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INNOVATION, VOICE AND HIERARCHY IN THE PUBLIC SECTOR: EVIDENCE FROM GHANA'S CIVIL SERVICE

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Abstract

Research on innovation in government often focuses on ideas introduced by senior leaders or managers, but ideas from public servants themselves are an important and underexplored channel for improving performance in government bureaucracies. We provide new evidence on the potential for bottom-up work process innovation, using qualitative and quantitative data gathered in the context of a large-scale productivity training program in Ghana's Civil Service. In contrast to common negative stereotypes of developing country bureaucrats, most officials do have meaningful ideas for improving performance. However, the overwhelming constraint to voicing these ideas is hostility by supervisors to new ideas from their subordinates. We argue that this anecdotally common yet understudied behavior is consistent with theories of psychological attachment to hierarchy rather than alternative theories rooted in material, structural, or cultural resistance to employee voice and innovation. We discuss implications for bottom-up work process innovation in government and interventions to promote it.

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Innovation, Voice, and Hierarchy in the Public Sector: Evidence from Ghana's Civil Service

1. Introduction

After decades of government employees being viewed mainly as the objects of top-down performance management programs, there is growing acceptance that bureaucrats themselves can be important sources of bottom-up work process innovations and performance improvement initiatives. This public innovation movement has become increasingly influential in government and professional circles in recent years, and a small but growing literature in public administration examines innovation in government bureaucracies, often focusing on identifying the individual and institutional predictors of innovation (Damanpour and Schneider 2008, Walker 2008, Teodoro 2011, Torfing and Triantafillou 2016). In contrast, the mechanisms of ideation, voice, and implementation of work process innovations have remained understudied, resulting in a limited understanding of whether and how public servants choose to voice new ideas (or not). Similarly, there is little evidence on how government interventions to promote innovation interact with these mechanisms in order to reduce the barriers to bottom-up innovation.

We address these gaps by conducting a qualitative study of work process innovation in Ghana's civil service, supplemented by quantitative analysis of over 700 innovation plans. We collect this data in the context of a large-scale productivity training program that encouraged lower- and middle-level civil servants to identify and implement work process innovations. We find that most officials do indeed have numerous ideas to make incremental but significant

improvements in work practices, in contrast to prevailing perceptions of civil servants in developing countries as passive and indifferent to organizational performance. The types of new ideas officials propose are meaningful but relatively narrow in scope, with the majority comprising ways to actually implement management practices that already exist on paper but not in practice, or work-arounds for various practical and logistical challenges. This focus on incremental improvement and implementation contrasts the popular image of innovation in government as oriented around new technology, behavioral science, customer service approaches, or design thinking.

Even more importantly, we find that the overwhelming constraint to bottom-up innovation is hostility by senior officials to new ideas from their subordinates. Why would supervisors – who almost universally express a desire for their teams to perform better – be not just indifferent but actively hostile to such ideas? We outline four potential theoretical explanations and their empirical implications. Using rich qualitative and quantitative description, we argue that the observed patterns are inconsistent with potential material, structural, and cultural theories, but are consistent with a theory of supervisors' psychological attachment to hierarchy in which supervisors perceive employee voice as a psychological threat to their position in the hierarchy.

While this hostility contrasts with the positive rhetoric around public innovation, it accords with a significant body of (mainly private sector) studies of voice or "speaking up" (Morrison 2014), which finds that employees often fear repercussions for extra-role behavior such as raising new ideas or concerns. Similarly, a parallel literature in organizational psychology finds that workers' perceived psychological safety is a key antecedent of risk-taking behaviors such as suggesting new ideas (Edmondson 1999). Although the psychological basis for managerial

aversion to employee voice is the subject of a small literature in private sector management in OECD countries (Milliken *et al* 2003; Ashford *et al 2009*; Fast *et al* 2014), the scope for this mechanism is plausibly even larger in the public sector .

