below average on most outputs in a neighborhood and community context that is situated in favorable socioeconomic conditions. The answers in this case showed both internal (within the same survey) and external contradictions (between different surveys implemented in the unit). The unit was trapped in a rigid and highly ossified military structure where there was no opportunity for adaptation or thinking about an alternative or “middle way” course of action. As the P2 policeman from UPP B mentioned in a fatalistic tone at the end of the interview, “There are three ways for the commander to act inside a UPP: omitting himself, going to war [combating the drug traffic], or corrupting himself [selling himself to the drug lords].” Sadly, in this case, he was unable to see a “middle way” in which to create an opportunity within the bureaucracy and possibly change things at the margin much in the same way as was done in UPP A.

7. Conclusion

This chapter examined variation in reform implementation in a classic street-level bureaucracy – the police – in the highly resource-constrained political and institutional context that is the state government of Rio de Janeiro. In particular, it examined the UPP reform and conducted fieldwork across the Program's 38 counterinsurgency units. In doing so, it tested the hypothesis that this variation in organizational performance across units is driven partly by the presence of the fringes of formality behavioral profile among the middle-tier bureaucrats, namely the commanders of the UPPs.

In sum, the chapter presented qualitative evidence gathered through the surveys and additional case studies in support of the hypothesis. Indeed, evidence from the fieldwork demonstrated that the units in which the commanders adhered to the fringes of formality behavioral profile demonstrated a higher organizational capacity than those in which the behavior was not present. The structured survey interviews further identified the presence of the three elements of the fringes of formality behavioral profile in a sub-group of commanders. Due to the lack of variation in the part of the survey data related to intermediate administrative outputs, the analysis could not directly correlate the identified behavior to stronger intermediate administrative outputs in those respective units.

Yet, this lack of variation in the commanders' answers does provide evidence – even if indirectly – for the theory. Due to the hierarchical and structured nature of the police bureaucracy, the commanders have a strong sense of what the formal bureaucracy demands. Thus, they applied that intrinsically embedded formality to answer the questions regarding intermediate administrative outputs – elements that can be measured and ranked – so that their responses would reflect what the organization formally expects of them. This uniformity in answers could be due to functionality or isomorphism, thus showing that the informal behavior identified has to find ways to co-exist with the formal expectations of the organization – and society – in practice.

In addition, evidence from the case studies focusing on outlier units provides further corroboration of the theory. The evidence from this complementary analysis shows that UPP A, faced with unfavorable exogenous circumstances and led by a commander with the fringes of formality behavioral profile, performed on average or above average on most intermediate

administrative outputs. In contrast, UPP B operated under favorable exogenous circumstances, but was led by a commander who did not exhibit the posited behavior, and the UPP performed below average on most administrative indicators.

Most interestingly, the supporting evidence comes from the comparison across the interviews among the different professionals that are part of the respective UPPs. There is an internal inconsistency in the data from both commanders' interviews that supports the explanation above about the pressure to project what the organization formally expects of them. Indeed, both commanders respond differently to the first part of the survey about their respective bureaucratic profiles of behavior – one is the fringes of formality type while the other does not ascribe to the behavior – while responding similarly to the second part of the survey about intermediate administrative outputs. This confirms the explanation that regardless of what they actually do in practice, the middle-tier cadre conforms to project the formal on instances in which their performance can be measured or ranked. In contrast, evidence from the other interviews within each unit show an external inconsistency, meaning that they diverge from their respective commanders' answers in the second part of the survey. In other words, the professionals in UPP B provide responses that demonstrate much lower organizational capacity than the answers provided by their commander, while the professionals in UPP A provide responses that corroborate those of their commander. This external inconsistency suggests that the answers from the commander from UPP B conform due to isomorphism, while those of the commander from UPP A conform due to functionality. Indeed, irrespective of their outlier conditions, the unit with the fringes of formality commander had higher organizational capacity than the unit in which the commander did not have the behavior.

Ultimately, this chapter examines the hypothesis within a classic street-level bureaucracy and finds some evidence in support of the fringes of formality theory of bureaucratic behavior. Admittedly, the evidence is not conclusive due to the small nature of the dataset. Nevertheless, the existing correlations and explanations do set the stage for further analysis. The next chapters will explore the application of the fringes of formality theory in two other sectors: education and industrial policy.

CHAPTER 3: SCHOOLING ON THE FRINGES OF FORMALITY

“You don’t cheat the rules, but you make adaptations and use strategies that allow you to meet the protocol, but in the form that you need.” – School Principal

1. Introduction

For many years, the Rio de Janeiro state’s secondary schools languished at the very bottom of Brazil’s state education rankings. Rio’s education system was afflicted by poor organization, gross inefficiencies in resource management, and a lack of coherent vision and structure. Beginning in 2011, however, Wilson Risolia assumed the position of Education Secretary for the state and initiated a comprehensive reform program focused on promulgating “new public management” practices in Rio’s educational system. These reforms included the introduction of performance pay, more frequent student evaluations, new management metrics and monitoring and evaluation systems.¹ Over the ensuing five years, these reforms scored notable successes – of particular significance, Rio’s students performance in national standardized testing rose from the bottom of the rankings to among the top five.²

But, the reforms were not an unalloyed success. Rather, their effects were highly uneven across schools, with some schools being able to absorb and profit from the practices while others failed to do so and many even spiraled into something like chaos. By 2016, indeed, things had come to a boil. On March 21st, a group of students invaded the Prefeito Mendes de Moraes school in the north of Rio de Janeiro state.³ The students, in protest, effectively took over the school and prevented any schooling activities from going on thereafter.⁴ This “occupation,” as it was called, represents the height of discontent with service delivery: students were so unhappy that they

¹ *Em Números*.

² Vinicius Ferreira de Godoy e Cristiane dos Santos Oliveira, *Experiências inovadoras na Secretaria de Estado de Educação do Rio De Janeiro*.

³ Káthia Mello, “Secretaria de Educação contabiliza 40 escolas ocupadas no RJ,” G1.globo.com, April 15, 2016, <http://g1.globo.com/rio-de-janeiro/noticia/2016/04/secretaria-de-educacao-contabiliza-40-escolas-ocupadas-no-rj.html>.

⁴ The occupation kept students out of class for up to four months, in many cases. Daniele Bacelar, “Ocupação nas escolas chega ao fim,” Odia.ig.com.br, June 21, 2016, <http://odia.ig.com.br/rio-de-janeiro/2016-06-21/ocupacao-nas-escolas-chega-ao-fim.html>.

preferred not to have any of the services than to have the mediocre quality of service currently offered by the government. School occupations grew exponentially in the ensuing months. By May 2016, disaffected students occupied 68 schools across Rio de Janeiro state, denying a total of nearly 50,000 affected students access to education services.⁵ The state education system – and the state – were in crisis.⁶ While the demands of the student occupants and their supporters were often vague and contradictory, certain themes did come through: a frustration with the poor and uneven education delivery coupled with a detached and ineffective leadership in schools.

Yet, the reality is that, as with the policing sectors – and as I will demonstrate with respect to the industrial sector – the education sector exhibits a pattern of variation across front-line service delivery units. Despite the widespread discontent with the education system, there is variation in the quality of education being offered in schools. To put it simply: performance is not bad everywhere. Even in this sector where the situation is so extreme that it has been impelling students to occupy their own schools, some schools are doing better than others. These schools are operating well bureaucratically, their administration is well managed, teachers are well motivated and students are making good progress – while there are other schools that are sorely lacking in many or all of these respects.

A key issue in Brazilian governance and education today is, then: What is the cause of this uneven performance in schools in Rio despite the relatively uniform application of new public management principles during the reforms of the early 2010s? Why do some schools perform better in delivering services? This question is of crucial significance for Brazil and developing countries, more broadly, as this country and others wrestle with how to ensure more effective performance under constrained resource conditions.

The explanation is not readily apparent, and structural explanations do not seem to account for the full amount of variation among schools. Thus, while broader structural, cultural, and economic factors appear to account for some and possibly much of the variation, there is variation that does not track with purely structural factors. For instance, there are schools doing very well in neighborhoods with few of the advantages often associated with good performance –

⁵ “Mais de um mês depois, ocupações de escolas no Rio não param de crescer,” Une.org.br, April 28, 2016, <https://www.une.org.br/noticias/mais-de-um-mes-depois-ocupacoes-de-escolas-no-rio-nao-param-de-crescer/>.

⁶ School occupations spread like fire to other states beyond Rio, and by October 2016, there were 407 schools occupied in 12 states.

and vice versa. In addition, the socio-economic background of students does not seem to account for this variation. Some schools are doing very well in which the students come mostly from disadvantaged backgrounds, and vice versa.

As in the policing chapter, this chapter will examine this question through a close examination of the middle-tier organizations in these schools, which is both crucial for administrative performance of the unit as a whole and also more readily subject to close investigation. As in these other chapters, the contention here is that an important cause of variation in organizational performance can be identified at this level – a cause that is not purely structural in nature and that has important implications for education policy in Brazil and beyond.

2. Hypothesis

This chapter tests a similar hypothesis to that which has been explored in the previous chapter. The main thrust behind the argument is that this variation in secondary school performance – in the intermediate administrative outputs produced by the organization in question – can be partly but significantly explained by differences in bureaucratic-organizational behavior among middle-tier bureaucrats – especially principals – across schools. My contention is that a particular type of bureaucratic behavior – the fringes of formality behavioral profile – is associated with more positive administrative performance across schools. In other words, the schools that have principals who practice this behavior are likely to have more positive intermediate administrative outputs, and thus exhibit better administrative performance overall, than those that do not.

Similarly to the analysis conducted of the police sector, the focus of this chapter is on examining the relationship between this type of behavior – the fringes of formality behavior – and the bureaucratic administration of the front-line service delivery unit. This means that the analysis focuses on the relationship between the presence of the fringes of formality behavior and its correlation with intermediate administrative outputs that are under the jurisdiction of school management. These are outputs that can be immediately affected by the behavior and the leadership and management of the principal and the administration of the respective unit – they relate to the functioning of the immediate unit (e.g., sense of mission, degrees of communication,

growth and learning in the unit), not that are beyond the unit's management purview (e.g., fundraising, hiring and firing of personnel).

In doing so, the chapter aims not to measure how these intermediate administrative outputs affect service delivery outcomes, such as an improvement in education access or quality indicators. Instead, it assumes, based on the literature, that improved intermediate administrative outputs and organizational performance ultimately have a positive effect on student outcomes.⁷ Indeed, current research shows that higher management scores are associated with higher student outcomes.⁸ The key question, then, is what is associated with improved organizational performance at the unit level? Thus, if we can better understand what produces improved intermediate administrative outputs, then we can also find what partly drives better education outcomes in the long run.

As discussed previously, the fringes of formality behavior has three main characteristics. The first characteristic relates to initiative, or the level of energy and activity that middle-tier bureaucrats exhibit in completing their daily tasks. In practice, this means that the school principals are willing to take the initiative to find solutions to their challenges on a daily basis. In particular, principals who share this characteristic are fully aware of the limits of their respective jurisdictions. And they exhibit autonomy in identifying problems and devising solutions to those problems within those limits.

The second characteristic of the fringes of formality behavior is an ability to spend more time on strategic functions – requiring critical thinking, deliberation, and judgment in their execution – as opposed to administrative ones that are more routine or procedural and can be easily delegated. The ability to focus more heavily on strategic functions offers school principals an opportunity to step back from the day-to-day administration of their respective schools and think more holistically about program design and structure, thereby allowing for increased planning and strategy over the course of a school year and beyond. At the same time, however, this focus on strategic functions does not mean that fringes of formality principals neglect their day-to-day functions. Indeed, principals who share this characteristic are able to toggle between

⁷ Rasul and Rogger, "Management of Bureaucrats and Public Service Delivery."

⁸ Nicholas Bloom, Renata Lemos, Raffaella Sadun, and John Van Reenen, "Does Management Matter in Schools?" *Economic Journal* 125, no. 584 (2015), doi:10.1111/econj.12267.

strategic and administrative functions, as circumstances dictate, often in a short period of time and without much advance notice.

In addition, the focus on strategic functions provides this middle-tier bureaucrat with a broader view of goals that are not limited to the purview of the school. This more comprehensive view of the school's mission and its goals is unique to their leadership role as principals and is thus not readily shared by other echelons in the sector's administration. Principals with this strategic perspective have an understanding of both the bureaucratic hierarchy and their respective schools' places in it. This broader view of the organization motivates them not only to focus on their own unit's interests, but also to reconcile how those interests may relate to those of the larger education organization. Their strategic mindset has a broader, public-minded character in the sense that their immediate goals and actions for their unit do not come at the expense of other schools or of the larger organization.

The third and last characteristic of the fringes of formality behavior is an ability to find bureaucratic zones of opportunity to work within the limits of what is determined as formal by the system. School principals who share this characteristic are able to improvise to address problems and challenges, yet they are able to do so within the dictates of the law. In essence, they are able to either identify or create opportunities within the available regulations and protocols – all the while husbanding their bureaucratic capital to accomplish their goals. In doing so, they can interpret certain rules and regulations in a more expansive and favorable manner relating to what they are trying to do or they can make use of situations for which there is either an ambiguity about or absence of rules and protocols. They are thus able to draw on bureaucratic zones of opportunity to maneuver their activities in the direction that they find most useful to reach their units' objectives.

The product of this activity has unique features and is at the same time productive to the organization as a whole. In this process, principals do not usually develop complicated solutions that require the use of additional "bureaucratic capital." What I mean by this is that they act in an efficient and seamless manner—though not hidden—to accomplish their goals. They do not create unnecessary additional work or regulations, nor do they call undue attention to themselves or their efforts. Thus, they engage in activities that they themselves are primarily able to implement without having to rely on any additional protocols, rulings, relationships or favors from superiors. They are thus frugal in their use of bureaucratic capital and do not waste that

capital on any of these relationships. They are self-reliant in the accomplishment of their actions within the fringes of formality.

In addition, the activity at the fringes of formality does not lead to intermediate or ad-hoc solutions, but ones that can evolve over time to more long-term elements of the school organization. Thus, the product of the behavior is not a one-off solution to a problem or something that entails the addition of elements of the bureaucracy that will only have temporary use. Instead, the products of this activity are indigenously developed solutions that will not only solve the problem at hand, but that may also over time evolve into long run solutions. These long run solutions are likely to contribute not only to the administrative health of the particular school itself, but also of the larger education bureaucracy as it could be easily applied to other similar circumstances, as well. Thus, the fringes of formality behavior ultimately includes actions and efforts that end up contributing to the overall well-being of the organization, and are not only for the unit's immediate goals and objectives.

While the school principals are operating in the fringes of formality, they have to maintain a façade of formality. Despite developing solutions in this alternative manner, they are aware that they have to maintain the trappings of formality to be able to survive within the bureaucratic organization. In other words, the fringes of formality behavior has to inevitably co-exist with the rules and protocols of the education secretariat. In practice, the principals undertake this behavior while projecting a sense of formality and strict adherence to rules and protocols both internally to the organization and to the outside world. Thus, they toggle between the practice of the behavior and the semblance of formality on a daily basis.

At first glance, the behavior may be thought as similar to the familiar *jeitinho* in Brazilian culture. While these do have some characteristics in common, such as their willingness to consider alternatives and ability to operate in a jurisdiction that is not strictly the mainstream, they have important and significant differences. These differences exclude the fringes of formality from being considered in the category of *jeitinho*. In fact, the two profiles of behavior have entirely different objectives and means of achieving those objectives. On the one hand, the fringes of formality behavior shares the goals of the organization as a whole, and thereby, perceives the school unit as being part—and affecting either directly or indirectly—the whole of the education secretariat. In addition, the behavior maintains its actions always in the formal and legal jurisdiction of the rules and protocols of the secretariat, thus never breaking the established

rules. On the other hand, the *jeitinho* behavior places the individual unit in front – and oftentimes at the expense – of the larger organization. This means that reaching the goals for the unit can be harmful for the organization as a whole. And it accomplishes these goals by bending and when needed breaking rules and protocols. Thus, the two profiles are markedly different in terms of means and ends.

In sum, the hypothesis that this chapter aims to test is that the secondary schools in which the principals exhibit the fringes of formality behavioral profile are more effective in terms of their bureaucratic administration than those in which the principals do not demonstrate this behavior. The goal, then, is to test the positive association between the fringes of formality behavior and positive intermediate administrative outputs. Thus, the independent variable is the fringes of formality behavior, which includes the presence of all three of the characteristics previously described. According to the hypothesis, holding other factors constant, these schools should not be as organizationally productive as the other schools in which the principals operate on the fringes of formality. The dependent variable, then, is bureaucratic administration of the front-line unit of service delivery – the school. Bureaucratic administration of the school will be represented by a series of intermediate administrative outputs, such as order and discipline, communication levels, professional growth and learning in the unit and are proxies to the overall functioning of the school as an administrative unit. While these outputs are not the ultimate goal of any operation, their proper functioning has been shown to be associated with improved education outcomes.

Lastly, it is important to note that the goal of the chapter is to test the association between the behavior and the intermediate administrative outputs. Thus, the goal is not to show that the behavior is the sole or even primary driver of bureaucratic administration, or even that it has any direct relationship to service delivery outcomes. Rather, the aim is to show that this behavior is important to reaching improved intermediate administrative outputs in these middle-capability service delivery contexts. Perhaps, this may lead to a conceptual evolution of an alternative to the Weberian model in which the bureaucracy has to improve as a whole based on a series of rigidly defined grooves and characteristics. Depending on the results, this could be encouraging in the sense that there may be a different – perhaps more realistically pursuable – path to introduce improvements in the bureaucracy and thereby make the jump from a middle-capability school to one that has improved capability.

3. The Fringes of Formality Behavioral Profile in Practice⁹

As discussed in the theory chapter, the fringes of formality behavioral profile manifests itself in four distinct categories of action: inventive satisficing, camouflaging, freestyling, and street-level diplomacy. These four possible responses are defined by whether or not protocols exist regulating the middle-tier bureaucrat's behavior. For each of the two scenarios there are essentially two possible types of behavioral response by the bureaucrat. When protocols exist, the fringes of formality bureaucrat can either inventive satisfice if the protocols make sense or camouflage if the protocols do not make sense. When protocols are not available, they can either freestyle or practice street-level diplomacy. In the education context, these categories of action take the following forms.

3.1. Inventive Satisficing

To recall, the first category of action is “inventive satisficing,” which occurs when explicit protocols and norms exist and make sense in practice, but there are insufficient resources for the bureaucrat to actually be able to implement these protocols. In these cases, fringes of formality bureaucrats often look for ways to do more with less, even if those ways are not clearly authorized (or realized) by their superiors.

A clear instance of “inventive satisficing” in education emerges in the context of underfunded extra-curricular mandates. Secondary schools in the state of Rio de Janeiro receive funds to carry out classroom and pedagogical activities related to the formal curriculum, but only limited funds for extra-curricular activities. Yet, schools are obligated to carry out such activities, which often have precise requirements and expectations about how they should be developed in the school.¹⁰ Dealing with this challenge is a frequent problem for school principals and fringes of formality bureaucrats do so in distinctive ways.

⁹ For anonymity purposes, I have assigned different names to the schools in the sample. They are all names of former Nobel Prize in Literature winners.

¹⁰ Portuguese teacher interview, Gabriel Garcia Márquez School.

In one instance, for example, the school community, including the principal and the teachers, had organized a play for the students to participate in as one of the extra-curricular activities. As the preparations for the play unfolded, it became clear that the requirements of putting on the production were going to be greater than the modest funds that were available from official coffers. The principal, operating on the fringes of formality, took an innovative approach to raising the funds necessary to achieve the goal. Appealing to the shared interests and hopes of the professionals in the community in a successful outcome for the play, the principal sought to raise funds independently to put on the production. Everyone volunteered their contributions because they realized how important it was for the school community to be able to put on the play in the manner that they had hoped. In this example, the principal took the initiative to recruit funding for the state-mandated extra-curricular requirements. He did so by identifying and executing a course of action that was neither prohibited nor clearly allowed for by the regulations to which he was subject. The end result was a successful fundraising drive that gathered support for a school-based extra-curricular initiative.

Another example of inventive satisficing emerged in a situation where inadequate resources were available for an extra-help program for students that were struggling academically. The school exhausted the limited available resources, but found that it was still unable to assist all of the students who required extra help.¹¹ In response to this quandary, the principal decided to invent a new way to structure the program that would draw on economies of scale in order to keep the program going within the limited resources available, even though this approach was not formally authorized or even implicitly acknowledged in guidance issued by his superiors. Thus, instead of having the program occur on an after-school basis, which required different shifts of teachers and increased the time needed to transition between shifts on a daily basis, the principal decided to have all the extra-help sessions clustered on one specific day in order to maximize economies of scale while still benefiting students. In addition to being more cost effective, this solution was able to free up additional teachers' time for that day while also being more efficient in the use of students' time after school. For instance, many of the students actually worked after school and therefore could not attend extra-help classes. When the sessions were condensed, however, students were able to adapt their schedules more easily, resulting in higher attendance. Here again, the principal identified a problem in the day-to-day functioning of

¹¹ Principal interview, Pablo Neruda School.

the extracurricular program and inventive satisfied to develop an approach to meet the protocol in a cost-effective manner. This example shows the principal's ability to think about the schedule in a more productive manner in order to maximize the extra-help program student attendance given the available resources.

3.2. Camouflaging

The second category of action in which fringes of formality manifests itself is camouflaging. In this category of action, the bureaucrat recognizes that the applicable protocol is counterproductive and, in response, adapts the protocol in practice. In essence, the bureaucrat preserves the outward form of the protocol, but amends its content to fit the circumstances in a way faithful to the intent of the protocol. In doing so, the bureaucrat thereby camouflages the new interpretation of the protocol in the formal structure of the protocol.

An instance of this type of behavior in the secondary school context in Rio is evident in how one principal responded to the centrally-dictated requirement for Saturday classes. This requirement does not specify in writing whether Saturday classes ought to focus on the formal curriculum or extra-curricular activities. However, school principals generally understand the requirements to *intend* – though not explicitly mandate – for formal classes to be held on Saturdays. Nonetheless, many school principals believe this requirement to be counterproductive because neither teachers nor students want to be there, which has a negative impact on attendance as well as engagement by both faculty and students.¹² With this in mind, in one situation, the school leadership decided through an internal consensus and without consulting higher organizational units that they would concentrate all extra-curricular activities and other volunteer activities on Saturday while leaving the formal classes for the weekdays. That way, if the students or teachers did not want to come, it would not affect the learning of the core curriculum. Through this alternative “camouflaging” solution, the principal was able to maintain the formal protocol of having the school open and functioning on Saturdays while changing the content of the activities to better meet the demands and constraints from both teachers and students.

¹² Assistant principal interview, Samuel Beckett School.

Another example of camouflaging was one in which the principal changed the number of class periods in a school day. The protocol in question required that the school day was made up of a total of six class periods. However, the problem was that the school was in a dangerous location and having six class periods required the students to leave the school very late, potentially exposing them to the violence prevalent in the neighborhood.¹³ In response, the principal decided to condense the schedule into five class periods. He found bureaucratic cover to do so in a formal instrument called the Pedagogical Plan Proposal (PPP). Each school is responsible for writing their own pedagogical plan and there is a component within this instrument that allows for the inclusion of internal resolutions. The principal used this bureaucratic zone of opportunity within the formal instrument of the PPP to be able to adapt the class schedule in the school. This example of drawing on a formal instrument to find camouflage for an internal adaptation of an existing protocol is a classic instance of camouflaging.

3.3. Freestyling

In contrast to these first two categories of action, the second two categories of action – freestyling and street-level diplomacy – emerge in contexts in which there are no applicable protocols for the problems school principals face. “Freestyling” principals improvise solutions to problems or challenges at hand without any guidance from above, and do so in ways that husband their resources effectively and advance both their unit’s and the overarching bureaucracy’s respective interests.

For instance, discipline is a major problem in Rio secondary schools. Students often have difficulty relating to authority figures, including teachers and school administrators. Indeed, both teachers and principals testified that they find themselves having to teach students basic manners and ways of acting. One frequent problem in one school was that students were frequently checking their cellphones during class and would not stop even after being directed to do so by their teachers.¹⁴ In response, the principal decided to create a “cellphone break” during class so that students would be able to check their phones during this time and then resume their work in class. In this case, the principal solved the problem for which there was no protocol or norm to

¹³ Principal interview, Gabriel Garcia Márquez School.

¹⁴ Principal interview, Jean-Paul Sartre School.

guide him by developing a solution that attended to the needs of his community while also not detracting from the overall learning goal.

Another example of freestyling arose in the context of a principal facing safety threats to his school community. Violence and other forms of criminality were prevalent issues in this school environment, making it very difficult for students to learn and school staff to teach. Even so, the regulations issued by the Rio state educational bureaucracy offered neither guidance nor resources for school administrators struggling to defend their schools against this degree of violent threat. The resources available, namely security guards, had already been tapped, but the threat was still prevalent. One principal chose not to be paralyzed by the regulations' lack of guidance or resourcing. He chose instead to address this problem through a participatory approach. He first consulted all school bodies including the student council and school boards and explained the extent and implications of the threat that they were all facing.¹⁵ Through this consultative process, the principal made the case to the school community that the school needed to invest in security cameras and install them both in the internal and external areas of the school patio. With this independently-generated, indigenous support, he was able to find ways to tap into school resources to implement the plan. In this case, the principal "freestyled" a solution that he himself developed and executed in a situation where there were no explicit protocols for how to move forward.

3.4. Street-Level Diplomacy

The fourth and last category of action also takes place in situations in which the bureaucratic actor has no guidance for how to proceed, but pertains mostly to cases in which the issue at hand is external to the school and thus beyond the principal's area of control and direct influence. In such circumstances, a fringes of formality bureaucrat draws on his diplomatic skills to create and mediate solutions, oftentimes in difficult and dangerous circumstances for all the parties involved.

In one instance, a secondary school principal had to address a situation in which a student had stored drugs on top of the school neighbor's fence.¹⁶ In response, the neighbor called the

¹⁵ Principal interview, Albert Camus School.

¹⁶ Principal interview, Ernest Miller Hemingway School.

school and complained about what had happened. This presented a quandary: When drugs are found in a school, the protocol is for the school to call the police; however, in this case, the drugs were not actually found to be in the school and no one in the school had seen the student with drugs. The principal elected to handle the situation in an adaptive manner. She knew that she might still be able to call the police for assistance, even though the aforementioned protocol was not technically applicable. Doing so, however, would carry other risks. She recognized that the school was in the middle of a slum with extremely violent drug factions and realized that if she denounced the student, then she would endanger the entire school community since the drug factions would see the school as a traitor (or, an “X9,” a term used to whomever denounces criminal organizations). To avoid this outcome, the principal decided to talk to the student openly about what had happened and come to an enforceable agreement that protected the security of the community (and the student implicated) while pushing drugs out of the school. The principal enforced the agreement by following up with frequent monitoring of the student’s activities to hold him accountable to the agreement that they had both reached. In this case, the principal drew on her diplomatic skills to explain to the student the risks involved in the situation, and outline and enforce a satisfactory way forward. The practice of street-level diplomacy removed the drugs from the school while keeping the community “out of the crosshairs.”

Another example of street-level diplomacy occurred in a secondary school that was also surrounded by a violent community with rivalrous drug factions. In this case, the community is afflicted by frequent shootings when the drug factions are fighting each other. This immediately affects the school, which is located in the middle of the community and near the faction headquarters.¹⁷ There is no explicit protocol for what the principal should do to keep the school functioning safely and well in such a hazardous situation. Rather, the principal is given autonomy to decide what is best to do for the school community, but little in the way of clear backing or resources to implement his or her vision. This leaves it up to the principal as to how to respond when, for instance, a shooting occurs. It is up to the principal to decide whether to shut down the school or whether to keep it open and keep all the students protected within the school building.

¹⁷ Principal interview, Gabriel Garcia Márquez School.

In the case of one secondary school operating in such dangerous situations, one principal, acting as a good street-level diplomat, explained that she draws on both her sourced intelligence of the extent of the shooting from the informants in the community as well as intuition to make decisions on the spot. In doing so, she draws on all her skills to assess the threat and risk of the danger and monitoring the “pulse” of the community while also keeping everyone in the school calm. Like a diplomat confronting crises, every situation – every shooting – for the principal is different, and choosing what to do in each case requires multiple sources of intelligence and careful judgment. In a classic case of fringes of formality behavior, the principal drew on her intrinsic autonomy to address the continuing challenge in a strategic and sustainable manner.

4. Methodology

To test the hypothesis, I developed a survey to implement across secondary schools in the state education network. As in the police and industrial cases, the survey includes both open and close-ended questions. The difference in this case is that the sample size of front-line service delivery units – or, the number of schools – is larger than in the case of police pacification units and innovation institutes. There are 1,335 schools in the state network, including secondary schools that operate both during the day and at night. As a result, this larger sample size allows for a wider selection of units to apply the survey.

The sampling methodology, then, was straightforward. First, I calculated the minimum detectable effect (MDE) that I would need to get statistically significant results at the 10 percent level. The result of this calculation was that I would need a sample size of about 100 schools to get statistically significant results at the 10 percent level. Second, I randomly selected 100 schools from the entire sample of schools offering secondary education shifts to students. Finally, I implemented the survey across 98 out of 100 randomly selected schools.¹⁸ Given the larger sample size and the opportunity to implement a more involved study, I decided to interview other players in the school besides the school principal. This would allow for the research to compare the principal perspective to those of others who also play an important role

¹⁸ I was not able to reach the last two schools in the sample because crime rates had gotten progressively worse in Rio during the fieldwork period and I did not think that it was safe to visit the school locations.

in the school. Thus, I applied the survey to four players in each school – namely the school principal, the pedagogical coordinator, and the math and Portuguese teachers.

I used a standard protocol to select interviewees upon arrival at the school. This protocol prevented a random selection of interviewees depending on whoever was in the school. Instead, it provided a homogeneous application of the survey across the sample of schools. For instance, in the case of the school principal, the interview was restricted to only that actor. So, if the principals were not in the school, the interviewer would have to return to the school to be able to interview them. As for the pedagogical coordinator, if they were not available, then the interviewer could apply the survey to another coordinator, either the educational coordinator or to the vice-principal. The idea here would be to find someone else in the administration of the school besides the school principal who could answer the survey. From here on, I will refer to this second player interviewed, who is either the pedagogical coordinator, the educational coordinator, or the vice-principal, as “administrator.”

Lastly, in terms of the math and Portuguese teachers, my protocol dictated that interviewers begin with the 9th grade teachers and then move upwards to other grade levels depending on their availability for the interview. If the math and Portuguese teachers were not in school, then the interviewers could conduct the interview with another science or humanities teacher, by the same protocol logic. The goal in the end was to have one interview with a teacher in the sciences and one with a teacher in the humanities, while adhering to a standardized protocol for survey implementation across schools.

Similarly to the police and innovation institute surveys, the school survey has both open and close-ended questions. The first part of the survey has questions related to the identification of the bureaucratic behavior, namely the presence or not of the three characteristics of the fringes of formality profile (initiative, practice of strategic functions, and tendency to find and use bureaucratic zones of opportunity). The second part of the survey has questions related to effectiveness of the administrative unit, namely a series of proxies for intermediate administrative outputs. The aim of the survey is to test whether the association of the presence of the behavior (first part of the survey) and the improved intermediate administrative outputs (second part of the survey) is present and significant across the sample of randomly selected schools.

In terms of the intermediate administrative outputs, the education survey draws on the same six indicators explored in the other surveys. The first indicator is whether there is a presence of a sense of mission among the principals and the other actors who work in the secondary school. In this case, a strong sense of missions refers to the context in which those working in the school are not only aware of the central goal of the school, but also are fully engaged in its accomplishment. This means that they have knowledge and understand the elements of the mission of the school. As Wilson describes, they take pride and ownership in what the unit is trying to accomplish.¹⁹

The second measure of an effective bureaucracy is the ability to define a critical task. This relates to the fact that the secondary school players are able to identify their role in combating the most critical challenge in the school. Thus, it places these members as active participants in the operationalization of the school mission as opposed to being passive recipients of externally produced messages. A strong definition of a critical task means that the player is fully engaged in the process, knows his or her role, and is aware of how his or her responsibilities connects to the broader aim and mission of the school.

The third measure is corporate autonomy, meaning the autonomy of the school as a unit. In practice, this refers to the school's ability to function as a corporate unit, or to fulfill its core responsibilities without depending on authorizations from other organizational units. It also refers to the ability of the school to define and redefine its tasks and responsibilities in a way that best improves its chances of achieving its goals and sense of mission. A strong measure of corporate autonomy ultimately refers to how readily de jure autonomy translates to de facto autonomy at the school level.

The fourth measure refers to the degree of order and discipline at the school. This refers to the degree in which both administrators and teachers are able to maintain discipline among the students in the school. The idea here is to gauge the extent to which the students are able to follow rules and be disciplined in a way that ensures order within the school unit.

The fifth measure is the degree of communication within the school. This measures whether the administration in the school is aware of important pieces of communication in the school or whether there are frequent breakdowns in communication. It refers to the extent to

¹⁹ Wilson, *Bureaucracy*.

which information flows freely and without constraint within the school so that no one is caught by surprise.

The sixth and last measure refers to the extent of growth and learning in the school. This measure refers to mostly school professionals' sense that they are growing and learning within their respective roles within the school. To put it bluntly, are they frequently learning new things or are they stalling in their professional development? This question tries to gauge the extent to which there are opportunities within the school for growth and learning to occur, either internally through interactions with their colleagues and students or externally through more structured interactions such as workshops and seminars.

In contrast to the other surveys, the education survey is much shorter. It has 19 questions instead of 34 questions. This is mainly due to resource constraint issues and to the fact that the survey was being implemented across a larger number of units and additional players in each unit. On that note, the team of interviewers was also larger than in the case of the other police survey. The team included 13 interviewers who were responsible for the implementation of surveys across sub-samples that were either of close proximity to their homes or to which they had easy access to transportation. The team members attended a two-hour training session that went over the survey application in detail and were provided with a written protocol of the application of the survey and its methodology.

5. Results

5.1. Descriptive Statistics and Preliminary Correlations

The survey drew on perception-based questions to gather evidence for the construction of both the dependent and independent variables. Drawing on this data, this section will test the association between the presence of the fringes of formality behavioral profile and a series of intermediate administrative outputs at the school unit level.

The independent variable is bureaucratic behavior, or more specifically, whether a given middle-tier actor exhibits the fringes of formality behavioral profile. The independent variable captures the responses to survey questions relating to the three posited features that together characterize the presence of the fringes of formality behavior among school principals. A binary

variable captures intrinsic autonomy when respondents answer positively to questions about de jure autonomy and de facto autonomy. Another binary variable captures whether the middle-tier bureaucrat spends more time on strategic functions depending on how respondents answer the question about which types of functions (administrative or strategic) the principals spend more time on a daily basis. A third and last categorical variable is used to measure how principals approach their problems: whether they follow the rules, improvise, break the rules, or wring their hands. The independent variable, then, encompasses the presence of these three characteristics as measured by these three variables.

The dependent variables are intermediate administrative output indicators that also draw on the survey responses. The sense of mission indicator is a binary variable based on the survey question that asks whether the survey respondent thinks that the school has a sense of mission (de jure measure), and whether all of those in the school are aware of and understand the mission (de facto measure). The school autonomy indicator is a binary variable that draws on the survey question that asks whether the school has independence to make decisions on important issues that are of an administrative or strategic nature. The order and discipline indicator is a binary variable based on the survey question that asks whether the survey respondents perceive that the students are reprimanded in a fair manner when they are caught physically fighting. Lastly, the organizational capacity indicator is also a binary variable based on the last question in the survey that asks the respondents how well the survey respondents would evaluate the overall administrative performance of the school.

Three output indicators, namely critical task, awareness, and growth and learning, have been excluded from the analysis due to challenges mostly related to survey design. The two survey questions that refer to a sense of critical task in the school had an open-ended answer choice in each one. A large number of respondents chose the open-ended response and given the diversity of responses, it was not possible to objectively ascertain patterns without introducing some subjectivity to the responses. The awareness indicator was also excluded due to the lack of variation in survey responses to the question. Over 90 percent of respondents said that most principals were aware when there was an operational problem, such as irregular delivery of meals or the poor condition of infrastructure, in the school. Lastly, the growth and learning indicator was not an adequate indicator given that the school as a unit is not directly responsible for providing professional development activities. In this case, the question is erroneously asking

how well the school unit is completing a responsibility that is not actually part of the unit's de jure mandate.

Table 1 provides descriptive evidence for the independent variable (fringes of formality behavioral profile) and the dependent variables (intermediate administrative outputs indicators) in the analysis. The sample includes 98 schools with four interviews (principal, administrator, humanities teacher, and sciences teacher) within each school. Column 4 provides the mean for each indicator for the sample of interviews with school principals while Column 6 provides the mean for each indicator for the sample of interviews with all other interviews in each school. In general, the means for the indicators is lower in the sample of the interviews with "others" than in the sample of the principals. For instance, organizational capacity is present in 79% of the schools in the principal sample while in only 69% of the others sample. In terms of the independent variable, the means are consistent across samples with the fringes of formality behavioral profile present in 17% of the schools, according to interviews with school principals, and in 16% of the schools, per interviews with the others.

Table 1: Descriptive Statistics for Independent Variable and Dependent Variables

Variable	Description	Principal		Other	
		N	Mean	N	Mean
Fringes of formality behavioral profile	Binary variable for whether school principal has fringes of formality behavioral profile	93	0.17	277	0.16
Sense of mission	Binary variable for whether school has a sense of mission	95	0.71	287	0.69
School autonomy	Binary variable for whether school has autonomy	95	0.86	289	0.81
Order and discipline	Binary variable for whether school has order and discipline	90	0.97	279	0.86
Organizational capacity	Binary variable for whether school has organizational capacity	95	0.79	291	0.69

Table 2 provides descriptive evidence of the control variables used in the different specifications. The analysis included six control variables mostly retrieved from the 2015 School Census. Student enrollment accounts for the absolute number of students enrolled in each unit

and thus is a proxy for school size. Class size captures the average number of students in a classroom in each school and is thus a proxy for school quality. Similarly, graduate teacher ratio accounts for the share of teachers with a postgraduate degree (masters, doctorate, or specialized course) over the total number of teachers per school and is another proxy for school quality. Mothers' schooling is the average schooling completion of the mothers of students in a school and is a proxy for socioeconomic background. CIEP is a binary variable for whether the school is a Center for Integrated Public Education, which is a type of school that receives additional funding for maintenance and infrastructure due to its more expansive facilities.²⁰ Lastly, as a proxy for management experience, principals' time in school is a categorical variable measuring the number of years that the principal has been working at the school in which they were interviewed. This last control was captured in the survey implemented across schools.

Table 2: Descriptive Statistics for Control Variables

Variable	Description	N	Mean	sd	Min	Max
Student enrollment	Number of student enrollments per school	95	669.97	464.22	88.00	2235.00
Class size	Number of students in a classroom	95	25.27	5.71	10.89	36.47
Graduate teacher ratio	Ratio of teachers with graduate degrees over number of teachers per school	94	0.25	0.15	0.00	0.72
Mother's education	Average schooling of mothers per school (0=none; 1=primary school incomplete; 2=primary school complete; 3=secondary school complete; 4=completed college)	93	1.76	0.34	1.11	2.64
Principal's time in school	Number of years the principal has been in school (1=less than 1 yr; 2= btw 1-2 yrs; 3=btw 3-5 yrs; 4= more than 5 yrs)	95	2.83	1.15	1.00	4.00
CIEP school	Binary variable for whether school is a CIEP	95	0.26	0.44	0.00	1.00

²⁰ The additional resources are approximately 1,000 reals, which is equivalent to around 300 dollars per school per month.

Tables 3 and 4 verify whether both the control and output variables are measuring sufficiently distinct elements. Table 3 presents raw correlations among the set of control variables. As Table 3 shows, the correlations among the variables are low and oftentimes negative. This low correlation across variables shows that no two control variables are so closely related that they could be controlling for similar factors, thereby mitigating the risk of multicollinearity in the analysis. Similarly, Table 4 presents the correlations among the output indicator variables. The table also shows low correlations across the set of output indicators. This demonstrates that the output indicators are distinct enough to be capturing a range of different aspects of organizational capacity.

Table 3: Correlations among Dependent Variables and Independent Variables

	Fringes of formality behavioral profile	Sense of mission	School unit autonomy	Order and discipline	Org. capacity
Fringes of formality behavioral profile	1				
Sense of mission	0.07	1			
School unit autonomy	0.12	-0.02	1		
Order and discipline	0.11	0.07	0.05	1	
Organizational capacity	0.04	0.15	0.11	0.12	1

Table 4: Correlations among Control Variables

	Student enrollment	Class size	Graduate teacher ratio	Mother's education	Principals' time in school	CIEP School
Student enrollment	1					
Class size	0.56	1				
Graduate teacher ratio	-0.19	-0.28	1			
Mother's education	0.28	0.19	0.04	1		
Principals' time in school	-0.04	-0.04	0.05	0.02	1	
CIEP school	0.19	0.18	-0.22	-0.17	0.05	1

5.2. Regression Results

The remaining tables examine the correlation between the output indicators and the measure of the fringes of formality behavioral profile. The findings are partial correlations and do not make any claims of capturing the causal effect of the measure of bureaucratic behavior and the selected output indicators. Tables 5-8 report the results. These tables have an identical

structure, but each refers to the correlation between the indicator of the fringes of formality behavioral profile (independent variable) and a different output indicator (dependent variable). Columns 1-3 of each table present the results of the correlations between the set of controls and the output indicator across three different samples: all respondents of the survey, principals only, and other respondents (administrator and teachers) only. Columns 4-6 of each table follow the same structure, but with the augmented regression of the measure of the fringes of formality behavioral profile and the same output indicator across the same three samples (all respondents, principals only, and others only). All regressions have regional and survey interviewer fixed effects.

Table 5 uses the “sense of mission” output indicator as the dependent variable. This variable measures the perceived presence of de jure and de facto sense of mission in the school unit based on survey responses. Column 4 shows a positive correlation between the fringes of formality measure and sense of mission in the full sample. Splitting the sample, we find a negative correlation in the sample of principals (Column 5) and a positive correlation in the sample of other respondents (Column 6). Yet, while the relationship between fringes of formality and sense of mission is not significant in the sample of principals, it is almost significant at the 10% level in the sample of other respondents (Column 3). The magnitude of the estimates from the sample of other respondents suggests that the school principal having the fringes of formality behavioral profile is associated with an increase of 11.6 percentage points in the likelihood of having sense of mission in the school unit (equivalent to 16.8% of the sample average).

Table 5: Sense of Mission

Dependent Variable: Sense of Mission						
	All respondents	Principals only	Others	All respondents	Principals only	Others
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Fringes of formality				0.054 (0.061)	-0.008 (0.169)	0.116 (0.071)
Student enrollment	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Class size	0.001 (0.007)	-0.002 (0.014)	0.002 (0.008)	0.001 (0.007)	-0.000 (0.014)	0.002 (0.008)
Graduate teacher ratio	-0.071 (0.224)	-0.285 (0.469)	-0.011 (0.262)	-0.046 (0.221)	-0.213 (0.499)	-0.001 (0.255)
Mother's education	-0.011 (0.082)	-0.309* (0.164)	0.086 (0.098)	-0.022 (0.083)	-0.277 (0.168)	0.075 (0.098)
Principals' time in school	0.050** (0.021)	0.061 (0.048)	0.047* (0.025)	0.060*** (0.021)	0.062 (0.049)	0.058** (0.025)
CIEP	0.083 (0.061)	-0.081 (0.130)	0.139* (0.071)	0.085 (0.064)	-0.046 (0.140)	0.136 (0.075)
Region fixed effects	Y	Y	Y	Y	Y	Y
Interviewer fixed effects	Y	Y	Y	Y	Y	Y
Observations	374	93	281	361	91	270
R-squared	0.199	0.430	0.194	0.213	0.438	0.217

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6 reports the results obtained using school unit autonomy as the dependent variable. This variable measures the corporate autonomy of the school unit, namely the independence of the unit to make key decisions without consulting other organizational units in the education secretariat organizational hierarchy. In line with the results above, Table 6 provides statistically significant correlations at the 5 percent level between the measure of fringes of formality and school autonomy both in the full sample and in the other respondents' sample, but not in the principals' sample. In this case, the school principal having the fringes of formality behavioral profile is associated with an increase of 15.8 percentage points in the likelihood of the unit having autonomy (equivalent to 19.5% of the sample average).

Table 6: School Unit Autonomy

Dependent Variable: School Unit Autonomy						
	All respondents	Principals only	Others	All respondents	Principals only	Others
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Fringes of formality				0.126*** (0.044)	-0.006 (0.148)	0.158*** (0.049)
Student enrollment	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Class size	0.003 (0.006)	0.004 (0.009)	0.003 (0.007)	0.006 (0.006)	0.004 (0.009)	0.008 (0.007)
Graduate teacher ratio	0.289 (0.196)	-0.140 (0.297)	0.470** (0.235)	0.283 (0.203)	-0.121 (0.321)	0.411* (0.244)
Mother's education	-0.033 (0.068)	0.070 (0.120)	-0.069 (0.084)	-0.027 (0.068)	0.065 (0.123)	-0.068 (0.086)
Principals' time in school	0.021 (0.017)	0.037 (0.036)	0.024 (0.021)	0.018 (0.018)	0.035 (0.036)	0.023 (0.022)
CIEP	-0.039 (0.055)	-0.105 (0.105)	-0.017 (0.066)	-0.050 (0.056)	-0.101 (0.120)	-0.033 (0.067)
Region fixed effects	Y	Y	Y	Y	Y	Y
Interviewer fixed effects	Y	Y	Y	Y	Y	Y
Observations	375	93	282	361	91	270
R-squared	0.110	0.377	0.135	0.123	0.376	0.160

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7 presents the correlation between the fringes of formality measure and that of order and discipline. This output measures the perceived presence of order and discipline in the school unit. Column 4 provides evidence that there is a positive correlation that is statistically significant at the 5 percent level between fringes of formality and order and discipline in the full sample. When splitting the sample, the results provide evidence that the correlation is driven by the responses from the sample of other respondents. Whereas the estimates from Column 5 indicate a small and statistically insignificant relationship between fringes of formality and order and discipline in the sample of principals, the estimate from Column 6 indicates a larger and statistically significant at the 5 percent level relationship between the same variables in the sample of other respondents. The magnitude of the estimates from the sample of other respondents suggests that the school principal having the fringes of formality behavioral profile is associated with an increase of 11.8 percentage points in the likelihood of having order and discipline in the school unit (equivalent to 13.7% of the sample average).