Finally, we examine how these dynamics are affected by a training program that aimed to improve productivity and prompt work process innovations. The training was delivered by Ghana's Civil Service Training Centre to slightly over one-third of civil servants in two different formats: one in which officers were trained with equivalent-rank peers from other organizations, and one in which officers were trained together with their entire work team (division) from managers down to junior officials. While interviewees found both formats helpful in identifying potential work process innovations, participants in the individual-level training found implementation difficult due to lack of buy-in from their team members. The team-level training encountered the paradoxical obstacle that having the team's manager in the room was perceived as necessary to get buy-in for implementing the idea, but also had the effect of suppressing open discussion of productivity bottlenecks in the team – which could be perceived as critical of the manager – and steering discussion towards issues that are more anodyne but less impactful. This ambivalent dynamic reinforces the potentially negative interactions between hierarchy and voice in promoting innovation in the civil service.

This paper contributes to the growing literature on innovation in the public sector. Our focus on using rich description to explore the characteristics and mechanisms of employee innovation and voice contrasts but complements existing scholarship in public administration which mainly uses quantitative methods to study the individual, organizational, and systemic determinants of innovation (Damanpour and Schneider 2008, Walker 2008, Salge 2010, Walker 2010, Teodoro 2011, Torfing and Tiantafillou 2016). Although public innovation is

typically understood to take a range of forms, including new services or contractual forms (Walker 2008), we focus more narrowly on work process reforms. Our focus on lower- and middle-level bureaucrats contributes to the small body of studies on "bottom-up" innovation and voice (Fernandez and Moldogaziev 2012; Hassan 2015; Hassan *et al* forthcoming) and on the determinants and consequences of bureaucrats' sense of control over their work, as represented within this special issue by Honig (2018) and Kay *et al* (2018). A deeper understanding of innovation and voice by rank-and-file bureaucrats in the literature seems especially important since Moldogaziev and Resh (2016) find that these internally driven ideas are more likely to be successful than those imposed top-down or by external actors. Finally, this paper extends the study of public innovation – which has so far been studied almost exclusively in OECD countries – to developing countries, and identifies supervisors' psychological attachment to hierarchy as a key potential constraint on bottom-up innovation. Given the salience of hierarchical modes of organization in the public sector and the renewed interest in the behavioral foundations of public administration, this is an important topic both for applied policy purposes and future research.

The remainder of this paper proceeds as follows. Section 2 presents our theoretical framework, and Section 3 gives details of the empirical context and method. Section 4 then provides a thick description of the types of innovations identified by civil servants and examines empirical support for potential theoretical explanations of managerial aversion to voicing innovations from junior officials. Section 5 examines how the training program affected those dynamics and Section 6 concludes.

2. Voice, Hierarchy, and Innovation Promotion

2.1 Voice and Hierarchy

The willingness of non-managerial workers to raise new ideas is the subject of a considerable management literature on improvement-oriented or promotive voice (Morrison 2014). As exercising voice often comes with some degree of risk, workers' perceived psychological safety in their teams and organizations is an important factor driving voice behavior (Edmondson 1999; Edmondson and Lei 2014). Empirically, voice willingness is highly correlated within teams (Morrison *et al* 2011; Frazier and Fainshmidt 2012), and both the voice and psychological safety literatures emphasize that leaders' attitudes are highly consequential. Workers' willingness to speak up will thus be influenced not only by direct encouragement or discouragement from superiors but also because workers dynamically observe leaders' reactions to instances of voice from themselves or others and update their expectations accordingly.

But if promotive voice is good for team and organizational performance (Baer and Frese 2003, Nembhard and Edmondson 2006), why would leaders be hostile to it? This puzzle has received limited scholarly attention, particularly in the public sector context, and so there is little existing theory that explicitly addresses this question. We propose and distinguish between four sets of potential explanations: material, structural, cultural, and psychological.