Table 7: Order and Discipline

Dependent Variable: Order and Discipline						
	All respondents	Principals only	Others	All respondents	Principals only	Others
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Fringes of formality				0.102** (0.040)	0.039 (0.044)	0.118** (0.054)
Student enrollment	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Class size	0.003 (0.004)	0.007 (0.005)	-0.006 (0.006)	-0.002 (0.005)	0.006 (0.005)	-0.005 (0.006)
Graduate teacher ratio	0.312 (0.195)	-0.065 (0.365)	0.464** (0.233)	0.290 (0.203)	-0.034 (0.400)	0.416* (0.242)
Mother's education	-0.006 (0.065)	-0.114 (0.080)	0.027 (0.083)	-0.003 (0.068)	-0.112 (0.081)	0.033 (0.087)
Principals' time in school	-0.041*** (0.014)	0.017 (0.016)	-0.054*** (0.018)	-0.044*** (0.015)	0.014 (0.017)	-0.057*** (0.019)
CIEP	0.022 (0.047)	-0.063 (0.066)	0.044 (0.058)	0.009 (0.049)	-0.065 (0.064)	0.031 (0.060)
Region fixed effects	Y	Y	Y	Y	Y	Y
Interviewer fixed effects	Y	Y	Y	Y	Y	Y
Observations	360	88	272	347	87	260
R-squared	0.115	0.217	0.155	0.128	0.224	0.168

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Lastly, Table 8 presents the correlation between bureaucratic behavior and organizational capacity. This output indicator is a measure of the perception of overall organizational capacity in the school unit. The output indicates a positive and statistically significant relationship at the 5 percent level between fringes of formality and organizational capacity in the full sample of survey respondents (Column 4). When splitting the sample, this correlation continues to be positive for both samples though not statistically significant.

Table 8: Organizational Capacity

Dependent Variable: Organizational Capacity						
	All respondents	Principals only	Others	All respondents	Principals only	Others
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Fringes of formality				0.116** (0.058)	0.115 (0.137)	0.082 (0.073)
Student enrollment	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Class size	-0.004 (0.007)	-0.004 (0.011)	-0.004 (0.008)	-0.005 (0.007)	-0.005 (0.011)	-0.005 (0.008)
Graduate teacher ratio	0.286 (0.219)	-0.583 (0.474)	-0.563** (0.245)	0.308 (0.225)	-0.611 (0.493)	0.571** (0.250)
Mother's education	-0.016 (0.081)	-0.121 (0.181)	0.014 (0.093)	-0.011 (0.084)	-0.108 (0.187)	0.012 (0.097)
Principals' time in school	-0.009 (0.020)	0.022 (0.053)	-0.013 (0.024)	-0.006 (0.021)	0.021 (0.056)	-0.008 (0.025)
CIEP	0.089 (0.057)	-0.084 (0.129)	0.142** (0.067)	0.100* (0.060)	-0.119 (0.139)	0.158** (0.068)
Region fixed effects	Y	Y	Y	Y	Y	Y
Interviewer fixed effects	Y	Y	Y	Y	Y	Y
Observations	377	93	284	362	91	271
R-squared	0.091	0.297	0.120	0.098	0.311	0.125

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

5.3. Interpretation

In sum, the results from the regressions show that the correlation between the bureaucratic behavior and the output indicators is positive and significant when examining the entire sample of survey respondents. When splitting the sample, the results show an interesting pattern and point to the fact that results are mostly driven by the sample of other respondents. Across the board, the results suggest a positive correlation that is statistically significant in the sample of other respondents (teachers and administrators), while a negative or positive correlation that is not statistically significant in the sample of principals only. Thus, according to the sample of other respondents, schools where principals are perceived to act according to the fringes of formality behavior are likely to have a stronger sense of mission, more order and discipline, increased corporate autonomy, and higher organizational capacity than those schools

in which the principals do not ascribe to the fringes of formality behavior. Moreover, the different specifications are robust to the inclusion of controls.

One likely reason for this pattern of results that is consistent with the theoretical literature is the different formal pressures to which the organization subjects each group of respondents in their daily routines.²¹ By nature of their position in the hierarchy and the organizational accountability structure, principals fall under greater pressure to conform to formality. For instance, if anything happens in the school, they are the ones held responsible, and level of culpability is often tied to an actor's degree of compliance to established rules and protocols. Therefore, principals are motivated to take as little risk as possible in their daily activities. Moreover, they want to maintain an image of closely adhering to the formal directives to which they are subject, and thus, condition themselves to answer the survey questions in the manner in which they are thought to be expected by the formal organization. As a result, there is not as much variation in their answers, which makes it more difficult for the survey to capture the relationship between the de facto patterns of behavior and output indicators.

In contrast with the principal sample, respondents in the "others" sample, including administrators and teachers, are under less pressure to conform to the formal rules and protocols of the education system. They are not directly accountable for school's results and are thus relieved of much of the pressure to project formality in the way that the principals experience. Put differently, they can endure more risk by allowing themselves to be more upfront and candid in their survey responses. As a result, there is more variation in this sample's survey responses, which allows for an identification of robust associations between the presence of the fringes of formality behavioral profile and the range of output indicators across schools.

In general, the R-squared across regression results is not small in absolute terms. Especially when considering the question at hand and the types of variables involved, it is not a negligible amount. Adding the measure of bureaucratic behavior adds more power to the estimation of these bureaucratic administration indicators. This is important progress since these elements have not yet been fully explored in the empirical literature in this manner. In particular, given how difficult it is to quantify these intangible elements, it is worth noting that this

²¹ Vegas, Emiliana. "School Choice, Student Performance, and Teacher and School Characteristics: The Chilean Case." *Policy Research Working Paper WPS2833*. Washington, DC: The World Bank, Development Research Group.

somewhat amorphous behavior can partly explain significant differences in these output indicators.

6. Conclusion

The state secondary education system has often been referred to as the bottleneck of the Brazilian education system. In Rio, in particular, it has consistently ranked very low on quality measures. Recent reforms in 2011 injected new life into the system. However, the reform's results have been uneven, with many schools lagging in performance. Moreover, this variation is not easily explained by structural factors: good schools are found in low-income, safe neighborhoods with students possessed of greater advantages, and vice versa. This chapter confronted this puzzle and closely examined a theory related to differences in bureaucratic behavior among principals within the school that helps account, along with other structural and policy factors, for this variation in implementation across the education system. As this chapter has found, the adoption of a fringes of formality profile of behavior by principals is correlated with an improvement in intermediate bureaucratic administration outputs in schools. Given the intractability of problems in the education sector and its importance, this is a significant finding.

Leadership in organizations rarely fully explains organizational performance, especially in circumstances like education. Yet, there are strong arguments and evidence for the importance of management and leadership in driving results in both private and public organizations. These theories have posited a range of hypotheses about how these factors are important in driving and sustaining reforms in these organizations. This chapter attempted to advance this literature by testing a theory that more explicitly characterizes what is meant by leadership and management in one of the more complex non-logistical street-level bureaucracies. The theory posits that there may be an often underestimated factor – namely, the presence of the fringes of formality behavioral profile among middle-tier echelons – that could account for the variation in reform implementation.

Indeed, evidence from the surveys consistently supports this hypothesis. For instance, schools in which the principals demonstrate the fringes of formality behavior are associated with a stronger sense of mission, increased corporate autonomy, more order and discipline and higher organizational capacity than those in which the principals do not ascribe to the same behavior.

In addition, the results also show an interesting pattern when splitting the sample of respondents. The results are mostly driven by the responses from the sample of teachers and administrators as opposed to those from the sample of principals. A likely interpretation for this pattern are the different pressures to conform to formal expectations that the two groups of respondents may face in their daily routines.

Ultimately, evidence of the association between the fringes of formality behavior and the organizational capacity indicators highlights the importance of studying this often-overlooked component of reform – the crucial way in which middle-tier bureaucrats translate high-level requirements into street-level action. Moreover, it offers alternative pathways to reform implementation than those that have often been proposed by the international development community and national education systems. These results suggest that there may be more productive pathways to reform than the traditional Weberian model. Indeed, schools can implement reform in a productive manner without necessarily ascribing to the classic principles. This chapter has highlighted what these features may include and taken a first step to open way for increasingly more indigenous reform efforts.

CHAPTER 4: INDUSTRIAL INNOVATION ON THE FRINGES OF FORMALITY

“I am fully conscious that the jeitinho is what stops Brazil from making progress...There is an ocean of jeitinhos... With autonomy, I do not need jeitinho, because I have control over things and do not need to kiss the ring and make space for the jeitinho to come in.” – Innovation Institute Director

1. Introduction

1.1. Context and Background: The Institutional Framework and Recent History of SENAI

Igniting and sustaining economic growth is a central challenge for middle-income countries like Brazil that risk becoming stuck in the “middle-income trap” if they fail to continue moving up the value chain of economic activity.²² An essential part of doing so is identifying drivers of productivity, innovation, and competitiveness while also managing to maintain stable economic fundamentals and avoiding growth slowdowns.²³ Key elements of avoiding such slowdowns – including the dreaded “trap” – entail stimulating innovation and industrial upgrading, which enable a country like Brazil to continue augmenting the quality of its goods and services and improving the productivity of its labor force.

Brazil offers an important example of a country deliberately trying to grapple with this problem. The country faces significant challenges relative to its peers both in terms of inputs, such as the training of science and technology graduates, and final outputs, such as the development of patents.²⁴ After a decade of strong growth in the 1990s and 2000s, Brazil’s economy had grown considerably, but much of the economic growth “low-hanging fruit” had

²² Fernando Gabriel Im and David Rosenblatt, *Middle income trap: A Conceptual and Empirical Survey* (Washington: World Bank, 2013), <http://documents.worldbank.org/curated/en/969991468339571076/pdf/WPS6594.pdf>.

²³ Greg Larson, Norman Loayza, and Michael Woolcock, *The Middle income trap: Myth or Reality?* (World Bank, 2016)

²⁴ Claudio Frischtak and Katharina Davies, *Deciphering Brazil’s Innovation Paradox* (Washington: The World Bank, 2015).

already been plucked, and significant obstacles to the effective furthering of innovation remain.²⁵ Indeed, these efforts have taken on renewed importance as Brazil's economy slowed dramatically and even contracted in 2014-2016. Accordingly, Brazil has made focused efforts to stimulate innovation through a number of mechanisms. These have ranged from the implementation of different government subsidies – many aimed at promoting and sustaining small and medium enterprises – to changes in the regulatory framework.

A particularly notable effort to stimulate innovation in Brazil have been the SENAI Innovation Institutes (ISI). SENAI is the largest and most important organization providing vocational training in Brazil. Since 1942, SENAI has provided secondary-level vocational and professional training for Brazilian citizens. Its core function is to provide formal training for specialized workers in the fields of chemistry, mechanics, construction and others comprising a total of 28 industrial fields. It currently has 809 mobile and fixed operational units across Brazil and offers over 3,000 courses in the aforementioned industrial focuses. Since its inception, 55 million professionals have graduated from SENAI.²⁶

SENAI is a privately-run, non-profit organization, with a public purpose that is overseen by the Brazilian Confederation of Industry (CNI). CNI receives funding for SENAI from the federal government, which raises that funding as a percentage of the annual taxes paid by industrial firms.²⁷ The SENAI organizational structure is analogous to that of a public sector bureaucracy in that it is highly decentralized within a federal apparatus. The organization is structured as a hierarchical bureaucracy, with headquarters setting guidance for distributed regional and local organizational units, but those units have a certain amount of autonomy in actually executing on that guidance. As a result, the dynamics between its central and local governing bodies is very similar to that found in other street-level bureaucracies in Brazil, such as Rio's police and educational bureaucracies.

To this effect, SENAI carries out its programs and initiatives through national and regional administrative bodies that operate under the supervision of the CNI. The two main governing bodies that operate in tandem are: the national SENAI directorate having jurisdiction

²⁵ For an analysis of the challenges facing Brazil's ability to foster and expand its innovation and other productivity enhancements, see Ibid.

²⁶ "SENAI," <http://www.portaldaindustria.com.br/senai/en/about/senai/>.

²⁷ The funding comes from 1% of the INSS tax paid by firms to the government.

over programs and projects at a national level, and the regional SENAI directorate that have jurisdiction over programs and projects in each respective unit at the state level. The national directorate, in theory, is responsible for providing planning, strategy, and guidance to the regional directorates, which are responsible for overall monitoring and supervision of operations and overall execution of programs at the state level. However, in practice, the national and regional units play somewhat overlapping roles in terms of strategy and operations. That is, national- and regional-level strategy and operations are developed and executed in conversation between the two levels of organizational governance. Moreover, the balance between strategic and operational functions varies according to the political economy – namely SENAI representatives' relationships with CNI – within each state.

In 2012, the leadership of the Brazilian Development Bank (BNDES) decided the government should draw on the SENAI platform to take a more active role in promoting innovation and especially industrial innovation. The country had been facing a steady decline in innovation and productivity indicators, which showed no real promise of improving given the rise of Asian competitors in some of the same traditional industries that Brazil had once been a strong player. Given this economic context, the BNDES, and in particular, its former president, Luciano Coutinho, pushed for a more targeted and planned involvement of the government in industrial policy.²⁸ According to his vision, one of the centerpieces of this involvement would be a strengthening of the knowledge and innovation ecosystem across the country.

Coutinho planned to make this vision a reality through the establishment of innovation institutes that would be housed within the SENAI platform. The institutes would be strategically placed in key geographical locations across the country. They would function in a network-like manner to bridge the knowledge and operational gap between industry and universities in these areas. Ultimately, the goal of the institutes would be to foster collaboration between the different players in industry and related sectors in order to accelerate and expand technological and innovation development across the country in a systematic manner. Coutinho proposed that the institutes be housed within SENAI, where they would be able to draw on SENAI's extensive

²⁸ Based on an interview conducted by Professor Michael Piore with Dr. Luciano Coutinho.

connections with industry and academia, and thereby facilitate the cross-sector transfer of technologies and innovative practices and thinking at the state- and national-level in Brazil.²⁹

As a result, the innovation institute program implementation started with a BNDES investment of 1.5 billion reais across 13 institutes. Since 2012, the number of institutes has nearly doubled to 25, employing a total of 521 professionals. The network of institutes currently has 188 projects that are either contracted or under execution for a total of 224.6 million reais. Since its inception, it has finalized 151 projects for a total of 135.8 million reais.

Coutinho's hopes for the innovation institutes were shared by the SENAI leadership and related communities of interest. However, the innovation institute initiative has faced significant challenges, not least in the area of organization and bureaucracy. Within SENAI, the innovation institutes have had to co-exist as a new conceptual and operational practice in a traditional institution in which the main line of work (that of vocational and professional training) is only tangentially related to the new initiative (promoting innovation). Moreover, the initiative's goal is harder to define and measure than SENAI's traditional core activities. This institutional challenge translates into a range of bureaucratic and organizational difficulties afflicting the innovation institutes that complicate, for instance, the creation of new procurement systems, human resources, bidding processes and so forth. In addition, the institutes, for a variety of institutional, political, and other reasons, have been placed in various geographic locations not organically connected to the industrial and technological strengths of their respective regions. Institutional, bureaucratic, and organizational issues are thus a crucial set of factors for the institutes, which are themselves a major part of Brazil's effort to grapple with the challenge of moving up the economic value chain.

The innovation institutes are therefore an important focus of study from both the organizational and development points of view. Although the institutes are not part of the Brazilian government bureaucracy, they operate as a quasi-governmental organization, and as a result of their functional role and organizational structure, exhibit many of the same dynamics and characteristics that define Brazilian governmental street-level bureaucracies. Similarly,

²⁹ Almeida and Schneider describe this approach as "neo-schumpeterian." Mansueto Almeida and Ben Ross Schneider, *Globalization, Democratization, and the Challenges of Industrial Policy in Brazil* (Brasília: Ministério das Relações Exteriores, 2012), 5-6, <https://sistemas.mre.gov.br/kitweb/datafiles/IRBr/pt-br/file/CAD/LXII%20CAD/Economia/Almeida%20%20Schneider%20612%20v7.pdf>.

SENAI is structured in a highly decentralized manner, like the policing and educational bureaucracies addressed in previous chapters. In addition, the SENAI innovation institutes interact with their respective communities in the same types of ways as the UPPs and schools. That is, the institutes engage directly with clients in the community (e.g., entrepreneurs and businessmen) on a daily basis. Like the UPPs and schools, the institutes are run by middle-tier bureaucrats – titled directors – who can exercise autonomy and discretion in the same ways as their UPP commander and school principal counterparts. And the innovation institutes' middle-tier bureaucrats and front-line agents interact in many of the same ways as their counterparts in government street-level bureaucracies.

For these reasons, innovation institutes offer a valuable opportunity to study variation in intermediate administrative outputs of a major development bureaucracy in a middle-capability setting, and thus complement the policing and education focuses of the previous chapters. The innovation institute initiative within SENAI constitutes a clear-cut case of development reform in which powers were completely decentralized to front-line units (the directors of the institutes) in an effort to advance regional and local development objectives (to promote innovation). It is a major and widespread initiative with high potential for bureaucratic administration to affect intermediate administrative outputs and thus deserving of careful attention as we seek to better understand why some reform efforts and not others succeed in middle-capability countries.

1.2. Variation in Reform Implementation across SENAI Innovation Institutes

The focus of this chapter is on how the innovation institute initiative has been implemented within SENAI's traditional bureaucratic structure. This issue is important because there is substantial variation in the performance of innovation institutes across Brazil that cannot be entirely explained by key factors such as region, geography, or socioeconomic factors. For instance, on the one hand, some institutes situated in geographical areas that are not only remote but also have no traditional role in innovation or technologies have successfully raised funds and shepherded multiple innovation projects. On the other hand, some institutes located in relatively developed regions with traditions of innovation across different technologies have struggled. Thus the success of the institutes at their designated mission cannot be wholly attributed to the geographic or socioeconomic environments – the key structural considerations – in which they

operate. The inability of structural factors to explain in substantial part why some institutes are more effective than others suggests that other – perhaps internally driven – factors may play a significant role in determining which institutes are successful and which are not.

Despite a similar reform implementation approach across innovation institutes, then, some institutes have done well while others have not done as well in ways that do not necessarily correlate with local or other environmental factors. Why? What causes this variation in performance among the innovation institutes? This chapter proceeds from the hypothesis, backed by evidence from preliminary fieldwork and interactions with the institute directors, that at least a significant part of this variation is caused by differences in organizational behavior.

As with the other chapters, the purpose of this chapter, then, is to try to identify what organizational dynamics or behavior are correlated with superior bureaucratic administration – and resulting intermediate administrative outputs, particularly an institute's sense of mission, definition of a critical task, corporate autonomy, order and discipline, communication, and opportunities for growth and learning – across the SENAI institutes. This chapter is not focused on directly linking the effect of better organizational behavior on outcomes; rather, it focuses on the mechanisms that cause better bureaucratic administration and thus intermediate administrative outputs, which are assumed to contribute to long-term outcomes like the development of patents.

In particular, I aim to examine how the behavior of key players in these bureaucracies – in this case the directors of the innovation institutes – affects the intermediate administrative outcomes of their respective institutes. I focus especially on how institute directors spend their time and the quality of the types of interactions of the director with others who are a part of their team at a given institute, those in other organizational units within the broader SENAI framework, and external clients and counterparts.

With this question in mind, the aim of the chapter is to draw on this experiment, to investigate the factors behind this variation in performance among the institutes. The chapter draws on this case study to examine the broader question of why innovation institutes – and public sector street-level bureaucracies writ large – are not performing in the way that they should and have generated widespread dissatisfaction among the populaces and stakeholders they serve. This has significant impact on the activities in which the state chooses to become involved. Organizations that perform better internally and bureaucratically should also perform

better ultimately in terms of their contribution to overall outcomes. In particular, I therefore want to explore why some institutes are more successful in the bureaucratic administration of their organizations than other units.

This narrower objective is still of broader and significant relevance because, while there has been much written on bureaucratic administration, there is still considerable uncertainty as to what the mechanisms that cause effective performance are. We still do not fully understand why similarly situated organizations exhibit different behavior and achieve different levels of performance in terms of bureaucratic administration, especially in middle-capability environments. The innovation institutes in Brazil offer an excellent opportunity to examine variation in intermediate administrative outputs in an important organizational reform initiative in a middle-capability institutional environment.

Importantly, this chapter is agnostic about the *advisability* of SENAI's approach to fostering innovation as a method of development, or of the innovation institutes, in particular. Rather, the chapter assumes that there is at least some rationale for this program. Indeed, there are important arguments that indicate that many of the most effective ways for Brazil to stimulate innovation lie elsewhere than the institutes. It is not the purpose of this paper to try to contribute to this debate. Instead, the chapter draws on the implementation of the innovation institute program to explore the mechanisms behind why some institutes have been more successful in their bureaucratic administration than others. It focuses on the organizational dynamics that contribute to or detract from the institutes' performance, based on the contention that these dynamics are relevant and perhaps highly relevant in determining the institutes' performance.

2. Hypothesis

As in the policing and education instances, I hypothesize that an innovation institute is more effective in its bureaucratic administration when its director – defined in this dissertation as a middle-tier bureaucrat because he or she sits above the institute's front-line agents (i.e., institute staff) and is subject to authority of the overarching SENAI bureaucracy – exhibits the fringes of formality behavioral profile. That is, an institute is more successful when its director exhibits initiative, practices strategic functions, and actively identifies or creates bureaucratic

zones of opportunity. All three of these characteristics, as opposed to just one or two of them, are necessary for the relationship between middle-tier bureaucratic behavior and intermediate administrative outputs to hold.

How do these characteristics manifest themselves in the innovation institute context? Institute directors who exhibit the first defining characteristic of the fringes of formality behavioral profile take the initiative to confront challenges and do so in an energetic and entrepreneurial manner. They accept the functions and responsibilities assigned to them by the higher SENAI authorities and genuinely respect the limits of their jurisdiction (i.e., they are committed to adhering to the rules, regulations, and protocols put in place to direct their freedom of action). However, they take the initiative and assume substantial autonomy in determining how best to carry out those functions and responsibilities within their jurisdiction.

Innovation institute directors who demonstrate the second characteristic of the fringes of formality behavioral profile give substantially greater focus to the strategic and interpretive functions of their work than to the administrative ones.³⁰ Importantly, due to the innovation aspect of this sector, this chapter makes an additional distinction in the category of functions and includes interpretive functions as well as strategic functions, whereas the other sectoral chapters only refer to strategic functions as a counterpoint to administrative functions. This additional nuance follows more closely the Lester and Piore framework that adheres strictly to the administrative versus interpretative dichotomy in the context of industrial innovation. As defined in previous chapters, strategic functions entail the exercising of judgment, deliberation, and planning as opposed to the routine and procedural tasks involved in administrative functions. “Interpretive” functions are a step further into abstraction and far less programmatic than strategic functions. An interpretive approach to problem-solving in the innovation institute context emphasizes brainstorming and creative thinking in a more open – indeed, a canvas-like – manner. As opposed to having a specific goal in mind that requires planning and strategy, interpretative thinking is about embracing the lack of structure to brainstorm new and often unprecedented solutions and ideas.

Institute directors with this behavior focus and practice this category of functions – strategic or interpretive – in a particular manner. Rather than seeing these functions as

³⁰ This distinction among functions draws on the Lester and Piore framework in the context of innovation. Lester and Piore, *Innovation: The Missing Dimension*.

compartmentalized, they practice them in a hybrid and dynamic manner. Like fringes of formality bureaucrats in the UPPs and schools, they are constantly wearing and switching different hats. In other words, they are able to practice administrative functions at one moment while quickly moving to interpretive or strategic functions at the next, and back again. Thus, they are nimble in switching gears and toggling between different categories of functions in a short period of time. Their practice of functions is also fluid in the sense that even when they are thinking about administrative issues, they are able to situate those administrative issues in strategic context. Lastly, institute directors of this variety have a managerial view of their functions in which they work to be able to delegate the parts of their broader plan that are more operational and routinized to others in their respective teams. This allows them to be more productive and efficient in their behavior, and thus, streamline and enhance their respective units' activities and work programs.

The third and final characteristic shared by innovation institute directors exhibiting the fringes of formality behavioral profile is an ability and propensity to strategically expand their authority into areas for which the overarching SENAI bureaucracy has neither clearly delegated nor clearly denied authority to them. These actors begin by using all of the authority clearly delegated to them as part of their respective recognized jurisdictions. When that authority proves insufficient to address problems that their units face, however, they take the initiative, improvise, and come up with creative solutions by identifying or creating bureaucratic zones of opportunity. Even as they do so, however, they are careful to not to exceed their jurisdiction.