Managers may fear that employee voice behavior could reduce the material benefits they receive from their position, in two potential ways. First and most obviously, managers may fear that an ambitious employee voicing new ideas could lead to the employee being perceived as more competent than the manager and promoted above them in the hierarchy. However, the scope for this is limited in many public sector environments, which are often characterized by rigid seniority-based promotion systems, and also discounts the ability of managers to

appropriate subordinates' ideas and present them as their own or as a result of their leadership. Alternatively, managers may fear that employee suggestions could lead to change that would reduce their opportunities for corruption or rent-seeking, for example if employees voiced suggestions for tightening cash management or procurement systems.

Structurally, managers may be unreceptive to employee voice and innovation because they see it as incompatible with the rule-based operations of the public sector. In this theory, managers are not opposed to innovation *per se*, but rather see the risks of voice and innovation as greater than the benefits, and thus discourage their employees from engaging in it. This accords with the widespread perception of risk aversion among public sector employees (Albury 2005). As with the material explanations above, in the structural explanation for innovation aversion managers have rational reasons for discouraging employee voice.

An alternative theory is that public sector workers and organizations have a generalized cultural aversion to innovation. While innovation-averse organizational cultures may stem in part from structural or material factors, theories of organizational culture are premised on the idea that the shared expectations, norms, and cognitive frames that comprise culture take on a life of their own and become drivers of behavior distinct from the underlying factors that shaped the culture (Schein 1985). In this view, innovation and worker voice may simply be seen as "not the way we do things here" in many public sector organizations.

Finally, supervisors' hostility to workers' innovation ideas may derive not from a rational cost/benefit calculation or a shared norm that innovation is inappropriate or undesirable, but from psychological factors related to their position in the organization's hierarchy. Particularly relevant is Fast *et al*'s (2014) theory of managerial aversion to employee voice that builds on

theories of the internalization of role expectations (Katz and Kahn 1978), the need for self-efficacy (Cuddy *et al* 2011), and self-discrepancy theory (Higgins 1987) to posit that managers may view employee voice as a threat to their sense of self-efficacy and thus engage in ego defensiveness in response. The psychological aversion to promotive voice thus derives specifically from the supervisor's position in the organizational hierarchy. Although the psychology of leaders' openness to employee voice is widely studied in private sector management (Ashford *et al* 2009; See *et al* 2011), with Hassan *et al* (forthcoming) as a recent exception. This gap is especially striking since hierarchy tends to be an even more salient feature of governmental organizations than private firms.

These four potential mechanisms are each associated with observable empirical conditions that would need to hold in order for the mechanism to be plausible. First, material explanations for supervisory hostility should only exist in contexts where supervisors stand some risk of material losses from subordinate promotive voice. Necessary conditions for this explanation are then the possibility that voice could lead subordinates to be promoted above their supervisors, or that the nature of subordinates' ideas threatens supervisors' rent-seeking opportunities. Second, the structural explanation for supervisory hostility is rooted in the idea that supervisors rationally discourage subordinates' ideas that may push the constraints of existing rules and procedures. A necessary condition for this to be a potential mechanism is that the nature of subordinates' ideas would indeed threaten to introduce practices that risk falling afoul of such regulations.

Distinguishing between the cultural and psychological explanations is more nuanced. A key implication of the cultural explanation for supervisory hostility to innovation is that such beliefs and norms are shared throughout the organization, not simply held by managers. In

contrast to the cultural explanation above, the mechanism is the interaction of public servants' psychological reactions with their position in the organizational hierarchy, so the emphasis is on *differences* in attitudes towards innovation and voice driven by status and hierarchy rather than on the shared norms throughout the organization that work process innovation in the public sector is undesirable. Empirically, to the extent that both supervisors and subordinates perceive promotive voice as undesirable, this would be evidence in favor of the cultural explanation, whereas differences in attitudes between supervisors and subordinates would be evidence in support of the psychological explanation. Similarly, if supervisors' psychological attachment to hierarchy is the cause of the observed hostility, then they should have less favorable attitudes towards innovations proposed by subordinates than to ideas proposed by their peers or superiors.

2.2 Innovation Promotion Interventions

This study's empirical context – an innovation promotion training in Ghana's government – provides a valuable opportunity to study the operation of innovation interventions, which are otherwise surprisingly understudied in both the private and public sector contexts. Despite a large literature recognizing the importance of psychological safety for improvement-oriented voice in private firms (Detert and Burris 2007), we are not aware of any quantitative or qualitative studies of interventions aimed directly at innovation, voice, or psychological safety. The partial exceptions are two evaluations of organizational culture interventions in hospitals in the US (Martinez *et al* 2015; Curry *et al* 2018), each of which targeted at improving psychological safety as one among several aspects of organizational culture. In the public sector, the most relevant intervention study of which we are aware is Andersen *et al*'s (2018) study of leadership training for managers in Denmark, which differs from this study in focusing on leadership style and skills rather than on innovation or employee voice.

Although this study does not aim to provide a quantitative impact evaluation of the training program, situating our analysis within the context of this training gives us an opportunity to better understand the mechanisms through which such training interventions – commonly used around the world – might promote work process innovation and employee voice (or fail to do so). While such interventions are intended to impart skills, ideas, and beliefs to individual trainees, the effectiveness of these is likely to vary according to: 1) individuals' pre-existing skills, ideas, and beliefs about innovation and promotive voice; 2) the mechanisms underlying leaders' real and perceived resistance to employee voice; and 3) the social context and coverage of the intervention, to the extent that individual behavior is determined by group dynamics rather than individual skills, ideas, and beliefs. As the following section discusses, our empirical context lets us observe each of these elements directly, allowing us to conduct rich empirical analysis and build theory on the operation of this common and potentially significant class of interventions.

3. Context and Method

3.1 Ghana's Civil Service and the Training for Productivity Project

The central government ministries that comprise the bulk of Ghana's Civil Service are responsible for setting policy direction for their sector, and for supervising policy implementation and service delivery by their subordinate agencies and departments. Ministries are divided into four to ten directorates or divisions, each headed by a Director. All Civil Service ministries are overseen by the Office of the Head of Civil Service (OHCS), which controls all promotions and personnel movements and creates, promulgates, and monitors a common set of *de jure* management processes across all ministries.

All officers below Chief Director (the bureaucratic heads of ministries) are career officers appointed through a meritocratic process, and enjoy security of tenure. The promotion process is largely based on seniority: officers become eligible to interview for promotion to the next grade after a fixed number of years. While officers can and do fail to be promoted for poor performance either in the interview itself or in the preceding years, in which case they can reinterview for promotion in the subsequent year(s), this occurs in a minority of cases and the *de facto* presumption for most officers is that promotion through the ranks will proceed essentially according to the seniority-based schedule. Most importantly for our analysis, it is nearly impossible for an officer to be promoted *ahead of* the seniority-based schedule – although such "out of turn" promotions are legally possible, this facility is almost never used. This means that there is little realistic possibility of a subordinate being promoted above their superior officer, so that relative positions in the overall hierarchy are almost entirely fixed.

The training program within which we situate our study is the Scheme of Service (SoS) training program delivered by Ghana's Civil Service Training Centre (CSTC), the Civil Service's primary institution for professional development. Each officer is required to undertake a two-week SoS training once every three years in order to be eligible for promotion to the next grade. SoS trainings are conducted in groups of 20-30 individuals who share the same grade (seniority) but work in various organizations across the Civil Service. This two-week training includes one day of training on productivity. The curriculum for this one day of productivity training includes both conceptual and motivation elements as well as practically oriented discussions around how to improve work processes in their own organizations and teams.[i] At the end of the two weeks, participants each completed a two-page "Action Plan" identifying a real productivity bottleneck in their organization and creating a plan to address it (see template

in Appendix A).[ii] This Action Plan was not just an abstract exercise; participants were strongly encouraged to implement it when they returned to their organizations after training, and were informed that they might be questioned about their Action Plan by promotion interview panels in the future.