Directors in this category exploit bureaucratic zones of opportunity are “institutionally conscious.” They are not out for personal gain, and they work to ensure that their actions do not benefit their respective institutes to the detriment of SENAI as a whole. That means that they are able to bypass restrictive rules and counterproductive protocols through imaginative methods, but they do so both legally and without hurting the overarching organization. These directors also consciously husband and employ their bureaucratic capital to achieve results. In other words, directors who are operating on the fringes of formality avoid trying to solve problems by creating additional institutional structures, procedures and protocols.

According to the hypothesis, then, the institutes that have directors who share this profile of behavior with these characteristics—fringes of formality behavioral profile—are correlated with better intermediate administrative outputs. This focus on intermediate administrative

outputs is important because it will shed light on organizational dynamics in public sector bureaucratic performance and behavior in middle-capability environments, which will both improve scholarly understanding and also enable more tailored and more effective reforms.

3. The Fringes of Formality Behavioral Profile in Practice³¹

What does operating at the fringes of formality mean in practice? As discussed in the other chapters, there are four categories of action of how this behavior occurs in practice. What follows are examples of how the categories of actions manifest themselves in the SENAI case study.

3.1. Inventive Satisficing

The first category of action, inventive satisficing, occurs in circumstances in which two things are true. First, there are rules and protocols guiding an innovation institute director's behavior for that particular set of circumstances. But second, crucially, the director lacks the resources needed to abide by the formal guidance in the way that his or her superiors originally intended. What sets directors who engaged in inventive satisficing apart is that they are able to make do with limited resources, and while not performing their duties quite in the way that their superiors originally envisioned, nonetheless find creative ways to meet the standards set for them.

Put differently, directors who engage in inventive satisficing are able to effectively accomplish their goals despite the limitations of their surroundings. They are able to get things done despite limited resources and institutional bureaucratic hurdles. Rather than explain why they did not do something because of what they did not have, they find creative ways to fulfill their missions, overcoming rather than focusing on and being paralyzed by obstacles. In doing so, they break new ground both in terms of innovating within their organization as well as getting their projects off the ground and completed.

³¹ For anonymity purposes, I assigned different names to each of the innovation institutes in the sample. They are names of famous inventors. I have also kept references to directors as gender neutral.

Take, for example, the case of the director from the Alexander Bell Institute. The regional SENAI directorship that the institute is a part of did not have a mechanism to import equipment to support the operation of her unit's projects. Instead of complaining about this lack and going through the normal protocols to resolve it, which would have ensured lengthy delays and an uncertain outcome, the director had his team do a series of benchmarking exercises to understand other ways that the innovation institute within a regional directorate might be able to cooperate to import equipment without going through the regular protocols. This process allowed them to figure out how to import the needed equipment more rapidly—and less expensively—than the formal structure would allow. As the director explains, “You have to interfere and support things in other organizational units. It is an additional process of breaking new ground and it is part of the work program.”³²

In contrast, under the same circumstances, innovation institute directors who do not exhibit the fringes of formality behavioral profile usually blame the system and passively accommodate inefficiencies and failures within the system. For instance, one director explains that when things get delayed or he is not able to move things forward, he simply makes the client wait to accommodate the slow timing of the system given ongoing politics and roadblocks in his state regulatory apparatus.³³ Another director recounts a story in which industry partners required that an important test be done to prove the sustainability and reliability of a given material even though performing the test would substantially delay the client's ability to realize profits. However, upper level management did not understand the need for delaying the project and so the director was prohibited from moving forward. The director simply accepted this prohibition. He argues that management is geared toward the education business of SENAI and thus does not understand basics of finance to be able to leverage deals, and resigned himself to this fact.³⁴ Ultimately, these examples help to show that when directors who do not exhibit the fringes of formality behavioral profile encounter problems within the system, they are generally passive and accepting of existing conditions, rather than trying to overcome bureaucratic hurdles within the organization in order to make progress on their respective projects.

³² Interview with the director from the Alexander Bell Institute.

³³ Interview with the director from the Thomas Edison Institute.

³⁴ Interview with the director from the Alan Turing Institute.

3.2. Camouflaging

The second category of action, camouflaging, occurs in situations in which rules and protocols exist but do not provide innovation institute directors with the latitude of action that they need to achieve their respective units' – and the broader innovation institute network's – objectives. This occurs frequently during the implementation of the institutes' respective agendas. In particular, it occurs due to the challenge of implementing a new type of organizational unit, with a new mission of promoting innovation, that is embedded in a conventional platform of SENAI that, in essence, has a different mission – that of vocational training. The result is that the current rules and protocols within the conventional platform, which have not been adapted to the new mission, are oftentimes not conducive to operationalizing the mission to promote innovation. In practice, the rules and protocols that are necessary to implement projects about innovation are somewhat different from those that are geared toward implementing vocational training. In response to this challenge, directors frequently camouflage the existing legal framework to incorporate and reach the new goals that are related to promoting innovation in industry.

One example of camouflage is how directors change the sequence of protocols to accomplish their real goals yet mask their practice in the overall framework. In doing so, these directors understand that protocols and procedures may not function and operate effectively in a sequential manner. Rather, the directors oftentimes do not follow steps in the order in which they are instructed, as someone following the protocols to the “t” might. For instance, two directors did not first construct their buildings and find a space for their institute to work prior to getting projects, as had been delineated in the protocols.³⁵ Instead, they immediately started to get projects and offer their institute's services to other firms, and only later, after they had a substantial amount of clients, did they start constructing their institute. They judged that they had to refine their product and become more certain of what they were offering before moving on to the construction of the building. As one director explains, “We need brains and a commitment to the business and everything else is secondary.”³⁶ In this case, they created their own priorities and logistical order within what was allowed in order to better meet their goals irrespective of the

³⁵ Interviews with the directors from the Alexander Bell and the Santos Dumont Institutes.

³⁶ Interview with the director from the Alexander Bell Institute.

order of the steps that were given to them. Yet, they did so in a manner that did not harm the broader institutional regulatory framework and also did not give their respective institutes any unfair advantage over the others. Thus, they were able to camouflage their non-sequential approach to the implementation of protocols and rules while being able to more effectively meet demands from clients.

In contrast, the familiar *jeitinho* would also improvise, yet it would do so without respect for institutional boundaries or equities and with little concern for the broader health of the institution and the lasting consequences of its actions. For instance, one director described a sort of “barter trade” that he engaged in with firms from which he wants to hire services. In order to avoid SENAI-imposed procurement requirements for an open competition (e.g., listing three competitive firms and their proposed budgets before hiring a service) which can often delay the implementation of the project, the director engages with the service provider in an informal manner within the project boundaries. The firm provides the services to the innovation institute’s client, and the director in turn, includes an item as part of the project that can ultimately benefit the firm.³⁷ In providing this benefit in exchange for the services, the director ensures that the firm will provide them services while not having to go through the cumbersome procurement processes to effectively hire the firm. While this approach solved the immediate problem of the innovation institute (streamlining hiring of services for timely project implementation), it harms the institution as a whole in that it sets the precedent for a kind of behavior that does not promote competition in the hiring of services. It violates not only the spirit of the law, but its letter.

Another example of the familiar *jeitinho* is when directors are given protocols from above and they find ways to escape them, thereby arranging an exception just for their respective institute. For instance, a director explains that a protocol came from upper management to cut the budget and yet this director was able to negotiate with his superior a manner in which he could keep his budget in the same figure range so that he would not need to make any cuts to fundamental line items.³⁸ In this case, the director relied on personal affinity to leverage a benefit for his respective unit that may indirectly affect the functioning of the finances of other units that are part of the network. Ultimately, these examples show a behavior that is very different from the other group of directors in that in these cases they seek exceptions and find ways to

³⁷ Interview with the director from the Karl Benz Institute.

³⁸ Interview with the director from the Wright Brothers Institute.

improvise yet in a way that mostly benefits their institutes and may potentially have negative consequences for the organization as a whole.

3.3. Freestyling

The third category of action, freestyling, occurs when rules and protocols do not exist to guide the actions and decision-making of an innovation institute director for a given set of circumstances. Directors who exhibit the fringes of formality behavioral profile frequently engage in this category of action, especially as a result of the fact that the conventional SENAI organizational platform oftentimes does not provide sufficient guidance – in the form of rules and protocols – for managing the needs of the new network of institutes. In these cases, directors have to co-exist with this institutional tension as they freestyle new solutions within the conventional operating system. On the one hand, they fully understand that the rules and protocols have to be respected. As one director explains, “I cannot operate in a way that hurts the institution of SENAI because this is a neurosis here.”³⁹ Yet, on the other hand, they understand that there are optimal times and windows when to push on these customs and rules for the betterment of their institution and the organization as a whole, and to improve their performance.

For instance, one director wanted to transfer two recent hires from the regional directorate – where they had originally been hired – to work on her team in the innovation institute.⁴⁰ These individuals were, however, better educated than what was expected for the available positions in her unit. Moreover, there was no protocol for how to deal with such a situation: whether to adjust the position requirements or to justify new levels of compensation for the more highly educated prospective transfers. The director took the initiative to address this dilemma. By improvising within the scope of his authority, he created a new career track for researchers inside the regional directorate that is responsible for implementing policies within her innovation institute. He worked within the appropriate jurisdiction (the regional directorate) to create a new protocol (the new career path) to accommodate the prospective hires accordingly. The new career path, then, would allow the professionals to be recognized and earn a salary more

³⁹ Interview with director from the Alexander Bell Institute.

⁴⁰ Ibid.

compatible with their degrees. This allowed him to hire the two individuals.⁴¹ Yet there were difficulties in the implementation of this new protocol. For instance, the salary that these professionals would earn under her plan was higher than that earned by some directors in other states in Brazil. This made discussing the situation internally with the rest of the innovation institute network difficult. Nonetheless, despite feeling exposed and going out on a limb, the director was able to negotiate and explain the rationale behind the career creation to the president of the CNI and thus have it approved by the regional directorate and thus his respective innovation institute.

Another example is a director who led the creation of a small department within the innovation institute network to process purchase requests.⁴² Until that point, innovation institutes were forced to work with the SENAI procurement office to make purchases. The problem was that the SENAI procurement office was structured to work on major acquisitions, like industrial-scale technologies. This made buying the types of imports that the institutes needed very difficult. As the director put it, “Buying soap [in bulk] is totally different than buying high powered sensors.” Recognizing that having to work through the SENAI procurement office was impeding the institute’s operations, and with much persistence and effort, he was able to convince the regional directorate and CNI to support an institute-specific procurement process. He persuaded his superiors that the knowledge of the laws and of the import processes required to move the types of materials – soap, not sensors – needed by the innovation institute is very specific and not easily available within the SENAI bureaucracy, and that it thus made sense for the institutes to run its own separate procurement office with new and more easily tailored rules and protocols. The director was, thus, able to make very focused changes to the institutional structure that ended up not only benefiting institute, but also the network of institutes as a whole.

In contrast, the group that practices the familiar *jeitinho* style of behavior would seek either to ignore the rules, and do what they immediately please or need, or create new rules and protocols that would help their institutes in the short term with no concern for the interests of the network or the organization as a whole in the long run. These new rules and protocols, in fact, generally turn out to be intermediary solutions that end up setting institutionally harmful precedents. For instance, one director explains how he manages to speed up procurement

⁴¹ Ibid.

⁴² Interview with the director from the Alexander Fleming Institute.

processes by attaching letters to project proposals explaining how, due to his impending deadlines, he needs the process to be approved as quickly as possible.⁴³ The letters are personally addressed and are based on relationships of affinity, thereby introducing the familiar *jeitinho* to get things done in a faster manner than others who follow the strict protocols. Importantly, this familiarity introduces an element into the system that allows for exceptions (e.g., faster approval process) to be made. Importantly, these exceptions are not made on the basis of actual need but based on the texture of the personal relationship evoked in the letter. It thereby sets precedent for this kind of informal and affinity-based protocol which ends up benefiting some units at the expense of others based on subjective terms and criteria.

Similarly, another director explains how he exploited a loophole in the procurement process to create a new protocol to be able to buy the particular kind of material needed for his project. As he explains, “This exception opens a precedent so that it can be used in other circumstances.”⁴⁴ The director suggests that the exception as a positive development that can have beneficial consequences for the practice of other units. In reality, the loophole is an ad-hoc and intermediary solution to the problem at hand. It can further place a burden on the system in the long run due to the lack of oversight currently available to the purchasing practice. The directors that incorporate elements of *jeitinho* in their practice are thus unable to distinguish the damaging institutional developments from the more productive methods and approaches. Ultimately, the view of this group of directors is somewhat like that of an “institutional predator” in the sense that anything is up for change as long as it immediately benefits their respective institutes.

3.4. Street-Level Diplomacy

The fourth and final category of action, street-level diplomacy – as with freestyling – takes place when rules and protocols do not exist to guide the actions and decision-making of an innovation institute director for a particular situation. In the absence of such guidance, bureaucrats can find creative ways to work with external actors (i.e., clients) to manage novel challenges and circumstances. Importantly, this does not occur as frequently in this sector as it

⁴³ Interview with the director from the Karl Benz Institute.

⁴⁴ Interview with the director from the Rudolf Diesel Institute.

does in the other more traditional street-level bureaucracies. This is due to the nature of the interaction between the frontline provider (director) and the client (entrepreneurs). This interaction is not as frequent as in the other sectors and does not conform to the same kind of accountability structures. Nonetheless, when these interactions do occur, successful directors tend to engage in “mediation” and “bridging” forms of street-level diplomacy in order to manage differences between clients’ demands and the requirements established by the innovation institute network and SENAI.

One example of this kind of mediation was one director’s ability to develop a compromise between clients and the internal demands of the organization. In this case, the director faced a challenge in that the national SENAI directorate opposed the innovation institutes entering into any partnerships that would allow them to earn royalties from patents, even though the regional SENAI directorate was not against the idea.⁴⁵ Recognizing that he was unlikely to prevail by taking the issue on directly, the director instead negotiated an alternative model with the client. In this model, the innovation institute shares with the client a co-ownership of the royalties. In this alternative model, the respective institute’s name is acknowledged as having contributed to the development of the royalties even though they do not benefit financially from the royalties. In this way, he developed a compromise that was able to satisfy all SENAI organizational units by not directly earning royalties from the patents, while at the same time gaining concrete reputational benefits for his institute by having his institute co-sharing ownership of the royalties.

In particular, the directors who share the model behavior have a persistence that distinguishes them. They are dogged, but not in a counterproductive or combative manner. Instead they follow a Brazilian saying: “Calm water on hard stone hits so much that one day it will create a hole in the stone.” Those directors in this category are dogged, persistent institutional fighters who know when to push hard and when to relent. In this sense, they have an understanding of when and how to apply their insistence. This means that they apply pressure and persistence, but know when to push and when to wait. This requires an acute understanding of institutional protocols, of people’s behavioral patterns, and of the overall timing of reform in the SENAI framework, as well as a keen strategic intuition and a willingness to push the limits of the formal. As one director describes the team within his institute, “We are like pit bulls. We bite

⁴⁵ Interview with the director from the Alexander Bell Institute.

the meat and suck until the bone marrow.”⁴⁶ In this case, the director refers to his multiple and frequent interactions, and mediation processes, between the client and the conventional institution.

In contrast, those that exhibit the familiar *jeitinho* or variants do not worry about sticking within the institution’s rubric or serving its interests; instead, they would just find ways to cut corners and ignore or circumvent protocols without considering the impact on the organization. When talking about cutting corners and ignoring or circumventing protocols, this group of directors often associates these actions with taking institutional and professional risks both internal and external to the organization.⁴⁷ As one director explains, “As a manager, you expose yourself as much to one side as to another.”⁴⁸ In this case, the director explains that he gets things done quickly within the organization and with external partners, but that it often involves taking risks. Yet, this director also acknowledges the limits to his actions as he explains: “At the end of the day I have to keep my job.”⁴⁹ This means that the director allows himself to take risks in so much as it does not threaten the security of his job. Indeed, the risk-benefit analysis for this group of directors is oftentimes of a personal nature. Ultimately, these directors are trying to change the system to benefit their institute through much risk-taking and beyond the margins of the formal, rather than persisting in the confrontation of existing organizational mechanisms to solve problems.

4. Methodology

This chapter seeks to demonstrate that a given, relatively intangible, type of behavior is correlated with better intermediate administrative outputs in the innovation institutes. This chapter, like the others, faces two primary methodological challenges in seeking to prove this. The first is how to characterize and measure a particular bureaucratic behavioral profile and how to determine whether it is present in a given organization. The second is how to determine

⁴⁶ Interview with the director from the Santos Dumont Institute.

⁴⁷ Interview with the director from the William Talbot Institute.

⁴⁸ Interview with the director from the Karl Benz Institute.

⁴⁹ Ibid.

whether a bureaucracy is performing “better” – in blunt terms, how do we soundly judge what “better” bureaucratic performance is?

To address the first challenge, I used a direct engagement with directors in the various innovation institutes to get an understanding of whether they exhibit the fringes of formality behavioral profile. To accomplish this, I used semi-structured surveys, with both open-ended and close-ended questions, relying on extensive telephone and in-person interviews. I conducted interviews of nearly every innovation institute director in the network. In addition, I collaborated as a research assistant as part of the MIT-SENAI research partnership. This allowed me to engage with SENAI – including innovation institute directors – on multiple occasions in workshops, seminars, and focused-group meetings. This engagement took place over the course of a three-year period. The length of time during which I was able to engage with SENAI and innovation institute representatives allowed me to develop relationships with key actors, which ultimately contributed to the richness of the data I was able to collect through surveys. It also provided ample opportunity to observe how SENAI and innovation institute representatives behaved, both in team environments wherein they were expected to cooperate with one another and individual scenarios.

For the second challenge, I am fortunate in that this is a well-known and much-debated problem in the public administration and economic development literatures. There have been manifold efforts to try to reliably and objectively measure bureaucratic performance. In recent years, much of this effort has been influenced by the new public management literature, which emphasizes clear incentives, monitoring and evaluation mechanisms, and accountability between providers and clients. As a result, many recent efforts to measure the performance of bureaucracies tend to concentrate on tangible and easily quantifiable metrics.

While these more tangible metrics can often serve as good indicators of whether a unit is performing well, they often do not tell the whole story, especially in discussions of behavior and organizational dynamics. The literature on bureaucracy and organizations over the decades has highlighted and explored other traits that have been somewhat overlooked by the recent literature measuring bureaucratic performance, traits that have been overlooked precisely in part because they are very difficult to measure and quantify. Yet, these intangible aspects of bureaucratic

behavior are often essential to the functioning of an organization.⁵⁰ The kinds of behavior specified in the hypothesis above are precisely the types that are difficult to measure under metric systems influenced by new public management, being highly intangible and subjective. Yet, this does not mean they are unimportant. Rather, as this chapter argues, they are often crucial elements of better administrative performance.

Thus this chapter, like the others, focuses on difficult-to-measure, often intangible types of organizational behavior on the premise that they are likely to be important – and possibly crucial – indicators of a well-functioning unit. These indicators take the form of five traits: sense of mission, shared definition of a critical task, corporate autonomy, strong intra-organizational communications, and opportunities for growth and learning. A sixth trait – order and discipline – was tested for in the previous chapters on policing and educational bureaucracies. It is not included in this chapter because it is not as applicable to the context of the innovation institute. In the other contexts, there is a superior (commander or principal) who has to enforce order and discipline on its front-line agents (policemen or teachers) as part of the *modus operandi* of the respective units, whereas in the firm context, this aspect is not as salient due to the nature of the operation.

This chapter draws on a semi-structured survey to measure the relationship between the bureaucratic behavioral profile and the five administrative traits, and overall bureaucratic administration, described above. The first part of the survey measures the extent to which the three elements (initiative, a focus on strategic and interpretive functions, and deliberate cultivation of bureaucratic zones of opportunity) described in the hypothesis are present in the behavior of the director. The second part of the survey measures the strength of bureaucratic administration in the unit. It thus focuses on questions that relate to the director's perception of the more intangible aspects of the organization's performance, as captured in the traits described above.

The survey is semi-structured, meaning that the survey is mostly composed of close-ended questions, with multiple-choice answers, but there are also open-ended questions. In addition, directors were free to elaborate and qualify any of the close-ended questions. This has

⁵⁰ Michael Crozier, *Bureaucratic Phenomenon* (Chicago: University of Chicago Press, 1964); DiMaggio and Powell, "The Iron Cage Revisited"; March and Simon, *Organizations*; Selznick, *Leadership in Administration*; and Wilson, *Bureaucracy*.

led to an extremely rich data collection. The survey's implementation became a chance for directors to share their respective experiences in the program. Each interview lasted an average of 1.5 hours. Since I had already interacted with directors in numerous formal and informal contexts over the course of three years – a longer duration of time than I had to develop relationships with UPP commanders or school principals – they mostly felt comfortable to share their experiences and challenges in a detailed manner. This led to a rich exchange during the formal interviews where directors were forthcoming and reflective about their respective experiences.

I applied the survey strictly to the institute directors across nearly the entire group of institutes, which were 18 out of the 19 institutes in total at the time of the onset of interviews in August 2015.⁵¹ This sample includes “startups,” or institutes that have been recently inaugurated and still do not have a stream of income. However, the bulk of the analysis that will follow focuses on the 15 institutes that have been operating for at least a year and that already have projects in place. The reason behind this research focus is that the majority of the survey questions rely on directors having experience interacting with the administration of the bureaucracy, which occurs primarily once there are actual projects in place.

5. Results

The survey data shows that the organizational behavior described in the hypothesis is present in a sub-group of the institute directors in the sample. The data identifies a distinct group of directors, four in total, who act in this specific manner. Their behavior cannot be easily explained by typical structural variables. Indeed, the group is very diverse, with each of the four directors working in a different region of the country, with different models of development pursued locally and with differing degrees of regional development. Indeed, there is no readily apparent similarity among these centers. Moreover, in addition to differences in degrees of local and regional industrial and technological development and innovation networks, the directors in the sub-group differ in terms of their personal backgrounds and professional experiences. They come from different industries; some have worked in the private sector, while others have

⁵¹ I was not able to reach the last institute director, who did not respond to any of the calls or email attempts for contact.

followed a career in the public sector. And they have varying age, professional, and expertise profiles.

One final noteworthy distinction between members of this group is that two of these directors are part of a larger regional technological and industrial training platform called the Manufacturing and Technology Integrated Campus (CIMATEC), which encompasses these institutes as well as many other working and technical groups in related innovation and technological development areas. This placement of these two institutes in the CIMATEC platform provides them a different standing and advantage in the overall SENAI institution. This nuance will be acknowledged in this comparative analysis, but the similarities among these four directors transcend this difference in institutional setting within the conventional platform of SENAI.

5.1. Initiative

The answers in the survey highlighted many elements showing that the directors in this sub-sample of institutes take the initiative to pursue their goals and confront ensuing challenges. Initiatives in this group are often self-generated or originate in their respective institute teams, whereas most of the other directors source ideas from other organizational units within the innovation institutes or SENAI networks and external clients. As these responses help to illustrate, this sub-group of the overall innovation institute director sample is very active in generating new ideas and projects for their respective units. They thus constitute a middle-level echelon with initiative in accordance with the theory posited.