Following each SoS training, roughly 40 percent of trainees were randomly selected to participate in a team-level productivity training, which consisted of the same training content but delivered to all members of one division from most to least senior (typically five to 20 individuals in total) rather than to a group of individuals of the same grade but from different organizations. The objective of delivering the training to entire teams together was to build consensus around the need for improvement and innovation ideas. Thus the only difference in training content was that teams created a single group Action Plan for their division, rather than separate individual plans. These division-level trainings took place three to six weeks after the individual-level training. In total, approximately 1400 civil servants – approximately one-third of eligible Ghanaian civil servants – participated in either the individual- or team-level trainings during the study period.

3.2 Empirical Method

The empirical content of this study is based on two main data sources: qualitative interviews with a sub-sample of civil servants, and mixed-method analysis of the Action Plans produced by civil servants.

For the qualitative interviews, we randomly selected nine divisions from different ministries in which to conduct interviews: one division representing each of the six potential combinations of training status – i.e. divisions in which officers had participated in either the old or new

versions of the individual-level productivity training during the year, or both, and/or the entire division participated in the team-level training – and three comparison divisions in which no officer had undergone training in that year.[iii] Our sample thus captures the full range of variation in productivity trainings to which divisions had been exposed. The aim of the inclusion of the three comparison divisions was to enable us to ask about innovation in the civil service in the absence of substantive influence or priming by the trainings. In total we interviewed 51 officers across these nine divisions, some of them multiple times.

To improve comparability across divisions, we took advantage of Ghanaian ministries' semi-standardized divisional structure and conducted all our interviews with Policy, Planning, Monitoring, and Evaluation (PPME) divisions, which are responsible for the core tasks of designing policy, monitoring, and reporting on performance across the ministry and its sector agencies. This meant that all interviewees were responsible for a similar range of tasks in their day-to-day work, and thus had similar scopes for innovation. Since personnel management and promotion for all ministries is handled centrally by OHCS, all interviewees operate under a similar set of formal incentives and regulations for innovation- and productivity-related behaviors.

In each sampled division, we conducted in-person, semi-structured interviews with up to five individuals. We ensured that this included the Director of each division, and that officers from across the seniority spectrum were represented. Where an officer in the division had participated in individual-level SoS training at CSTC, we ensured that this officer was interviewed. All interviewees were assured that their responses would be anonymous and non-attributable, to enable interviewees to speak freely and to assuage concerns about supervisors' and colleagues' reactions. Overall interviewees discussed their experiences openly and frankly,

even when discussing issues that painted their colleagues or division in an unflattering light, and triangulation of accounts across individuals revealed little evidence of conscious or subconscious misrepresentation or bias among respondents.

The interviews consisted of open-ended questions with probing follow-up by the interviewer, covering a progression of topics: productivity, work processes, bottlenecks, and constraints in the division's work; experiences of and attitudes toward new ideas and how they do or do not get voiced and implemented in the division; and the officer's experience in the training interventions and subsequent follow-up. Table 1 summarizes the coverage of a typical interview and sample questions, and the full interview guide is presented in Appendix B. For approximately one-third of interviewees we conducted follow-up interviews to probe further based on findings from the first round of interviews.

In addition to these qualitative interviews, we also coded officers' Action Plans on the type of issues addressed and solutions proposed, as well as other characteristics of the plans. Each template was two sides of A4 paper in length. Appendix A presents these templates. In total we were able to collect and code 650 SoS Action Plans and 94 division-level Action Plans.[iv] This represented 94 and 95 percent of individuals and teams that attended each training type, respectively. Coding was conducted mainly by a set of civil servants from OHCS, CSTC, and the Management Services Department who had expertise in training, productivity, and management analysis, and were designated by OHCS to support the research. These coders operated under the supervision of research assistants, and participated in an initial training and follow-up training.[v] The coding scheme was developed by the authors and piloted and adapted in collaboration with these civil servant coders. Full details of the coding variables and options is presented in Appendix C.