Also in accordance with the theory, directors in this sub-group acknowledge that, while each has a certain amount of authority within their respective recognized jurisdictions, they must be deliberate in how they choose to draw on and use that autonomy. This means that they have to understand that their decentralized unit operates much in the same way as if it were an extension of the central unit. That is, their degree of autonomy *de jure* stands in contrast to their autonomy *de facto*. They have to manage internal and external restrictions from other organizational units in varying and tailored manners. And the costs associated with navigating these limits imposes real – though informal – constraints on what they can do. For instance, while directors are technically permitted to engage in a wide range of activities, they must be careful in how they

communicate their intentions to others in the innovation institute and SENAI bureaucratic structure, so as not to trigger pushback. Similarly, while individual institutes have autonomy to carry out a range of actions, they must frequently coordinate many of these actions with higher authorities. For instance, they have to run operational decisions by other units or have other units sign off on their proposed actions before proceeding. One director, for example, explains that he really feels that he has to manage his unit as a part of a much larger whole that reaches into the local units. As he explains, “There is a national beast inside a local unit.”⁵²

These directors also do not see themselves as the sole source of initiative at the middle echelon. Rather, they want to train the members of their team to be able to develop new ideas and initiatives themselves in the long run. As one director explains, “It is a process of acclimatization where people are getting used to a new way of doing things.”⁵³ Given the relative youth of the innovation institute initiative and especially the newness of some of the institutes, this director, for one, explains that his team is not yet mature in terms of institutional relationships. He therefore believes it best to take the lead in terms of developing new ideas and proposals within the broader institution.

The degree of autonomy in the innovation institutes under the CIMATEC model is somewhat different in that CIMATEC exerts more influence over the institutes’ activity at the regional and local levels. For this reason, in part, the two directors of innovation institutes affiliated with CIMATEC are clear that they are very responsive to direction from CIMATEC authorities. Even so, interviews with these directors – and in particular, the ways that they explain their decision-making processes and relationships to protocols set forth by CIMATEC in addition to SENAI – show that they that they behave in an analogous manner to the other two directors of the group not under CIMATEC. However, in their cases, given the fact that CIMATEC exerts more influence at the regional level, in particular, than does SENAI, these directors effectively have a “*regional* beast in a local unit” as opposed to the other two who have to deal with the *national* beast inside their respective units, to borrow one of the director’s words. In the former case, the “regional beast” is the regional directorate that operates in close synergy with the leadership of CIMATEC. Ultimately, national or regional, the relationship is the same:

⁵² Interview with the director from the Alexander Bell Institute.

⁵³ Ibid.

one of significant *de jure* autonomy while *de facto* understanding the numerous protocols and norms that have to be followed through the management of their different programs.

Despite the limited delegation of responsibility from the higher organizational units, the directors in this subgroup have managed to create and develop their own autonomy. The four appear to have done so through different strategies though in pursuit of the same end: that of being able to navigate cautiously through the rules and norms of the institution in a semi-autonomous manner. Both directors from the Alexander Bell and Santos Dumont Institutes, for instance, use their relationships with key interlocutors in SENAI to make it so that they could act as autonomously as possible within their recognized jurisdictions. The director from the Santos Dumont Institute explains that he sought and was slowly able to assert himself within his recognized jurisdiction from the beginning of his directorship. As he recounts, “Like a new character in a soap opera, I had to fight for my own air time.”⁵⁴ He did this by carefully gaining the trust of the regional directorate, which in turn granted him a good deal of autonomy to pursue his organizational goals in his unit.

Though the two other directors who are part of the CIMATEC model did not cultivate opportunities to behave autonomously in the same way, the essence of the relationship that they developed within the institution is analogous to the other two directors. The boundaries on these directors’ respective recognized jurisdictions were set by both SENAI and CIMATEC. Since CIMATEC was very close, and politically aligned, to the regional directorate, the directors did not have to “fight for air time” in the same way that the director from the Santos Dumont Institute had to. Indeed, most of their autonomy was formally delegated by the regional directorate through CIMATEC. Yet, once this autonomy was delegated, they did have to develop and cultivate a similar alliance with the regional directorate as the others did to safeguard this autonomy over time. These relationships offered them the political cover they needed to exercise greater discretion within their recognized jurisdictions.

In particular, innovation institute directors’ alliances with the regional directorate is strategic and represents an alignment of visions. Their work and projects show the importance of this alignment with the regional directorate. This alliance is based on a relationship of mutual trust that developed over time. It is also based on a relationship of affinity between the director and the head of the regional directorate. Yet, this affinity and trust is based on substance and an

⁵⁴ Interview with the director from the Santos Dumont Institute.

understanding of strategy and vision for their respective institutes. In contrast, those directors practicing the *jeitinho* would think of this alliance with the regional directorate as a personal relationship that they could call on for their own ends, rather than a strictly pragmatic relationship to accomplish project-related objectives.

In contrast, the other directors in the sample are much more passive. Most of the ideas for projects conducted by their institutes are generated externally by clients or other organizations (universities and research institutes). As one director explains, “I can only think of one case in which we went ourselves with an idea to the client.”⁵⁵ In addition, they do not seem to have a strong sense of autonomy, explaining that they always have to consult other organizational units on key decisions. As another director reports, “I have to ask for the seal of approval for anything that I want to do.”⁵⁶ Others see – and apparently accept – the slow and cumbersome processes in the broader organization as *de facto* constraints in their respective work programs. “The chains are not in making decisions but in the processes. It is not enough to decide to buy or allocate resources, but until the decision is realized is the problem.”⁵⁷

5.2. Focus on Strategic and Interpretive Functions

All the directors in the sub-group also demonstrate a focus on strategic and interpretive as opposed to administrative functions alone or primarily. In the context of the SENAI innovation institutes, the time spent on strategic functions is mostly focused on business development. Thus, directors who share this behavior think strategically about how to find new clients and projects, which is a core part of the mission of the institutes, especially in this foundational period. They think of projects not so much in day-to-day and strictly operational terms – meaning that projects are seen primarily as ways to keep their institutes running – but as “solutions for the industry,” which is the underlying mission and purpose of the innovation institutes.⁵⁸ In this context, the time spent on interpretive functions is mostly focused on the development of new ideas and projects in a canvas-like manner, with much discussion and deliberation among team members.

⁵⁵ Interview with the director from the Alessandro Volta Institute.

⁵⁶ Ibid.

⁵⁷ Interview with the director from the Samuel Morse Institute.

⁵⁸ Interview with the director from the Santos Dumont Institute.

Indicators of the relatively greater amount of time these directors spend on strategic and interpretive functions is evidenced both in their responses to questions about time spent on different functions as well as their responses to the list of different functions. In the latter case, directors who share this behavior remarked repeatedly that they spend time on functions that were more strategic and interpretive in nature rather than ones that were more administrative in nature. That is, they spend relatively more time on functions such as the elaboration of strategic plans, development of new projects, optimization of resources, and development of partnerships. The next sub-sections will elaborate on what the focus of strategic and interpretative functions looks like in practice.

5.2.1. Practice of Strategic Functions: Persistently Breaking Free from “Administrative Chains”

Evidence from the interviews with the directors in the sub-group shows that the practice of strategic functions is a constant battle in which they actively fight to preserve their time from institutional expectations and requirements that often translate into administrative functions. In order to free their time from administrative functions, directors find opportunities to draw on their knowledge of the internal dynamic of the institution to practice strategies to overcome administrative obstacles. As one director explains, “I try not to be swallowed by the bureaucracy.”⁵⁹ Given what he understands about the slow timing of the institution, he explains that he always plans ahead instead of being reactive to the administrative challenges that come his way. In so doing, he is constantly reviewing the business plan for his institute. He explains that, given the pace of movement in the institution, it is of no use to “put pressure on institutional players when there is a deadline.”⁶⁰ Another director also explains that, before he closes a project, he finds “institutional experts” from other areas to explain to him how SENAI works so that he can “pray like the Bible orders” – that is, play by the institutional rules in order to get what he needs.⁶¹ He explains that, in doing so, his method is to “marry external and internal

⁵⁹ Interview with the director from the Alexander Bell Institute.

⁶⁰ Ibid.

⁶¹ Interview with the director from the Alexander Fleming Institute.

cultures” in order to achieve his aim.⁶² This strategy goes as far as organizing ad-hoc mini-workshops to learn bureaucratic rules and protocols so that the team is able to more efficiently run through the requirements. In this case, the director makes effective use of his bureaucratic capital, plays by the rules, and is able to equip his team to assume a larger share of the administrative task load – thus freeing more of his time for use on strategic functions.

Further evidence from the open-ended questions shows that even when the directors in the sub-group spend time on administrative functions – which are, after all, important for organizational performance – it is with a “strategic eye.” They are not practicing administrative functions in a routinized, box-checking fashion. Rather, they are thinking about ways to effectively delegate these more routinized functions so that they can spend more time on strategic tasks with higher organizational payoffs. In other words, these directors are fully conscious of the opportunity cost of time spent on delegable functions. As one director explains, this is no easy task, as the institution as a whole tends to push directors to focus on these kinds of minutiae. The broader SENAI institution, according to him, “exerts an internal pressure for me to become a slave to email, mobile phones, entrepreneurial Facebook – and all of this really leads to nowhere.”⁶³ He describes the internal interactions as long-winded and risk taking an incredible amount of his time without serving much use or purpose.

The directors who do not share this behavior, on the other hand, spend more time on the administrative management of the unit. At the same time, the directors in this group often do not really understand the nuance between the two categories of functions. Rather, they understand administrative and strategic functions either to be very similar, or they think that some administrative functions have a strategic nature. Others describe administrative functions as incorporating strategy, thereby demonstrating a somewhat limited understanding of the depth of strategic behavior. For instance, one director describes his role as being more strategic and then he proceeds to describe himself as a “seller of luxury goods.” In other words, he describes his role in the unit as knowing what constitutes “state of the art” technology worldwide, identifying which of these high technologies are needed on a larger scale in Brazil, and then going out to pitch and sell these technologies to clients.⁶⁴

⁶² Ibid.

⁶³ Interview with the director from the Santos Dumont Institute.

⁶⁴ Ibid.

5.2.2. Practice of Interpretive Functions: The Forager and Hierarchical Approaches

Besides strategic functions, the directors who share this behavior also spend most of their time on interpretive functions. These functions are more unstructured and have more of an intuitive, spontaneous, or brainstorming kind of approach. In the context of the innovation institutes, these functions are mostly focused on the development of new ideas and pushing the innovation and technological frontier further. This kind of thinking is at the core of SENAI work – and of the innovation institute initiative, in particular – and, in theory, it should be the mainstay of the work of all institutes. Nonetheless, evidence from the interviews shows that this thinking and behavior only rarely occur in a systematic manner, and when they do occur, it is usually under the leadership of directors who share the fringes of formality behavioral profile.

How, then, does this thinking happen in this group of institutes? And how is it different from the thinking present in the other institutes? Among this sub-group of directors, this kind of interpretive thinking happens according to two different models. These models that are distinct, but they have more commonalities than differences.

The first model – the “forager” approach – is seen in the institutes led by both the directors from the Alexander Bell and the Santos Dumont Institutes. The forager approach is entrepreneurial at its essence: it focuses on using breakthroughs to propel follow-on breakthroughs, thereby advancing the innovation and technological frontier in a successive, systematic way. To realize this goal, both directors prioritize earning their clients’ or potential clients’ trust over time.

The director from the Alexander Bell Institute prioritizes building trust through informal interactions. He treats his clients as partners in joint ventures, actively seeks out firms to meet with at events, and always tries to cultivate relationships. The mainstay of his approach is to be on the road and draw as much as possible on the interactions arising from informal events as a way to build trust. He tries to carve out moments that are “not professional and [are instead] off-script.”⁶⁵ These can range from a one-on-one meeting over coffee or bumping into someone at an event or fair and speaking quietly in a corner of the event. As he explains, “A person hires

⁶⁵ Interview with the director from the Alexander Bell Institute.

technology on the basis of trust... it is not something that you can buy over the internet.”⁶⁶ He explains that it takes a bit of time, but that people will soon call him by his nickname, which means that they are about to formalize their business relationship.

Once the director has achieved this level of trust with a client, he organizes meetings with experts to dive deeper into the demand that the client has identified. There is a managed flexibility to this process. He is open to listening to new ideas and thoughts and going beyond the script, but at the same time, he has his overarching business plan in mind. As he describes it, he always enters into client or potential client interactions with broader strategic objectives in mind. Once his relationship with an individual grows and they are together able to identify different sources of demand, he begins to call on his own institute’s experts to begin work on the substantive aspects of the client’s problems, thereby bringing the project home. To facilitate this second stage of the business development process, he has organized his institute into four technical areas. During this second phase, he mostly provides inputs only in his own technical area. The idea is that he wants others in his team to engage in all phases of the project development so that the institute can institutionalize the actions through the sharing of information and practices through both structured workshops and informal interactions within the institute.

Similarly, the director from the Santos Dumont Institute also introduces managed flexibility to trust-building. He describes it as a sort of exercise by which he engages in a question and answer interview type session with the heads of firms to understand their problems and challenges. He describes it as being a provocative session in which he is almost acting like a detective trying to figure out their main challenges and concerns. In this process, he invites them to speak, for instance, about what they are doing any given day, how their team is structured, and the kind of equipment and technologies that they are using, among other things. In addition, he goes into a process-tracing kind of mode in which he interviews those who worked with the firm in the past in order to understand and recognize different patterns of behavior as well as to learn from past experiences.

Once he has established trust with a client or potential client, he begins to involve not only his team but also his broader network of professional contacts. He tries to find the person who would fit best to respond to each dilemma raised by the client or potential client. During this

⁶⁶ Ibid.

whole process, he explains that, much in the same way as the director from the Alexander Bell Institute, he works closely with the firm in question. In doing so, he is able to prod the firm to think about their problems in different ways, until he and the client or potential client are able to collectively devise the best solution for the challenge that they have identified. After that, he conducts regular meetings with the client.

The second model – the hierarchical approach – is shared by the directors of the two institutes that are part of the CIMATEC platform. The process in CIMATEC is more structured and hierarchical than the forager approach described above. For instance, brainstorming for new projects and ideas occurs within the organization and through committees prior to the interaction with clients. For instance, before meeting with clients, the director from the Steve Jobs Institute does a lot of work internally beforehand. This work usually involves meeting with other units in the innovation institute network and SENAI, and informing and consulting them about different aspects of the business development process. He enters into client interactions already having a relatively developed understanding of the client's need and how his innovation institute can address that need, with he and his team already having spent time researching the client's organization and performance. These preparations allow him to go to clients with a proposal early on in the business development process. He, then, uses client interactions to get as precise an understanding as possible of the dilemmas facing the client. This is the “a-ha!” moment, as he calls it, when he is able to structure the project in a cohesive manner that both meets internal and external demands.⁶⁷

The director from the Alexander Fleming Institute provides additional detail into how the hierarchical approach occurs in practice. He sees three different entryways to the development of innovation through his institute: the client comes with a readymade idea, the client arrives and talks about a problem and needs a solution, or the client comes with a solution but they have to adapt and define which one is the better one. This process is usually characterized by engagement with external partners, mapping of possibilities, and a range of internal brainstorming sessions at multiple levels of the relevant organizations. Indeed, these internal sessions involve not only the institute team, but CIMATEC and its many committees. These deliberations generally proceed in a hierarchical manner, according to the director.⁶⁸ That is, the

⁶⁷ Interview with the director from the Steve Jobs Institute.

⁶⁸ Interview with the director from the Alexander Fleming Institute.

original ideas are often generated by him and other senior professionals in the innovation institute and CIMATEC teams, who then pass them on to the other researchers who work in the institute. The director remains involved with the ideas generation process, even as it moves down the hierarchy. As he explains, the innovation institute director is involved in many aspects of the project, and has a direct influence on the ultimate direction taken in each of the projects.⁶⁹

In contrast, directors who do not exhibit the fringes of formality behavioral profile do not practice interpretive functions and engage in a very limited process of innovation; thus acting as either consultants or selling new products and equipment. They generally do not engage in the kinds of internal brainstorming and canvassing mechanisms used by the aforementioned directors to push the frontier and think about the most productive and innovative ways to move forward. Their focus is often not innovation as such. At times, they opt not to engage in any form of innovation, serving instead as business consultants. In describing his interaction with the client, for instance, one director explains, “I saw that their machine was bad and I gave the idea of purchasing better equipment.”⁷⁰ In this case, the innovation institute’s contribution to the firm’s business was the simple, even obvious, identification of the need for more robust machinery. At other times, they do engage in innovation, but innovation is treated as a means to building their respective institutes’ market positions, rather than an end in itself, as it is described in the innovation institutes’ mandate. For instance, one director explains that they are against disruptive innovation in his unit. Instead, they aim at innovation that is small scale and that meets local market demands. He provides the example of a computer chip that he is using for medical sensors. Their unit has the piece and wants a firm to invest in them so that they can gain scale.⁷¹ This provides another example where the alleged process of innovation is about identifying equipment and products in demand as opposed to developing them or developing new solutions, which is the original purpose and mission of the SENAI innovation institutes.

Such directors are essentially responding to what the client demands – usually a combination of short-term solutions and products – as opposed to pushing boundaries, challenging the existing knowledge, and pursuing new ideas and undertaking innovative projects. They are being reactive rather than proactive. Ultimately, this is a different type of approach

⁶⁹ Ibid.

⁷⁰ Interview with the director from the James Watt Institute.

⁷¹ Interview with the director from the Benjamin Franklin Institute.

altogether in the sense that it is less of an exchange and more of a client-driven relationship. Thus, the client dictates where the alleged innovation will occur and the innovation institutes that are part of this group simply provide support to their clients' respective production processes.⁷² In doing so, the directors in this group play a management role of the process of supplying the product or service in demand to the client.⁷³ In this procedural and managerial process, they do not see informal interactions within or outside the community as being that beneficial in the same way – namely that of stirring new ideas – as the other group of directors did. Instead, they see these informal interactions as being a way to learn about new products and activities and about how their client firms understand SENAI, or even as a way to navigate politics within their respective states.⁷⁴ In addition, they do not see the potential development of personal relationships and the social and trust-building aspect of these interactions as being that helpful, rather they see this social aspect of the interactions as a waste of time.⁷⁵ And still others do not even understand what informal interactions mean, and proceed to talk about examples that include scheduled events, like conferences and fora, or structured meetings, thereby showing that these types of interactions do not comprise a significant element of their practice.⁷⁶

5.3. Bureaucratic Zones of Opportunity

The directors who exhibit the fringes of formality behavioral profile have one last crucial characteristic in common: they have the ability to identify and use bureaucratic zones of opportunity to solve problems and pursue goals. This means that they do not strictly follow rules and protocols but that they work through or, as necessary, around them in ways that are consistent with the organization's policies and designed to advance the organization's interests and goals. In other words, directors exhibiting this behavior do not willfully violate or ignore rules or protocols. Rather, they find openings, flexibilities, opportunities, and spaces – bureaucratic zones of opportunity – for creative interpretation of rules that otherwise would

⁷² Interview with the director from the Alessandro Volta Institute.

⁷³ Interview with the director from the Samuel Morse Institute.

⁷⁴ Interview with the directors from the Karl Benz and Rudolf Diesel Institutes.

⁷⁵ Interview with the directors from the Samuel Morse and Alessandro Volta Institutes.

⁷⁶ Interview with the director from the Benjamin Franklin Institute.

unduly bind them and their teams. Most importantly, they do this without hurting the organization as a whole, rather contributing to it while also achieving the immediate ends for their respective institutes, not for their own personal interests.

In the innovation institutes context, the ability to identify bureaucratic zones of opportunity is modulated by a “thick” understanding of the broader organization of SENAI and its ensuing challenges. In other words, directors who share the fringes of formality behavioral profile have a profound understanding of SENAI and the purposes of the innovation institutes within it as well as their institutional boundaries, goals, and professional and career hierarchies. The directors see this understanding not as something extrinsic to their job or something that they have to overcome as quickly as possible, but as a crucial part of succeeding in their mission. Directors of this type are like runners who have to run a race in bad weather. They do not see the rain as bad luck or something that will make their performance worse; rather they see it as an inevitable part of competing. In this sense, they “train” and work with the possibility that it might “rain” on any given day. Instead of fighting against the “bad weather” or the idiosyncrasies of the broader organization, these directors breathe, learn, and come to fully understand the implications of these far from optimal conditions and of how these can influence their practice. Yet, this does not mean that they are complacent, rather it means that this understanding makes them even better equipped to identify and use bureaucratic zones of opportunity, be it either in the creation of a better mechanism to import equipment for projects or in the development of alternative career pathways for professionals, as in the examples in the earlier section.

This “organizational understanding” means three particular things that ultimately moderate the identification and use of bureaucratic zones of opportunity in practice. First, the directors who exhibit this behavior share an understanding of the traditional SENAI. In this sense, they have a profound understanding of SENAI’s traditions, mission, protocols, and rules. They are aware of the larger organization’s *modus operandi* and the scope of the administrative maze of the traditional education-centric institution that has existed for over 70 years in Brazil. This means that they understand that SENAI – while a decentralized and federal organization in theory – has significant tendencies to centralize decisions in practice. One director, for instance, notes that, while he theoretically has decentralized autonomy, the organization requires approval

from higher organizational units to purchase a pen.⁷⁷ This is the nature of the “rainy” organizational challenge these directors face on a frequent basis. Instead of combating the protocols, these directors learn to work with them and whenever possible find openings to adapt practices at the margins, such as in the case of the re-labeling of the royalties in the Alexander Bell Institute.

In addition, these directors also understand the political nature of their work within the traditional SENAI institution. They understand that they have to play the formal rules of the game while also pursuing bureaucratic zones of opportunity. Operating at the fringes inevitably has to co-exist with the formal system’s norms and practices. This means that part of their work includes conducting and participating in an extensive number of meetings about administrative issues. As one director explains, sometimes it feels like he is exercising the “control of the control” through the many layers of administration.⁷⁸ Moreover, he explains that when he arrived in the institute, he was shocked when he realized that there were more administrators than researchers in the innovation unit.⁷⁹ As a result, they request frequent meetings that are often unproductive and go over the same things that have already been dealt with under different circumstances. Thus, the administrative overhang in the institution is significant.

Yet while directors in this sub-group seek to minimize their administrative burdens so that they can focus on strategic and interpretive functions, they also have an intuitive and bureaucratic-political understanding that they need to “play the game” in the administrative realm. They grasp that these meetings serve a purpose, as they keep communication flowing in the organization, help to make sure that everyone is in the loop so that no one feels left out, and prevent the natural schism that exists between the traditional and new lines of work from coming to loggerheads. But, these directors seek to take care of this administrative side of things in a way that minimizes the administrative burden while still getting as much value as possible out of these meetings. In fact, they draw on the meetings as opportunities to learn more about the organization and the behavior of its front-line agents. This knowledge will then enhance their ability to find bureaucratic zones of opportunity when needed in the implementation of their daily practices.

⁷⁷ Interview with the director from the Santos Dumont Institute.

⁷⁸ Ibid.

⁷⁹ Ibid.

Besides an understanding of the traditional SENAI, they also have an understanding of what it means to be a part of and to operate in the new SENAI. They understand the organizational nature of their respective institutes and how they should operate within the hierarchy and practices of the broader organization. In other words, they understand that they have to co-exist in a symbiotic manner with this “national beast” within their local units: meaning the tendency to centralize decisions, and to thereby, inevitably impart the practices that operate under the traditional model of vocational training into the new model of the innovation institutes. They understand that the traditional unit provides the frame and platform in which their respective units have to live and grow. They understand that they fundamentally are trying to accomplish a mission – that of promoting innovation – completely different than the educational-centric mission of the traditional SENAI. Instead of trying to supplant the established line of effort, they try to absorb and work with what is best from the traditional institution, while at the same time dealing as efficiently as possible with its cumbersome aspects. This is informed by the same fringes of formality approach wherein the ability to flexibly and cleverly work within the existing system is more productive than vainly trying to displace it.