Table 1: Interview Coverage and Sample Questions

Topics	*Sample Questions*
• Work processes	What does your work entail, on a day-to-day basis?
• Productivity	How has the Scheme of Service training that you received affected you with respect to productivity?
• Bottlenecks and constraints	Can you tell me about a particular challenge you face in the workplace and what effect this has?
• Experiences of and attitudes toward new ideas	How easy is it to talk about new ideas or innovations in your workplace? What concerns might a junior officer have in approaching their superior with a new and unsolicited idea?
• Experience of the SOS training (if applicable)	How do you feel the training has affected you in relation to think about new ideas and implementing them? As a result of the training on productivity have you changed any work processes you do as a result?

Note: Topics and sample questions are indicative, as interviews were conducted in a semi-structured fashion. Full interview guides are available in Appendix B.

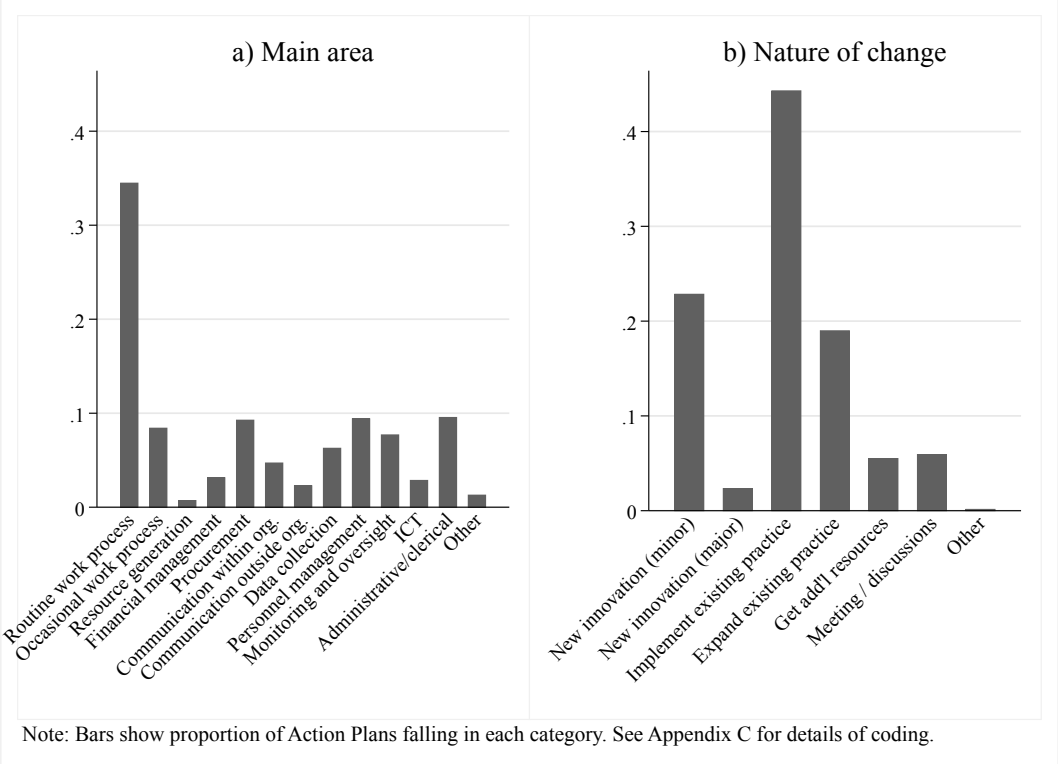
We triangulate these data sources to examine their accuracy and potential biases. The following section draws on them to provide a thick description of proposed work process innovations in Ghana's Civil Service and to examine the empirical support for the four potential mechanisms underlying supervisory hostility to employees' promotive voice.