That said, the directors who share this behavior are not fatalistic. Rather, they have an understanding of how the new role of the institutes is supposed to and can change SENAI. But, they understand the challenges that their institutes face in seeking to aid the evolution of such a highly established and traditional institution. They see the institutes as an opportunity to push the older institution to break new ground. Yet, as opposed to thinking that they should or can “shock” the old suddenly into wholly embracing the new, they see the most effective and sustainable change as a gradually evolving process. In this approach, the institutes will identify and absorb the elements and practices that work well and modify those that do not work, as well. Over time, the accumulation of these folk practices that have been tested on the ground and done well will gradually accumulate over time into sustainable institutional change. Thus, the directors in the sub-group see their respective institutes as “institutional experiments” that can have an enormous potential to cause change within the larger organization. As one director explains, “We keep working until we are able to contaminate in a positive manner the culture of SENAI.”⁸⁰ Moreover, as another director explains, “I see the administration of the unit here as a way to

⁸⁰ Interview with the director from the Alexander Bell Institute.

impose a new culture here in the country.”⁸¹ And lastly, as the director from the Santos Dumont Institute explains, “The ISIs are here to change SENAI. They are supposed to transform something that was originally about education into something different. I only know how to create, I do not know how to simply fit in.”⁸² Ultimately, they believe that they will stir change and that reform will gradually occur over time through a demonstration effect from the experiments that have gone well in their respective institutes.

5.4. Relationship with Intermediate Administrative Outputs

Once this behavior has been identified, the next step is to see whether the behavior is correlated with better intermediate administrative outputs. As explained in the methodology section, the paper focuses on whether the identified administrative behavior is correlated with a set of intermediate administrative outputs. This set of outputs is derived based on surveys given to directors and is strictly derived from the directors’ perceptions of their respective units. The survey measured five essential but more intangible administrative capacity indicators derived from the bureaucracy literature (as described previously): sense of mission, definition of the critical task, corporate unit autonomy, degree of communication, and growth and learning. This section will discuss each one of the indicators.

5.4.1. Sense of Mission

The interviews showed that the units whose directors exhibit the fringes of formality behavioral profile also displayed a strong sense of mission. This means that the teams that work in those units are not only aware of the mission as it is formally written in posters and on the SENAI website, but also – and more importantly – understand the full extent of the mission and its implications for their daily work activities. In the identified group, the directors themselves have made sure that the mission is understood and that it has become intuitive for each one of the

⁸¹ Interview with the director from the Alexander Fleming Institute.

⁸² Interview with the director from the Santos Dumont Institute.

team members. As one director explained, “All the system, its logic, and the mission of the institute have to be on the tip of everyone’s tongue.”⁸³

In addition, these institutes have a sense of perspective behind the understanding of the mission. This means that they do not see the mission as being “local” and pertaining only to their respective institutes and daily routines and objectives. Instead, they perceive the mission as extending beyond their institute and reaching a broader scope. In particular, they are aware of the wider contributions that they expect to make not only to the organization as a whole, but also most importantly to the country’s industrial and technological development. They understand the mission as being directly connected to the aims and good of the country as a whole. As one director described, “We cannot think in terms of the values of projects individually because then we will remain as small ants whereas the target is the market and the industrial development of the country as a whole.”⁸⁴

Lastly, the sense of mission in the units that share this behavior has been internally constructed over a period of time. In other words, this sense of mission was not externally imposed by other organizational units or trickled downwards from higher up the hierarchy. Instead, this sense of mission was part of an effort that was typically led by the director of the institute or by the team as a whole. As one director explained, “It started with me, but later everyone ‘bought’ the message and it became a common dialogue for everyone.”⁸⁵ According to Wilson, this is one of the key indicators of a unit being administratively strong; namely, the fact that everyone in the unit participated in the creation and development of the mission rather than being an element that was externally or artificially imposed by others who are foreign to the local unit’s organizational dynamics.⁸⁶

Other units that did not share this behavior gave a plurality of responses about their unit’s mission that demonstrated a lack of a strong sense of mission in their organizations. They mostly had a sense of mission *de jure*, but *de facto* the members of the units did not fully comprehend how the mission translated and permeated into their daily tasks and activities. Even when team members understood the mission *de facto*, this understanding seemed to be somewhat restricted

⁸³ Interview with the director from the Alexander Bell Institute.

⁸⁴ Interview with the director from the Santos Dumont Institute.

⁸⁵ *Ibid.*

⁸⁶ Wilson, *Bureaucracy*.

to local targets and objectives, and thus, lacked a sense of how it related to the whole of the organization of SENAI or even to the country's objectives. And, lastly, the communication of the mission by the respective directors seemed to be somewhat forced and trite in these circumstances, as if it was a simple repetition of what they had heard from other organizational units. They seemed to be following a script when talking about it, rather than having an intuitive understanding of the complexity of the mission and its many ramifications for their respective local realities. This last point seemed to highlight the fact that other organizational units had externally imposed the mission on this group of units.

5.4.2. Definition of the Critical Task

The second indicator of effective bureaucratic administration is whether the director of the unit is able to both clearly define the most significant challenge in the unit and also detail his or her role in confronting that challenge. The idea here is that there is an internal consistency in both the definition of the challenge as well as in his or her role in facing that challenge. According to Wilson, this internal consistency in the definition of the critical task is an important indicator of capacity in bureaucratic units.⁸⁷

The answers of the directors who exhibited the postulated behavior confirm this internal consistency in the definition of the challenge and in their role in confronting the challenge. Although they each define different challenges, they are all very clear, detailed, programmatic, and also forceful in how they explained how they would mitigate their unit's central problem over time.⁸⁸ For instance, the director from the Alexander Fleming Institute explained that his biggest challenge is in being able to align the objectives of his institute with those of the regional directorate. In response, when explaining his role in confronting this challenge, he provided examples of how he sets up frequent meetings and aims to create a standard form of protocol and behavior that will be "married" to those that work within SENAI.⁸⁹

What is also interesting about their definition of the critical task is that the definition of the challenge is broad-ranging, going beyond the confines of their individual unit, and the same

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ Interview with the director from the Alexander Fleming Institute.

holds true for their proposed solutions. In other words, they do not think about their challenge strictly in local terms and how it relates to their respective units. Instead, they try to identify patterns and think about ways in which the challenge extends beyond their units and individual jurisdictions. In doing so, they are able to think and reflect on their role in confronting the challenge not only as a way to benefit their respective unit, but also as a way to leverage the broader network of institutes and the organization as a whole.

In contrast, the innovation institutes whose directors do not exhibit this behavior do not appear to have a consistent definition of the critical task. They are usually able to define a challenge, but when explaining their respective roles in confronting this challenge, they were often either vague or their explanation was inconsistent or misaligned with the problem at hand. In addition, their definitions are usually restricted to their relatively narrow and local respective realities. Their responses thus seem to indicate a deficit of vision and understanding of the larger organization and how their unit could dialogue, benefit from, and influence the broader organization.

5.4.3. Corporate Unit Autonomy

The third indicator of organizational capacity is whether the unit has a sense of corporate autonomy. This means that the unit is able to determine how to implement its policies even though it has to inform or consult with other organizational units regarding its actions. In this case, all the directors who exhibited the fringes of formality behavioral profile sought and perceived a strong sense of corporate autonomy in their respective units. The idea here is that they do not have to get the approval of or coordinate with other units, but that they are able to do what they need to do as long as they are able to inform other units of what they are doing.

The responses of the directors exhibiting this behavioral profile indicate that they do not allow the need to advise or consult with other parts of the bureaucracy to stop their efforts. Rather, they view it as necessary to keep dialogue and communication open with other units because they are part of bigger whole. As one director explained, “We are part of a body that is much larger than ourselves.”⁹⁰ In this sense, the directors who share this behavior demonstrate an “institutional maturity” in pursuing autonomy despite the existence of nominally – though not

⁹⁰ Interview with the director from the Alexander Bell Institute.

practically – restrictive protocols. As one director described, “The question is not about content but about form,” meaning that his unit can make decisions as long as they follow the communication protocols inherent to the broader institution.⁹¹

In contrast, those directors who do not exhibit the postulated behavior perceive their unit to have very little corporate autonomy. Indeed, they feel that they have to consult rather than inform other organizational units of their actions. They are not able to “read between the lines” and identify the latent autonomy that exists behind the myriad of protocols and requirements. In other words, they do not seem to have the “institutional maturity” to actually see and make use of the potential autonomy that is available.

5.4.4. Degree of Communication

The fourth indicator of positive administrative behavior relates to the strength of communication in the unit. The directors who exhibit the identified behavior unanimously perceive their units to have strong communication internally and report that they are aware of different events, knowledge, and activities that may be happening in their respective units.

At the same time, however, they report that surprises do occur, and that they are oftentimes caught unaware with news that they did not expect in the unit. This was interesting because, as described below, we expect such directors to be on top of what is going on in their units. Why are the directors exhibiting the postulated behavior surprised, then? The answer seems to be that, instead of perceiving these surprises as negative, they see their occurrence as something that is organic to the nature of the organization and even sometimes as being positive. As one director explained, “I see the surprises coming from a team that is proactive. When there is no news at the end of the day, I feel worried because it means that no one came to work today.”⁹² In this sense, the directors see the event of surprises in their units as a sign that there is activity, movement, and that the team is making progress – as a sign of life rather than as something to be stamped out or controlled. They also see surprises as being inherent to the large and complex nature of the organization as well as the still nascent role of the innovation institutes in the traditional SENAI. As another director explained, “I sometimes manage through

⁹¹ Interview with the director from the Steve Jobs Institute.

⁹² Interview with the director from the Alexander Fleming Institute.

darkness since there is a complete lack of systems and [administrative or logistical] support networks in our regional directorate.”⁹³

In contrast, the units that do not exhibit the hypothesized behavior tend to report that they are also always aware of what is happening in their respective units *and* that they are rarely caught by surprise. Yet, the open-ended answers seem to indicate that there is a sort of control and micro-management of their respective units, a tendency oftentimes to centralize processes, and an unwillingness to delegate tasks to team members, thus showing a unit that communicates, but in a somewhat constricted and even counterproductive manner.

In sum, one of the interesting findings here is that a degree of surprise may be a good thing, since it could reflect a dynamic and organically organized unit rather than a highly top-down, rigid one.

5.4.5. Growth and Learning

The fifth and last indicator of positive administrative behavior is the degree of the growth in learning occurring within the unit, and particularly with respect to the director him or herself. In this case, growth and learning refer strictly to that happening within and promoted by the unit as opposed to formal training structured outside of the unit or organized by other organizational units. The directors who exhibit the hypothesized behavior perceive that they learn something new that is relevant to their respective roles in the unit about once a day. Their perception of this learning is both frequent and dynamic, meaning that it seems to flow directly into their respective tasks and activities. As one director explained, “The day that you do not learn, you can ask to be buried.”⁹⁴ This approach is reflected in the attitudes of these directors toward the promotion of growth and learning on the part of their subordinates in the unit.

In addition, this learning seems to have an interesting duality that is both important and relevant to the professional development of those within the unit. The learning that occurs seems to be both technical as well as managerial in nature. In other words, the directors perceive that they are learning new things in these two tracks, and that each part of the dual-track learning process complements the other – as they strengthen their technical skills, they also become better

⁹³ Interview with the director from the Alexander Bell Institute.

⁹⁴ Ibid.

managers, and as they become better managers, they find more time to strengthen their technical skills, all in a virtuous cycle. As one director explained, “We have an interesting portfolio of projects wherein there are fascinating demands that require the development and exposure to both technical knowledge as well as new business models that are readily applicable to the client.”⁹⁵

In contrast, the directors that do not exhibit this behavior appear to indicate that there is either very little learning taking place, or that the learning that does occurs is limited in scope or impact. These directors tend to have multiple explanations for the lack of learning in their respective units. Among the most common explanations for the lack of learning in their units are the location of their state or institute and the lack of knowledge networks in Brazil.⁹⁶ This seems to indicate a kind of fatalism or lethargy about approaching the problem, an attitude distinctly different than that of the directors who do exhibit the postulated behavior. Moreover, even when learning does occur among those directors who do not demonstrate this behavior, the learning that does happen tends to be highly project-specific or focused on a particular activity, such as visiting an expert.⁹⁷ In these cases, the learning experience is limited and ephemeral, showing no signs of continuity and little to no impact on their daily tasks and activities.

5.5. Robustness Tests

This section addresses the question of why it is necessary to fulfill the three criteria for the fringes of formality behavioral profile to have the proposed correlation with more positive intermediate administrative outputs. In other words, why is it not sufficient to have one or two of the three criteria for the behavior to occur? For instance, would having a middle echelon with initiative that focuses on strategic and interpretative functions be sufficient?

In order to answer this question, this section draws on subsamples to show that when one or two criterion are missing, the correlation between middle-tier bureaucratic behavioral profile and more positive intermediate administrative outputs is not present. Indeed, depending on which subset of the three criteria is present, six distinct behavioral profiles emerge, each with its own

⁹⁵ Interview with the director from the Steve Jobs Institute.

⁹⁶ Interviews with the directors from the Benjamin Franklin and the Isaac Newton Institutes.

⁹⁷ Interview with the director from the James Watt Institute.

implications for the respective innovation institutes' bureaucratic administration and resultant intermediate administrative outputs.

5.5.1. Initiative Only: The “Free Radical” Profile

The directors who only have the active echelon criterion are internally driven to find solutions that serve their unit only. Directors in this subsample are extremely active and focused primarily on what happens within their own institute, without regard to how it might possibly affect the entire network of institutes. Similarly to firefighters, they are frequently addressing problems and challenges as they arise and on a case-by-case basis. They are trying to find exceptions that will solve the problem for their unit at that point in time. In doing so, their kneejerk reaction is to reach to upper level management units to find a way to work around impediments and to negotiate exceptions. As a result, most of the issues that they focus their energy and activity are mundane, often administrative, issues regarding organizational processes. Ultimately, their actions show that they lack the strategic vision to frame and address problems in a longer-term, systematic manner. And they are further unable to operate within the organization to effectively spur change.

5.5.2. Strategic and/or Interpretive Functions Only: The “Armchair General” Profile

The directors who only have the strategic and interpretive function criterion are more technical yet are less able to get things off the ground. Directors in this subsample have a vision and are able to develop ideas that would enhance their line of business development. They are effective in conducting brainstorming sessions and in involving key members of their institutes in the conceptual development of different ideas and lines of work. However, they are passive and have difficulty operating within the constraints of the organization. In other words, they follow protocols and rules in a script-like manner and thus oftentimes get bogged down by slow processes and lags in implementation. They approach protocol in a technocratic manner, and in doing so, they are oftentimes frustrated when the technical approach does not produce results and rather only creates institutional inertia. In the cases when they do choose to improvise, they do so only at the margins by either aggregating rules or changing the order in which they follow the

rules, but these changes have no real implication in terms of the de facto operation of the organization.

5.5.3. Bureaucratic Zones of Opportunity Only: The Jeitinho Profile

The directors who only fit the bureaucratic zones of opportunity criterion are operating in a way in which their actions cause change that is not really relevant for the organization in the long term and is somewhat limited in scope. This is due to the fact that they spend most of their time on administrative functions and do not have a strong sense of autonomy to produce new ideas. As a result, while they are acting on the fringes of formality, they are doing so to achieve effects on rather mundane changes in the organization that will have no real impact in the overall management of the organization. For instance, many of these directors are simply reacting to client demands and trying creatively to move a particular project or business proposal faster and more efficiently along the internal processes of approval within the institution. Ultimately, their actions are short-term, unit-oriented – toward helping their respective innovation institute's bottom line on a project-by-project basis – and have no real long-term impact due to a lack of vision and strategy.

5.5.4. Initiative and Strategic and/or Interpretive Functions: The “Barking up the Wrong Tree” Profile

The directors who only have the active echelon and strategic/interpretive functions criteria have good ideas and a strong sense of autonomy, but have their hands tied. In this case, they spend time on strategic and interpretive functions and spend the kind of energy and activity that shows a heightened sense of autonomy. However, they do not know how to advance their agendas within the institution. In other words, they are rigid and are imprisoned within the organizational hierarchy. This means that the more widespread approach to most problems is to take them a level upwards in the organization. In doing so, they confront the problem head-on within the hierarchy, thus arguing why things should proceed differently. They are active, have a keen sense of their intrinsic autonomy, and a vision for why things should be different; yet, they do not proceed in an “organizationally smart” manner. Instead, the result is that they spend much

bureaucratic and political capital in trying to get things moving and are oftentimes burdened by bureaucratic inertia.

5.5.5. Strategic and/or Interpretive Functions and Bureaucratic Zones of Opportunity: The “Short of the Mark” Profile

The directors who only share the strategic/interpretive functions and the bureaucratic zones of opportunity criteria have the vision and understand how to operate within the bureaucracy, but they are passive. In this case, the directors in this subsample have a strategy for what they want to do and are able to bring the team together to engage in a collective brainstorming from which innovative ideas emerge. In addition, they are also very good observers of different patterns within the bureaucracy. They understand what and how something would need to be done within the organization to move things along. Yet, they are more passive and are unable to jumpstart initiatives and carry them through the organization. Oftentimes they improvise, but only in a shy manner, and are thus not persistent enough to effectively move projects through key decision-making points. Even if they pass through the first hurdle, the next hurdle is bound to discourage them from moving forward, as they are somewhat pessimistic in the manner in which they understand their autonomy and independence to carry things forward.

5.5.6. Initiative and Bureaucratic Zones of Opportunity: The “Energizer Bunny” Profile

The directors who only have the active echelon and bureaucratic zones of opportunity criteria are very active and know how to operate within the bureaucracy, but they have no vision or strategy guiding their actions. The ensuing result of their activity is that they oftentimes take risks within the organization to get their projects in place and keep moving forward. This means that the solutions rely on much bureaucratic and political capital, but they are not geared toward the long run. They serve the purpose of their institute, and a particular project, in a given point in time. In other words, they are able to get things done as they are active and know how to operate within the organization, but the end result is of an ephemeral institutional quality with no lasting consequences for any change within the organization. And during this process, these directors take risks in this kind of improvisation, but due to the lack of vision and strategy they are unable to exert any lasting impact on the organization as a whole. Instead, their strong initiative results

in their leaving the organization with often intermediary solutions that may be slightly beneficial in the short term, but are bound to be problematic in the future.

Table 1: Summary of Behavioral Profiles in Innovation Institutes

Element(s) of Model Behavior	Behavior Profile	Innovation Institute Example
Initiative only	Free radical	Samuel Morse
Strategic functions only	Armchair general	Cai Lun
Bureaucratic zones of opportunity only	Jeitinho	Wright Brothers
Initiative and strategic functions	Barking up the wrong tree	Rudolf Diesel
Initiative and bureaucratic zones of opportunity	Energizer bunny	Karl Benz
Strategic functions and bureaucratic zones of opportunity	Short of the mark	James Watt
Initiative, strategic functions and bureaucratic zones of opportunity	Fringes of formality	Alexander Bell

6. Conclusion

In this chapter, I examined the research question of what causes variation in performance in reform implementation in the context of the SENAI innovation institutes. After five years of implementation of the network of innovation institutes, I found much variation in performance across the 15 innovation institutes examined. Indeed, four institutes performed markedly better than the rest of the network of institutes. Moreover, this group of institutes did not have any apparent structural commonalities that could otherwise have exogenously influenced their relatively better performance. Through a three-year research period of interactions with the respective institute directors and other members of the broader SENAI organization, I was able to investigate the hypothesis that this variation in performance could be partly associated with differences in the behavioral profiles of institute directors. Evidence from surveys showed that the directors of these four better performing institutes practiced the fringes of formality behavior, and that these institutes were, in fact, performing better on a set of measures of intermediate administration outputs.

The findings from this research should directly touch on a key question of policy interest in the bureaucratic administration, organizational behavior and development fields. Given the difficulties and downsides to creating new institutions, often states and sub-state entities need or want to work through existing institutions – yet these institutions often resist new initiatives designed to meet current social or developmental needs. How, then, can states or sub-national entities create, sustain, and successfully implement “institutionally robust” policy agents, initiatives, and policies even in highly developed, often rigid and even unwieldy institutions?⁹⁸ In particular, how can the innovation institute “spirit” survive and prosper within an organization like SENAI’s highly bureaucratic organizational structure and eventually positively influence the rest of the organization?

The evidence from this research indicates that the optimal approach to this issue is based on the proposition that good organizational behavior and rules can be the product rather than only the cause of good practices.⁹⁹ That is, sometimes good behavior precedes good formal rules. This is especially important because of the mixed and often sorry history of attempts to impose new ways of behaving from above based on top-down approaches. In environments such as Brazil, such efforts often lead to frustration, evasion, and failure.

The alternative is to take advantage of organic positive developments and to deepen and expand them within organizations. One clear historical example of this evolution is the progression of property rights in the United States, where often constructive and positive extra-legal arrangements co-existed alongside the formal system, and were over time absorbed into and reflected in the formal legal and political structure.¹⁰⁰ This type of dynamic has not, however, been particularly strong in Brazil. In fact, the challenge in Brazil substantially derives from the resistance of entrenched classes, power centers, and organizations to changes to often

⁹⁸ Mary Hallward-Driemeier and Lant Pritchett, “How Business Is Done in the Developing World: Deals versus Rules,” *Journal of Economic Perspectives* 29, no. 3 (2015), <https://www.aeaweb.org/articles?id=10.1257/jep.29.3.121>; and Ricardo Hausmann and Dani Rodrik, “Doomed to Choose: Industrial Policy as Predicament” (working paper, Harvard Kennedy School, 2006), <https://www.sss.ias.edu/files/pdfs/Rodrik/Research/doomed-to-choose.pdf>.

⁹⁹ Andrews, Pritchett, and Woolcock, “Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA).”

¹⁰⁰ Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York: Basic Books, 2003).

dysfunctional formal arrangements. Partly as a result of this, the country has difficulty integrating and capitalizing on reform efforts and remains caught in a middle-income trap.

How, then, can a country like Brazil break free from this middle-income trap and take advantage of more effective institutional performance? In particular, how can large, key organizations like SENAI incorporate better practices and processes to achieve better results in their designated—conventional and new—goals?

The research here suggests that, in middle-capability institutional environments such as those found widely in Brazil, the answer is not to try to will away resistance through top-down, formalistic, rules-based change, but instead to work “breed, water, and grow” good practices into sustainable, customary practices and to reflect them in formal arrangements over time. It is to capture organic best practices and replicate them outwards and upwards, rather than trying to design an ideal system and force it downwards and inwards.

This is, of course, a complex and interactive endeavor that requires substantial further work. This chapter has provided, however, contributions to the first step of figuring out how to identify and validate good practices – that are independent of structural variables – on the ground. These practices and the behavior accompanying them are fundamentally different from the “best practices” identified by multilateral agencies and the development community more broadly. The next chapter will provide recommendations as to how to think about these findings, and the set of findings from the previous chapters, in a broader policy implementation context.

CHAPTER 5: CONCLUSION

1. Cross-Case Comparison

Evidence across the three sectors supports the hypothesis that the fringes of formality behavioral profile is associated with better intermediate administrative outputs – namely, a sense of mission, shared definition of a critical task, corporate autonomy, order and discipline, intra-organizational communication, and opportunities for professional learning and growth – in front-line service delivery units. That is, the police pacification units, schools, and innovation institutes led by commanders, principals or directors, respectively, who exhibited the fringes of formality behavioral profile consistently fared better in the series of evaluated intermediate administrative outputs. This finding holds after accounting for potential bias in survey and interview responses as well as multiple sector-specific trends in the data.

The initial data collected across sectors revealed that even though the middle-tier bureaucrats showed variation in behavior, they projected comparable outputs. This pattern suggested that middle-tier bureaucrats experienced strong pressure to report the performance of what was expected of them, whether or not they were actually achieving the reported outputs. In order to filter between those middle-tier bureaucrats who were simply projecting the formal and those who had actually performed successfully, I probed this pattern further in each sector. I did so through additional case studies for the police sector, expansion of the survey target population to include front-line agents in the schools, and administration of longer open-ended surveys at the innovation institutes. The expanded dataset allowed me to distinguish between middle-tier bureaucrats that were projecting the formal due to functionality (i.e., actual performance) and those that were doing it due to isomorphism (i.e., mimicked performance). Ultimately, the cases conforming due to functionality were the ones that were also practicing the fringes of formality behavior.

Yet, there were also differences across sectors. For instance, the intensity of the pressure to conform was the strongest in the police and industrial policy cases and weaker in the case of education. The police output data showed almost no variation: that is, all commanders responded that their units were faring equally, despite demonstrating high variation in profiles of behavior. This lack of variation was initially present among the innovation institute directors, as well; only

later, through the course of the open-ended interviews, did variation surface. A possible explanation for this is that, although all sectors have a strong sense of hierarchy intrinsic to the organization of their bureaucracies, this sense of hierarchy is more potent in the police unit and the innovation institute organizational structures.

There are multiple possible explanations for this difference in the potency of hierarchy across the bureaucracies. A particularly salient one is that both the police unit and innovation institute bureaucracies, though decentralized, are still under the strong influence of the federal government, either through a quasi-military structure or through a national federation system of industries. These federal government organizations function as “shadow bureaucracies,” influencing the daily operations of their decentralized subordinates, the police units and innovation institutes. Indeed, both police commanders and innovation institute directors oftentimes referenced the “national beast in the local beast” when discussing how the national government’s cumbersome apparatus and dominating spirit affected bureaucratic administration in the respective local units.¹

In addition, there was variation in the frequency of the different fringes of formality categories of action across sectors. Inventive satisficing was present across all sectors due to the strong resource constraint prevalent across the board. But the remaining categories of action showed variation in frequency across sectors. For instance, camouflage and freestyling were most prominent in the innovation institutes. The prevalence of these categories of action in innovation institutes can be partly explained by the fact that they took place during a period of bureaucratic disruption. Camouflaging and freestyling – more than inventive satisficing or street-level diplomacy – proved especially useful for entrepreneurial innovation institute directors trying to figure out how best to innovate within the somewhat rigid, traditionalist SENAI organization. Fringes of formality innovation institute directors are compelled to either camouflage in the face of often ill-suited existing rules and protocols or freestyle in the absence of guidance for implementing projects.

Street-level diplomacy, by contrast, is by far more frequent in police units and schools than in innovation institutes. This variation in frequency is mostly due to differences in the nature of interaction between the middle-tier bureaucrat and the client across sectoral

¹ Interviews with the director from the Alexander Bell Institute and the commander from the Elie Wiesel UPP.

bureaucracies. Interactions between the commander and the citizen and the principal and the student oftentimes include situations that have informal or mediation aspects and are intrinsic to the practice of street-level diplomacy. These aspects are less likely to occur in more structured interactions between innovation institutes directors and heads of industrial firms.

2. Lawful Activity

This dissertation has described what the fringes of formality behavioral profile is in theory as well as what it looks like in practice. Nonetheless, there are still some instances in which it is difficult to clearly delineate between behaviors that should and should not be considered consistent with the fringes of formality behavioral profile. These instances raise a potential criticism of the fringes of formality approach: that the line between a behavior consistent with the profile and a degenerate or even illegal practice might itself be ambiguous. For instance, it might be argued that the instances in which the police commander interacted with a drug lord or the teacher with a drug-dealing student could easily degenerate into or even be characterized themselves as illicit behavior.²

It is important to clarify this point. A defining characteristic of the fringes of formality behavioral profile is that any actions taken by a fringes of formality bureaucrat must always be legal – even though they may *border* on certain kinds of illegality, especially regulatory or procedural illegality. Relatedly, and crucially, the fringes of formality bureaucrat always has the public objective in mind rather than the pursuit of private interests. That is, the fringes of formality bureaucrat is bending – but not breaking – or exploiting the rules to pursue the public good, not his or her own.

These fundamental differences are also reflected in the way fringes of formality bureaucrats pursue borderline activities, as they are often forced to by resource constraints, the absence of adequate regulations or protocols, or other environmental factors. For instance, in the policing sector, fringes of formality commanders may be forced to engage in street-level diplomacy with criminals. But, when they do so, they do it through measures such as intermittent as opposed to regular contact and through intermediaries rather than direct contact, so as to stay

² In these specific cases, it should be noted that I only examined a point in time and did not accompany these professionals over time. Indeed, their behavior could change in a repeated interaction.

on the right side of the regulations and protocols governing their behavior. For instance, the commander who reached out to drug lord responsible for the rave party did so through an intermediary. In addition, rather than offer an exchange of personal favors in order to achieve security in his sector, he issued a credible threat of punishment if the drug lord did not acquiesce to his directives. And finally, he made sure that this was a one-off interaction as opposed to a regular communication and it never got personal. Ultimately, the fringes of formality behavior occurs when the system is not allowing the middle-tier bureaucrats to do what needs to be done for the good of the public; these actors in turn, do what needs to be done as long as it is not illegal.

3. External Validity Questions

Up to this point, I have developed and tested the theory strictly in the context of middle-capability countries, in particular in Brazil. However, does the theory apply to more developed countries, or countries with higher capability in their respective bureaucracies? While the topic merits further study, I would say that it can apply, but with certain modifications. The type of behavior could indeed be highly useful in developed countries, but with the need stemming more from problems of sclerosis and overregulation rather than lack of capability deficits and underdeveloped regulatory frameworks. Additionally, the behavior in these contexts would focus more on its flexibility, plasticity, and adaptability rather than its willingness to work around rules, given the generally higher enforcement and suitability of regulatory structures in advanced country contexts. Thus, restrictions stemming from the growing number of regulations make it more difficult to follow rules strictly in the context of a rapidly evolving service delivery wherein improvements in technology, for instance, offer new and different opportunities for implementation. Middle-tier bureaucrats, then, find themselves in situations where they have to “elbow the law” to get things done. And it is precisely in this context of restrained opportunities in which the fringes of formality can not only operate but also be crucial.

Although the motivation for the behavior to occur in higher capability countries is comparable to that of middle-capability countries, the structural conditions under which the behavior operates are by definition very different. For instance, the most relevant difference is in terms of resources, be they financial or human. These differences in capabilities and constraints

have implications in terms of how the behavior occurs in practice (e.g., applicability of categories of action). Thus, there is much less inventive satisficing needed in higher capability contexts since there are in fact available resources to conduct tasks and responsibilities. Another difference is that freestyling will be less necessary in light of the existence of highly-developed legal and regulatory frameworks in these highly-regulated contexts. In contrast, camouflage is likely to be more useful for fringes of formality bureaucrats trying to navigate the frequently overly-burdensome regulatory overhangs found in this highly-regulated environments. Developing this topic further would be a promising area for future research.

Another question arising about this theory is whether and to what degree the fringes of formality behavioral profile is culturally-driven or -specific. I would argue that while culture is fundamental in determining how the behavior is expressed in practice, it is not the driver of why the behavior occurs in the first place. The fringes of formality behavior is fundamentally a response to the inability to achieve public good ends in public organizations due to institutional constraints, lack of resources, ill-suited or underdeveloped regulation, and the other challenges particularly common in middle-capability countries. This problem and the realities it produces are not culturally-specific; rather, they are widespread. The *manner* in which a fringes of formality official aptly expresses the behavior, however, is *highly* culturally-dependent. Indeed, the fringes of formality behavioral profile is in large part about understanding and expressing how best to achieve broadly public goods in a particular cultural, political, and historical context instead of being servant to an abstract vision of uber-rational Weberian bureaucracy. It is a theory about how abstract goods need to be pursued with a sensitivity toward and understanding of particular cultures. This points to a fruitful and important line of future research: What are the core concepts and practices that might spread across countries and contexts? What are country- and culture-specific approaches that need to be unpacked and developed?

One might also ask: how does the theory apply to different types of public bureaucracy? I would posit that the theory has broad applicability to public bureaucracies. For instance, the post office bureaucracy, a highly routinized and tangible delivery organization, has many potential applications for fringes of formality behaviors. A postal official in a middle-capability country facing resource constraints or inappropriate regulations could readily draw upon the essence of the fringes of formality behavior. The application to less logistical and more regulatory-focused bureaucracies may be a bit more complicated. How would an environmental or healthcare

regulator best employ fringes of formality behaviors when they lack the direct touch to the public they are meant to serve? Their rationale for the use of fringes of formality behaviors, like police commanders, for instance, would be driven by the constraints they face, which are not necessarily unique to a single type of bureaucracy. But, how they applied these behaviors would likely be different, and thus, the categories of action might have to be different depending on the nature of the bureaucracy. This is worth further study.

Lastly, is the fringes of formality behavioral profile applicable to front-line agents in street-level bureaucracies, such as police officers, teachers, or innovation institute staff members who report to the director? I would argue that the answer to this question is more nuanced. On the one hand, due to the strategic component of the behavior, namely the focus on strategic functions, the fringes of formality behavior is necessarily unique to the middle-level echelon. That is, middle-tier bureaucrats are generally the only bureaucratic actors who are responsible for strategic decisions *and* have regular access to the public they are serving. On the other hand, this argument could vary depending on the degree of delegation within a particular unit in a given bureaucracy. Indeed, I did find police pacification units in which the fringes of formality commander had delegated so much authority that some front-line agents began to take on more strategic roles, and in that capacity, exhibit fringes of formality behaviors. In these cases, the fringes of formality behavioral profile and its practices had trickled down through the hierarchy. Whether this trickle-down effect is systematic or only occurs under certain circumstances – as well as its effects on unit outputs – are topics for further research.

4. Policy Principles: An Indigenous Instantiation of *Existing* Best Practices³

The findings from the previous chapters have consistently identified a similar type of behavior – the fringes of formality behavior – among selected professionals who are part of a middle-level echelon of bureaucrats in middle-capability public sector contexts. In addition, evidence from fieldwork has also shown that this behavior is associated with improved intermediate administrative outputs in the front-line service delivery unit, particularly in police

³ I benefited greatly from conversations with Lant Pritchett in writing this section. The instantiation of the principles draws on the approach described in his papers and the PDIA approach.

units, schools, and innovation institutes. This section builds on these findings to discuss their policy implications. If this behavior is associated with positive outputs, then how can it be incentivized, cultivated, and sustained within a middle-capability policy and institutional context (and possibly beyond)?

This theory of the fringes of formality behavioral profile argues that the profile, and the practices that stem from and are associated with it, acts essentially as an adverse functionality that can positively reform the system from within. The middle-tier bureaucrats who exhibit this behavior develop practices that initially look like an intermediate solution, thereby imperfectly bridging a challenge within the organization with an adapted response. These practices, then, co-exist with current administrative and bureaucratic structures even as they slowly embed themselves within the system's framework. After many iterations, what started as an adverse functionality is ideally able to over time slowly change the organizational structure from the inside out, and in doing so, reform the system in a productive direction.⁴ The ways that these changes unfold vary. They can occur at the margins or as a demonstration effect, thus initially having little immediate reform implications, but later informing reform elsewhere in the organization.

Accordingly, the main policy thrust stemming from this research is to protect, encourage, and cultivate the behavior wherever it can be found. It is crucial that this does not mean mandating the behavior in a deductive or top-down fashion. What is clear is that any attempt to formalize or turn into a cookie-cutter model the cultivation of this behavior and its professionals in a systematic manner within the bureaucracy will inevitably distort, undermine, or at least gnaw at the strength of the behavior. The heart of the fringes of formality behavior is its unique ability to iterate, to develop, to evolve, and adapt in directions that are not easily foreseen from the beginning and are thus difficult to formalize and systematize. It is a fundamentally bottom-up, inductive approach to bureaucratic innovation and reform. As a result, the general tenets of broader reform implementation have to build upon organic and indigenous practices and behavior in order to protect their development and emulation against organizational and political capture.

⁴Andrews, Pritchett, and Woolcock, "Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA)."

Put another way, fringes of formality bureaucrats are rare flowers – they cannot be mass-produced. The fringes of formality behavior is an inherently organic thing. Its strength lies precisely in its spontaneous, adaptive quality – its suitability for its particular space within the bureaucracy, and indeed one that by its nature tends to avoid visibility and is not susceptible to specific direction. In other words, any attempt to formalize or systematize this behavior will inevitably be at odds with the nature and characteristics of the organic and idiosyncratic way in which it develops and operates within the bureaucracy. Rather, like rare flowers, they must be watered and nourished. The mission of the state seeking to leverage fringes of formality behavior is not to try to turn every bureaucrat into a fringes of formality star – this would be futile and dilute the quality of those key change agents who do have this behavior. Instead, it is to find and enable the ones who do, allowing them to positively evolve their bureaucracies from within.

Since policy recommendations generally aim to formalize, systematize, and scale up best practices, this generates a particular tension: how do you systematize something that is by its nature not systematic, not off the assembly line? The aim of the policy options that follow is to embrace and work with and through this tension by proposing a set of principles that promote the behavior through the energy and activity of the bureaucrats who are practicing the behavior, rather than changing the formal bureaucratic and regulatory rules and framework. Through this approach, the fringes of formality bureaucrats are the ones who will jumpstart and inspire the ensuing organizational change and provide the necessary thrust for reform. The policy implications, then, aim to incentivize the behavior and to remove as many potential hurdles to their ability to develop their practice without restraints.

The policy implications identified below are not especially distinctive. Indeed, various reforms have specified principles similar to these before. Rather, what is new about these principles is the manner in which they are to be implemented since their implementation depends directly on the actors themselves. These are not top-down driven principles, meaning that they are not motivated by changes in the overall framework or regulatory structure. Rather, middle-tier bureaucrats spearhead their implementation through the active development of their practices. Accordingly, this section brings the implementation context – its bureaucratic and capability sensitivities – to the forefront in describing the particular instantiation of the recommendations.

At a meta level, the implementation of these principles is analogous to what needs to be done in terms of the fringes of formality practices. For instance, the fringes of formality practices have to be identified, iterated, adapted, and eventually nurtured and fostered. Similarly, the principles underlying the recommendations have to draw on existing practices and extrapolate and build on what has already emerged naturally and is working effectively in the organization. In other words, the fringes of formality bureaucrats are smart, they recognize the need to survive within the organization, and have by nature of their practices already developed resources and mechanisms to sustain their respective practices. Ultimately, the idea behind these principles is to identify and understand what those mechanisms already are, find ways to build upon them, and expand them to be able to reach other like-minded professionals within the organization – all without destroying the strength of their organic and indigenous essence.

Briefly, the recommendations focus on the application and instantiation of four key principles: incentives, networks, insurance, and competition. The remaining part of this section explains what each one of these four principles means in practice and how to implement them differentially across the three sectors of focus in this dissertation. Needless to say, there are inevitable overlaps among the different principles. For instance, networks and competition both involve the sharing and dissemination of information. Nonetheless, the purpose of information sharing differs by principle. In networks, the purpose of sharing information is to function as a support group for professionals; the purpose of sharing information in competition, in contrast, is to promote a sharing of best practices. These are not mutually exclusive purposes; indeed, depending on the organization in question and its sensitivities, they oftentimes occur in tandem. Nonetheless, they are inherently distinct bureaucratic phenomena. Hence, the discussion of these efforts as separate categories.

4.1. Duty Incentives

Incentives are the primary mechanism for motivating fringes of formality bureaucrats to overcome the steep hurdles to the effective development of their practice. More specifically, incentives refer to the implementation of *non-financial* incentives within each sector. While financial incentives are, of course, valuable, budgetary conditions are often tight across sectors. Yet, fringes of formality bureaucrats tend to have a set of values that lend themselves to a fuller

appreciation of these non-financial types of incentives. Why? Fringes of formality bureaucrats have a strong sense of mission and identify with the *esprit de corps* of the institution in which they serve. They share a sense of duty and take pride in serving in the public sector. Unlike some civil service professionals who see a career in the public sector as a way to “milk the state,” the fringes of formality bureaucrats inherently believe in serving the public and giving back to their community or country.

As a result, fringes of formality bureaucrats tend to respond well to honors. Reputation, respect, and status within the organization – as well as the broader community – are valuable currencies in this case. To obtain this respect, they often treat their front-line service delivery unit as a “sanctuary” in which they have to set an example for others within the organization and their respective communities. In response to the nature of this behavior, non-financial incentives, then, can provide a powerful source of motivation driving their actions. The goal of these incentives is to highlight and enhance the reputation and status of both these professionals and the “sanctuaries” in which they work and in which they are invested. Such incentives can take the form of awards, notices in respected bulletins and memos within the sector, or other vehicles of communication that are public and reach communities that are both internal and external to the public sector.

Most importantly, the middle-level echelon has to organize the instantiation of these non-financial incentives. This cadre has to, in effect, take ownership over this selection and recognition process. The incentives for fringes of formality bureaucrats are often focused more on recognition by respected peers rather than by upper echelons in whom these officials often lack trust and whom they may even disdain. Appropriate incentivizing forms of recognition, then, may often not come from the superiors of the organization. Rather, they can be bred and cultivated from within the organization and among those who are most familiar with the frontlines and the adverse conditions of putting different objectives into practice (e.g., lack of resources, political support).

Evidence from fieldwork shows that forming this kind of community of middle-tier bureaucrats is feasible, as interviewees were able to immediately identify those commanders, school principals or innovation institute directors who are successful in their activities and exhibit a fringes of formality-type behavior. And, for the most part, based on the findings from the interviews, they are accurate in their assertions of good performance. The idea here, then,

would be to capitalize on this knowledge, to make it public and visible, and to network these officials so that these professionals are able to find comfort and renewed strength from peer-to-peer recognition, and as a result, are incentivized to continue on their paths and potentially even inspire others to take comparable approaches. This visibility may further serve to legitimize their activities, and thus function as a form of protection from institutional and political pressures to their practice.

4.2. Affinity-Driven Networks

Networks refer to opportunities for the fringes of formality bureaucrats to talk and exchange ideas and find an outlet of support for one another. These networks serve two fundamental purposes. The first one is to provide a space in which these professionals can share their difficulties, and in particular, the burden of the responsibilities and risks they have to endure on a daily basis. What came across during the fieldwork is that these professionals were craving to talk and to be heard by others. As the interviewer, I oftentimes felt that we were in a “therapy session” in which the patient was ardently sharing with me his or her deepest concerns and anxieties. This network of professionals would provide an opportunity for these professionals to identify with others who are sharing comparable experiences and anxieties. It would effectively provide a peer support group for these professionals.

The second fundamental purpose of networks would be a dissemination function. In addition to a support function, these networks would also provide an opportunity for the fringes of formality bureaucrats to identify and jointly vet best practices and then to disseminate their practices among other like-minded professionals. This would allow them to both reflect and build upon their existing experiences with others who are going through similar challenges. This intermittent dialogue and exchange would effectively allow for more rapid and fluid iteration process of the practices that are relatively more successful. In this context, it would also provide opportunities for them to disseminate their practices to younger generations within the profession, thereby mentoring others who share similar traits and strengthening the practice of this behavior. Ultimately, these rare flowers not only can be cultivated, but can also encourage the marginal expansion of their garden space through mentoring practices.

Most importantly, these networks should be organized by the fringes of formality bureaucrats for like-minded professionals and other aspiring professionals. Thus, it would not be an obligation sent down from above. The officials themselves must have ownership over the membership process and the manner through which the ensuing interactions are implemented. This means that the timing and structure of the interactions have to respect their own schedules and regiments. Thus, such network events would need to be frequent yet not necessarily regular. Indeed, they would need to reflect the demands of the community of practice, for instance, in grappling with key issues or challenges from the hierarchy. Alternatively, network events might not always include the same members; instead, the network as a whole might have a mechanism in place that allows subgroups – made up of individuals with common interests – to have their own individual meetings, as well.

Evidence from the fieldwork shows that these exchanges already occur, yet they are often irregular and based on personal affinity. The idea of this network would be to create an outlet to leverage these existing relationships so that they can grow stronger, come to entail more frequent interactions, and ultimately incorporate others who are facing similar problems. For that to occur, respect for current conditions and practices is key as opposed to trying to formalize a new mechanism top-down for these interactions to occur on a more regular and structured basis. This sense of ownership by the fringe of formality bureaucrats is important to ensure a “thick process” that involves a candid and fresh discussion of the challenges, especially when these bureaucrats are thinking about how to operate on the boundary of formality. The discussion oftentimes will be nebulous, intangible, and puzzling, and these bureaucrats must be able to be upfront when sharing that information and their associated frustrations and failures to make progress. The process must be candid and open to enable the dynamic that will produce better results. In addition, the challenge of tracking results, intermediate administrative outputs, and a general process for measuring this iterative process of reform across the front-line units is also part of this discussion among the fringes of formality bureaucrats. It is therefore vital that the fringes of formality bureaucrats themselves and others not part of the institution’s hierarchy control the networking function for it to work.

4.3. Corporate Cover

Corporate cover refers to the mechanisms through which the organization and/or the broader community can protect the fringes of formality bureaucrats from the risks and challenges that may arise from their practices. Another strong sense that came across during the interviews was that, although these professionals had a significant commitment to what they were doing, they were also fearful of the consequences that could stem from their actions – actions that were legal and public-spirited, but pushed the bureaucratic envelope. This commitment and its accompanying fear worked hand-in-hand and were two sides of the same coin as they explained the difficulties they confronted in the implementation of their practices. Indeed, there are many risks involved in the activities they engage in to put their principles in practice. These professionals are oftentimes literally working through gunfire, be it in schools or counterinsurgency units. They show a relentless commitment – but they are still human and thus live in anxiety, if not fear. To that end, these professionals have to find and develop ways to protect their physical and mental integrity. More than that, they have to find ways in which to minimize or handle the fear while strengthening the commitment to their practice.

In practice, corporate cover can take the form of fringes of formality bureaucrats developing strategic connections with targeted individuals within the hierarchy of each bureaucracy. In essence, these middle-tier bureaucrats should proactively build and draw on connections with more senior officials with political power, who in turn can back up the fringes of formality bureaucrats if push comes to shove. As opposed to waiting until they actually need this help, these bureaucrats should proactively build and develop relationships of affinity with like-spirited professionals at a higher rank in the organizational hierarchy from the beginning. This would give these bureaucrats a sense that they have “corporate cover” in case they need to rely on it for the effective implementation of their practices.

Similarly to the implementation of the principles listed earlier, the fringes of formality bureaucrats have to be responsible for the implementation of this principle. It has to be done by themselves for themselves – effective mentorship and patronage in these circumstances cannot be done in a cookie-cutter manner. This means this could be handled in concert with the network function, potentially, so as to promote a good match (i.e., affinity-driven) between professionals.

One might argue that there is an apparent rivalry in the nature of the good. That is, one bureaucrat's ability to use his respective corporate cover might preclude another from using that same cover. One cannot go to the same well multiple times, so not all professionals will be able to share the same corporate cover. Given the rivalrous nature of the good, then, how can the fringes of formality bureaucrats effectively share and use this knowledge for the common good?

I posit, however, that the good of corporate cover is actually non-rivalrous in this circumstance. One of the reasons such cover can be rivalrous in most circumstances is that there is too much demand for a limited supply of professionals at the top who are willing to play this role. But, that is not the case here. Evidence from fieldwork shows that due to the scarcity of the fringes of formality behavior (and the corresponding demand for more of it from the community), the professionals offering corporate cover are more than willing to help the fringes of formality bureaucrats. In fact, they seem to be under-utilized. As a result, the main issue is not too much demand from lower level officials, but rather their scarcity and the consequent need to become more known to others who are like-minded – and higher up and politically connected – within the organization. They have to form political and corporate alliances and, working with senior mentors and protectors, create an authorizing environment that is more susceptible to being used by the fringes of formality bureaucrats.

Furthermore, it should not be too difficult for fringes of formality bureaucrats to identify senior colleagues with whom they can build these sorts of relationships. The interviews showed that each of the fringes of formality bureaucrats knew who they could count on within the organization. But, with few exceptions, they did not reach out to these senior colleagues to begin forming these types of mentor-protector relationships until the need arises. The key, then, for a successful insurance strategy is for fringes of formality bureaucrats to begin engaging more senior bureaucrats who look favorably on their work and to strengthen these alliances over time. As these relationships mature, they can help not only current fringes of formality bureaucrats, but also those who may be aspiring to the same practices – that is, they can help to entice those who might be considering this type of behavior in addition to supporting those already doing it.

Most importantly, due to the current rotation in higher echelons of the organization, it is crucial to build resilient and cross-netted networks. Because of turnover and other factors, it is important to effectively identify the various players, connect to them, track their prominence over time, and cultivate these alliances so that even with turnover and the like, the practices are

resilient – for instance allies of the allies that can be drawn upon to carry forth the mission in place. The corporate cover principle – through the alliance or partnership coalition – then, is not dependent on only one person, but would have organically evolved through the active contribution and collaboration of its members over time.

4.4. Competitive Arenas

Competitive arenas refers to the creation of outlets through which the different fringes of formality bureaucrats can compete against one another as well as other professionals within the cadre and in the broader organization. This principle is about harnessing these bureaucrats' competitive spirit. It capitalizes on another characteristic of the fringes of formality cohort that was highlighted in interviews: namely, that they want to perform better and better. Even when things are going well and they have obtained their immediate objective, they still want to change things, to improve, to be better than they have been. They are not necessarily competing against each other. Oftentimes, they compete against themselves and the image of what they would like to see their unit accomplish in their respective communities. In either case, they always crave to learn about new ways of doing things and for new information about what others are doing, so that they can improve their own operations and, in many cases, best their peers.

The competition principle could be realized through a number of mechanisms. For instance, fringes of formality bureaucrats can track key metrics on front-line service delivery units performance, as well as corresponding bureaucratic best practices, and then post relevant data on websites that are frequently used by middle-tier actors, fringes of formality bureaucrats and non-fringes of formality bureaucrats alike. The tracking of this progress and the effective dissemination of this data and results would stir discussion and debate, and ultimately, tap into more innovative actors' competitive desire to improve their respective units' rankings. In this way, fringes of formality bureaucrats could be further incentivized to learn from their peers, improve their own performances, and fulfill their competitive ambitions.

As before, implementation of the competition principle should be spearheaded by fringes of formality bureaucrats themselves – not by the bureaucratic hierarchy. The reason why is that the discussion of what constitutes success has to be candid and open among fringes of formality and other middle-tier bureaucrats, so as to avoid isomorphic mimicry. If the higher echelons

within the bureaucracy were to oversee the implementation of the competition principle, one could imagine that an increase in pressure on middle-tier bureaucrats to project the formal would occur. If professionals adhere to this pressure and project the formal, then nobody will have access to the real data (i.e., based on what is de facto happening on a daily basis) needed to spur competition and enable actors to build on best practices.

As has been said before, the above-described roles of incentives, networks, insurance, and competition in spurring bureaucratic innovation are not new in of themselves. Indeed, they have been explored numerous times across different literatures in the management, organizations, and public policy literatures.⁵ What is unique to these recommendations is their emphasis on a more indigenous-looking instantiation of said principles, and their call for the fringes of formality bureaucrats themselves to own how these principles are implemented, in order to improve their practices and encourage as many middle-tier bureaucrats as it makes sense to adopt similar practices. In other words, how to implement these principles within each street-level bureaucracy in a way that incentivizes, cultivates, and sustains the fringes of formality behavior within these different institutional and policy contexts of middle capability is the effective contribution of this section.

⁵ Bloom, Raffaella Sadun, and Van Reenen, "The Organization of Firms across Countries"; Grindle, *Going Local*; and Tendler, *Good Government in the Tropics*.

Table 1: Instantiation of Policy Principles across Sectors

Principle	Police	Industrial policy	Education
Duty Incentives	Mention in “Diário Oficial” (daily dispatch) and recognition in media stories and other professionally organized outlets	Performance Awards that are part of SENAI Innovation Competition, which is judged by peers within the organization	Merit recognition in school bulletins and school council meetings whose participation is determined by local elections
Affinity-Driven Networks	Network among fringes of formality police commanders with facilitation by jointly selected commander	Network among fringes of formality directors of innovation institutes with facilitation by jointly selected director	Network among fringes of formality school principals with facilitation by jointly selected principals
Corporate Cover	Direct connection with the respective team within the Central Police Pacification Unit	Direct connection with the teams of the respective Regional Directorates and National Directorates	Direct connection with the administrative head and teams of respective Regional Secretariat
Competitive Arenas	Presentation of activities in monthly police pacification unit meetings and work directly with monitoring and evaluation office in central headquarters	Internally generated “organizational” competition (not from national or regional directorates, but from institutes themselves)	Dissemination of practices in principal training forums and union meetings organized by principals, teachers and staff

5. Counterarguments

Based on the discussion above, different schools of thought could present objections as to whether these principles and their effective application in practice shed any new light on the organizational management discussion. Is this simply old wine in new bottles? The key plausible counterarguments are as follows:

5.1. The Weberian School of Thought

The Weberian school of thought and the traditional literature on bureaucracy associated with it could argue that the application of the policy principles discussed above are not new but de facto ways to motivate and track inputs within a hierarchical structure – a central tenet of the Weberian approach.

I would counter-argue that adopting the fringes of formality approach implies a rejection of pre-defined inputs, which is a central feature of the Weberian model. Rather, the approach

outlined here allows for a targeted modularity that fosters adaptability and incremental change in the application of the principles, as opposed to the Weberian-style application of rules and regulations, which is “rational” by definition and often homogenous and rigid in practice. For instance, in contrast to the specification of duties to the smallest detail and the enforcement of such behavior often found in Weberian-type systems, the application of the fringes of formality behavioral profile promotes a deliberate exploitation of ambiguity found within and between rules. The practice encourages bureaucrats not to follow rules and responsibilities rigorously, let alone slavishly, but rather to work quite deliberately at the boundaries of these rules for the purpose of the mission. The emphasis is not on replication for the sake of uniformity, consistency, and compliance, but on the ability to organically and individually develop tailored practices better suited to producing sustainable results. Thus, as opposed to automating the system, the primary aim of these inputs is to create an inductively learning and flexible bureaucracy – one that stands in quite stark contrast to the Weberian bureaucracy.

This is crucial because the fringes of formality approach – and namely the flexibility in the definition of inputs – is far more likely than the Weberian model to pay dividends in a middle-capability context like Brazil. Oftentimes in these contexts, the hardest part of the reform process is to understand what the real problem is. Part of the issue is that problems are multi-layered, and the challenge is to identify which part of the problem is most consequential.⁶ Unlike high-capability contexts where teams can attack problems in their entirety and manage multiple challenges simultaneously, middle-capability contexts inevitably demand a much higher degree of selectivity because of resource, capacity, and political constraints. These constraints take numerous forms, such as high employee turnover rates, political factors leading to unexpected changes in the institution, nationally-imposed restraints on local budgetary spending, and a series of comparable modulating factors that influence the definition of the problem and the ensuing inputs that may follow in the organization of the administrative bureaucracy.

Due to these constraints, then, it is of utmost importance to be able to break down the problem into its respective parts and develop a manner in which to prioritize the most significant and consequential pieces of the problem. Iteration and adaptation, then, are key factors in this process because they allow bureaucrats to experiment, and in doing so, understand which aspects

⁶ I owe the development of this insight to a conversation with Joana Monteiro of the Institute of Public Safety (ISP) in Rio de Janeiro.

of the problem are most critical and how best to sequence possible solutions. Ultimately, this critical exercise not only drives the definition of inputs, but also the development of a reform approach that has to be by definition organic and indigenous at its essence.

5.2. The New Public Management School of Thought

The New Public Management (NPM) school of thought could argue that the application of the policy principles discussed above are de facto ways to translate inputs into outputs, and thereby fall primarily under the rubric of the private sector, which emphasizes the importance of tracking outputs.

I would counter-argue that, while NPM tracks progress against a set of pre-determined outputs, the fringes of formality approach rejects the pre-definition of outputs. To the contrary, the aim is to encourage an organizational culture that builds on indigenous practices, enabling them to evolve organically and develop their own appropriately-tailored forms of evaluation. While NPM insists on a specific consensus of how specific inputs translate into output metrics, the fringes of formality approach embraces variance and, in doing so, sees that the richness in this variance is in the active and systematic production of positive deviants – both in behaviors and practices – as opposed to the active and systematic production of sterile outputs in isolation.

Importantly, the fact that the fringes of formality approach involves open-ended outputs implies that the relevant actors do not necessarily know where they will end when they begin a reform process. While they have an idea of where they hope to go, that idea is a guide rather than a precise path – it does not restrain them in case experimentation or iteration leads them somewhere else. This notion of “open-ended guidance” – what has sometimes been called “mission command” – is particularly important in the context of street-level bureaucracies in middle-capability countries. The main reason is that improving capability in these large and cumbersome bureaucracies is one of the most difficult development challenges of our day.⁷ It is hard because it has never been done before, and the experiences to date cannot be easily transferred to these organizational and institutional contexts. As a result, in the effort to break new ground in the field of capability building, middle-tier bureaucrats have to experiment, iterate, and adapt to reach novel solutions. The fringes of formality approach, then, by allowing

⁷ Pritchett, *The Rebirth of Education*.

an open-ended view of outputs, allows precisely this kind of warranted scope for bureaucratic reform.

5.3. The Decentralization and Increased Autonomy School of Thought

The decentralization and increased autonomy school of thought could argue that the application of the policy principles discussed above are de facto ways to allow for increased autonomy of the middle-tier bureaucrats so that they can best tailor their practices and their respective tracking of outputs to the local needs of their respective communities.

I would counter-argue that the fringes of formality approach takes into account and works within the de facto – and often imperfect – context of decentralization as opposed to the de jure illusion of autonomy and discretion of the middle-tier bureaucrat. This means that fringes of formality bureaucrats operate within a context that is de jure decentralized, but that in practice, provides very little opportunity for autonomy and discretion to the middle-tier bureaucrat. The fringes of formality categories of action, thus, are not *enablers* of increased discretion. Rather, they are *creative maneuvers* for working within the binding restrictions of a regulatory framework that itself is often muddled with conflicting responsibilities, unclear function assignments, and insufficient resources and capability.

The categories of action described as part of the fringes of formality behavioral profile are likely to be important for different reasons depending on the contextual level of capability. In a middle-capability context, they are important because there are a vast number of rules that are either vague or ill-defined (e.g., overlapping rules). As a result, the ability of a middle-tier bureaucrat to be able to identify and use bureaucratic zones of opportunity is key to pursuing successful outcomes. These bureaucratic zones of opportunity enable the actor to expand the scope and influence of their activities, thereby enlarging their de facto autonomy and allowing them to attain their organizational objectives.

In a high-capability context, by contrast, the difficulty is often not in the imprecision of the rules, but in the fact that there are too many rules and that the space for activity is over-regulated. In this context, the fringes of formality approach is most effective in circumstances in which the middle-tier bureaucrat can “elbow the law,” or find and exploit gaps in the regulations

that allow them to create comparable bureaucratic zones of opportunity.⁸ In short, fringes of formality behavior in the middle-capability context is more about the bureaucratic actor expanding autonomy by exploiting the vagueness or imprecision of the law, while in the high capability context it is more about the bureaucratic actor expanding autonomy by finding narrow corridors in between rules. Both efforts, however, stand in direct contrast to the orthodox decentralization approach, which assumes these responsibilities are static and should precisely conform to the de jure pre-conditions of reform.

5.4. The Informal Accountability School of Thought

The informal accountability school of thought could argue that the application of the policy principles are ways to cultivate and enhance informal practices that essentially contribute to improved outputs.

I would counter-argue that this is precisely what the fringes of formality is trying to avoid. Fringes of formality bureaucrats are *not* acting in an informal manner. Rather, they are acting just within in the boundaries of what is delimited as formal. Whereas the informal accountability school of thought advocates for experimenting and creating new ways of doing things *outside* the system, the fringes of formality is about developing and adapting practices *within* the system. Thus, according to the fringes of formality argument, bureaucrats must embed practices in a larger structure so that they can develop, adapt, and flourish, as opposed to existing in isolation for a limited period and then being lost.

This emphasis on developing structures and reform from within the system – rather than outside of it – is of particular importance in middle-capability contexts. The main reason for this is that these countries oftentimes have a thin network of civil society and private stakeholders that are exogenous to the public sector machinery. As a result, experiments that run outside the system have a greater likelihood of becoming islands of excellence and ultimately getting lost over time because they do not have an opportunity to become consolidated within an institutional apparatus.

In contrast, the fringes of formality approach details a behavior that occurs within the boundaries of the formal system, and in doing so, produces modular effects that can reform the

⁸ I owe this insight to a conversation with Jessica Tisch of the New York Police Department.

system in positive and productive directions. This behavior respects existing norms, indigenous practices, and other broadly-defined cultural factors that are important in calibrating the success of the behavior in improving bureaucratic performance. As a result, both the likelihood of institutional consolidation and the sustainability of bureaucratic practices developed through the fringes of formality approach are relatively greater than those envisioned by the informal accountability school in middle-capability contexts.

6. Final Thoughts

This dissertation has done two things, in particular. First, it has systematically identified an under-noticed, distinctive type of bureaucratic behavior and its intrinsic characteristics, and examined it in detail within three different sectors in Brazil. Second, it has shown that there is a correlation between the fringes of formality behavioral profile and intermediate administrative outputs within the front-line service delivery units of the three street-level bureaucracies studied as part of this project. This correlation is robust both within and across sectors. Given the established connection between improvements in intermediate administrative outputs and improved outcomes, this is a significant finding. This is especially so given that bureaucratic reform and improvement of public service delivery have been in near-crisis mode in middle-capability countries like Brazil for many years. I have been able to locate a type of behavior in public organizations that makes a meaningful difference in the performance of these institutions – this is an important step of progress.

It does, however, leave much work to be done. While I have pointed to ways in which this behavior can be incentivized, enhanced, and sustained across different institutional and policy contexts within the respective front-line service delivery units, much more analysis is required to identify how best to leverage the fringes of formality approach and turn it into practical implementation guidelines for states and international organizations like the World Bank and the Inter-American Development Bank (IDB). Work on such implications will have applicability beyond Brazil and possibly beyond middle-capability environments, to include high-capability countries and potentially the private sector.

BIBLIOGRAPHY

- Almeida, Mansueto and Ben Ross Schneider. *Globalization, Democratization, and the Challenges of Industrial Policy in Brazil*. Brasilia: Ministério das Relações Exteriores, 2012. <https://sistemas.mre.gov.br/kitweb/datafiles/IRBr/pt-br/file/CAD/LXII%20CAD/Economia/Almeida%20%20Schneider%20612%20v7.pdf>.
- Andrews, Matt, Lant Pritchett, and Michael Woolcock. "Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA)." Working Paper 299, Center for Global Development, Washington, June 2012: 1-26.
<https://research.hks.harvard.edu/publications/getFile.aspx?Id=841>.
- Bacelar, Daniele. "Ocupação nas escolas chega ao fim." *Odia.ig.com.br*, June 21, 2016.
<http://odia.ig.com.br/rio-de-janeiro/2016-06-21/ocupacao-nas-escolas-chega-ao-fim.html>.
- Banerjee, Abhijit and Esther Duflo. "Addressing Absence." *Journal of Economic Perspectives* 20, no. 1 (2006): 117-132. doi:10.1257/089533006776526139.
- Beato, Claudio. *Compreendendo e Avaliando: Projetos de Segurança Pública*. Minas Gerais: Federal University of Minas Gerais, 2008.
- Bloom, Nicholas, Raffaella Sadun, and John Van Reenen. "The Organization of Firms across Countries." *The Quarterly Journal of Economics* (2012): 1663-1705.
doi:10.1093/qje/qje029.
- Bloom, Nicholas, Renata Lemos, Raffaella Sadun, and John Van Reenen, "Does Management Matter in Schools?" *Economic Journal* 125, no. 584 (2015): 647-674.
doi:10.1111/eoj.12267.
- Brodkin, Evelyn Z. "Reflections on Street-Level Bureaucracy: Past, Present, and Future." *Public Administration Review* 72, no. 6 (2012): 940-949. doi:10.1111/j.1540-6210.2012.02657.x.
- Cano, Ignacio. 'Os Donos do Morro': *Uma Avaliação Exploratória do Impacto das Unidades de Polícia Pacificadora (UPPs) no Rio De Janeiro*. Sao Paulo: Fórum Brasileiro de Segurança Pública, May 2012.
<https://riorealblog.files.wordpress.com/2012/07/relatc3b3riofinalcaf13.pdf>.
- Crozier, Michael. *Bureaucratic Phenomenon*. Chicago: University of Chicago Press, 1964.
- DaMatta, Roberto. *O que faz o brasil, Brasil?* Rio de Janeiro: Editora Rocco Ltda., 1984.
- de Godoy, Marcos Vinicius Ferreira and Cristiane dos Santos Oliveira. *Experiências inovadoras na Secretaria de Estado de Educação do Rio De Janeiro: como o fortalecimento da gestão estratégica explica o avanço no IDEB*. Brasilia: Conselho Nacional de Secretários de Estado da Administração, 2015.

<http://banco.consad.org.br/bitstream/123456789/1248/1/EXPERI%C3%84NCIAS%20I NOVADORAS%20NA%20SECRETARIA%20DE.pdf>.

de Soto, Hernando. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books, 2003.

DiMaggio, Paul J. and Walter W. Powell. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48, no. 2 (1983): 147-160. <http://www.jstor.org/stable/2095101>.

Ferraz, Claudio and Bruno Ottoni. "State Presence and Urban Violence: Evidence from the Pacification of Rio's *Favelas*." Working paper, November 2013.
https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=SBE36&paper_id=120.

Frischtak, Claudio and Benjamin R. Mandel. "Crime, House Prices, and Inequality: The Effect of UPPs in Rio." *FRB of New York Staff Report*, no. 542 (2012): 1-46.
doi:10.2139/ssrn.1995795.

Frischtak, Claudio and Katharina Davies. *Deciphering Brazil's Innovation Paradox*. Washington: The World Bank, 2015.

Grindle, Merilee. *Going Local: Decentralization, Democratization, and the Promise of Good Governance*. Princeton: Princeton University Press, 2007.

Hallward-Driemeier, Mary and Lant Pritchett. "How Business Is Done in the Developing World: Deals versus Rules." *Journal of Economic Perspectives* 29, no. 3 (2015): 121-140.
doi:10.1257/jep.29.3.121/.

Hausmann, Ricardo and Dani Rodrik. "Doomed to Choose: Industrial Policy as Predicament." Working paper, Harvard Kennedy School, 2006: 1-64.
<https://www.sss.ias.edu/files/pdfs/Rodrik/Research/doomed-to-choose.pdf>.

Helmke, Gretchen and Steven Levitsky, eds. *Informal Institutions and Democracy*. Baltimore: Johns Hopkins University Press, 2006.

Im, Fernando Gabriel and David Rosenblatt. *Middle-Income Trap: A Conceptual and Empirical Survey*. Washington: The World Bank, 2013.
<http://documents.worldbank.org/curated/en/969991468339571076/pdf/WPS6594.pdf>.

Larson, Greg, Norman Loayza, and Michael Woolcock. *The Middle-Income Trap: Myth or Reality?* World Bank Group, 2016.
<http://documents.worldbank.org/curated/en/965511468194956837/pdf/104230-REVISED-RPB-1-Middle-Income-Trap.pdf>.

Lester, Richard K. and Michael J. Piore. *Innovation: The Missing Dimension*. Cambridge: Harvard University Press, 2006.

- Lipsky, Michael. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. New York: Russell Sage Foundation, 1980.
- March, James G. and Herbert A. Simon. *Organizations*. Hoboken: Wiley-Blackwell, 1993.
- Mello, Káthia. "Secretaria de Educação contabiliza 40 escolas ocupadas no RJ." G1.globo.com, April 15, 2016. <http://g1.globo.com/rio-de-janeiro/noticia/2016/04/secretaria-de-educacao-contabiliza-40-escolas-ocupadas-no-rj.html>.
- Mizala, Alejandra and Ben Ross Schneider. "Negotiating Education Reform: Teacher Evaluations and Incentives in Chile (1990-2010)." *Governance* 27, no. 1 (2014): 87-109. doi:10.1111/gove.12020.
- Monteiro, Joana and Rudi Rocha. "Drug Battles and School Achievement: Evidence from Rio de Janeiro's Favelas." *The Review of Economics and Statistics* 99, no. 2 (2017): 213-228. doi:10.1162/REST_a_00628.
- Olken, Benjamin A. and Rohini Pande. "Corruption in Developing Countries." *Annual Review of Economics* 4 (2012): 479-509. <http://hdl.handle.net/1721.1/73081>.
- Ostrom, Elinor. "Collective Action and the Evolution of Social Norms." *The Journal of Economic Perspectives* 14, no. 3 (2000): 137-158. <http://www.jstor.org/stable/2646923>.
- Linhares Pires, José Claudio. "The Reform Process within the Brazilian Electricity Sector." Undated paper. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.4377&rep=rep1&type=pdf>
- Panorama dos Territórios*, Rio de Janeiro: Instituto Pereira Passos, Prefeitura do Rio de Janeiro, 2015.
- Pritchett, Lant. *Folk and the Formula: Fact and Fiction in Development*. Helsinki: United Nations University World Institute for Developmental Economics Research, 2013. <https://www.wider.unu.edu/sites/default/files/News/Documents/Folk-and-formula-fact-and-fiction-Lant-Pritchett-5766.pdf>.
- Pritchett, Lant. *The Rebirth of Education: Schooling Ain't Learning*. Washington: Center for Global Development, 2013.
- Pritchett, Lant and Michael Woolcock. "Solutions When the Solution Is the Problem: Arraying the Disarray in Development." *World Development* 32, no. 2 (2004): 191-212. doi:10.1016/j.worlddev.2003.08.009.
- Putnam, Robert. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press, 1994.
- Rapoza, Kenneth. "Brazil Is Murder Capital Of The World, But Rio Is Safer Than Compton, Detroit, St. Louis...." *Forbes*, January 29, 2016.

<https://www.forbes.com/sites/kenrapoza/2016/01/29/months-before-rio-olympics-murder-rate-rises-in-brazil/#7aaa41ed2790>.

Rasul, Imran and Daniel Rogger. "Management of Bureaucrats and Public Service Delivery: Evidence from the Nigerian Civil Service." *The Economic Journal* (April 2017). doi:10.1111/ecoj.12418.

Reinikka, Ritva and Jakob Svensson. "Local Capture: Evidence from a Central Government Transfer Program in Uganda." *The Quarterly Journal of Economics* 119, no. 2 (2004): 679-705. doi:10.1162/0033553041382120.

Selznick, Philip. *Leadership in Administration: A Sociological Interpretation*. Oakland: University of California Press, 1984.

Silbey, Susan S. "The sociological citizen: Pragmatic and relational regulation in law and organizations." *Regulation & Governance* 5, no. 1 (2011): 1-164. doi:10.1111/j.1748-5991.2011.01106.x.

Tendler, Judith. *Good Government in the Tropics*. Baltimore: Johns Hopkins University Press, 1998.

Tsai, Lily L. *Accountability Without Democracy: Solidary Groups and Public Goods Provision in Rural China*. Cambridge: Cambridge University Press, 2007.

Vegas, Emiliana. "School Choice, Student Performance, and Teacher and School Characteristics: The Chilean Case." *Policy Research Working Paper WPS2833*. Washington, DC: The World Bank, Development Research Group.

Wilson, James Q. *Bureaucracy: What Government Agencies Do And Why They Do It*. New York: Basic Books, 1989.

Wilson, James Q. *Varieties of Police Behavior: The Management of Law and Order in Eight Communities*. Cambridge: Harvard University Press, 1978.

Em Números: Transparência na Educação. Rio de Janeiro: Secretaria de Estado de Educação, 2014.

"Mais de um mês depois, ocupações de escolas no Rio não param de crescer." Une.org.br, April 28, 2016. <https://www.une.org.br/noticias/mais-de-um-mes-depois-ocupacoes-de-escolas-no-rio-nao-param-de-crescer/>.

"SENAI." <http://www.portaldaindustria.com.br/senai/en/about/senai/>.

"Unidade de Polícia Pacificadora." <http://www.upprj.com/>.