4. Innovation Ideas and the Dynamics of Voice and Hierarchy

4.1 Types of Innovation Ideas

The types of work process innovations proposed by officers are diverse, as illustrated by the broad distribution of focus areas in Panel (a) of Figure 1. These areas mainly correspond to the functions and responsibilities of the officer or division in question, with routine work processes accounting for the largest share. When we examine the nature of the proposed change in Figure 1, Panel (b), however, two categories stand out: proposals to actually implement management practices or processes that nominally exist already, and proposals for ways to work around logistical gaps or the failings of other work units. We discuss each in turn.

Figure 1: Types of Ideas Proposed in Action Plans



Note: Bars show proportion of Action Plans falling in each category. See Appendix C for details of coding.

As panel (b) of Figure 1 shows, 44 percent of the proposed work process innovations in the Action Plans concern ideas for how to implement processes or practices that exist on paper for their organization or division, but are not currently executed in practice. For example, many Action Plans suggest appropriately handling and filing documents to ensure they are easily located and accessible – a process which should already exist, but is often neglected. While the prevalence of implementing existing practices as a category of "innovation" or "new idea" may seem contradictory, it is consistent with the idea that the gap between *de jure* and *de facto* procedures in developing country governments is a salient problem in developing countries (Andrews 2013). On a theoretical level, the idea that ideas for how to actually implement nominally existing practices can constitute an innovation fits within existing definitions: for example, Walker defines innovations as "new ideas, objects, and practices…which are new *for the unit of adoption*" (2008, 592; emphasis added). Work process innovation is thus most meaningfully understood relative to the existing practice of the organization question, not necessarily relative to "best practice" in an international or even national sense.

Aside from implementing existing practices, the other significant category of proposal contained in the Action Plans constitutes minor innovations: ideas that would change work processes in ways that were either marginal or narrow in scope. While these ideas were also diverse in their focus areas, drawing qualitatively on the Action Plans and interviews reveals a common theme: many proposed work process innovations are in fact creative ways to work around logistical constraints or around the failings of other work units with whom the individual or division must cooperate. These compensatory innovations constitute the second major type of work process innovation identified by civil servants in our sample, alongside the implementation of nominally existing work practices.

For example, many interviewees and Action Plans identified as a constraint that other organizations or divisions frequently delay significantly in submitting information that is needed to prepare reports or policy analysis. Officers suggested various proactive strategies for avoiding these delays, such as sending out a schedule of all reporting deadlines at the beginning of the year to facilitate planning and informal follow-ups, rather than having to seek their supervisors' signatures for formal letters for each individual deadline (Interview D2). Another common constraint identified by officers is equipment deficiencies, with compensatory innovations thus seeking ways to achieve a given function with little resource outlay. For example, an officer noted that the ministry's poor system of record-keeping made it difficult to retrieve needed documents, and proposed that their division start routinely scanning important files so that they would be at hand when later needed (Interview G1).

These compensatory ideas are more mundane than the types of large-scale digital government or business process reengineering efforts on which the innovation literature often focuses. However, they are nonetheless innovative and meaningful relative to: the context in which they are proposed; and the scope of responsibilities of the lower- and middle-level officers who comprise the sample of this study. Although these ideas are not transformative, they constitute incremental steps towards better management and greater efficiency. At the same time, their narrow scope and practical orientation also reflects the limitations of these bottom-up efforts at work process innovation in an environment where there is little encouragement to do so and a low likelihood of support from superiors with greater scope of authority – a theme explored in Section 4.2 below.

Before proceeding to examine whether, how, and why officers actually voice these ideas (or not), a final descriptive question concerns the extent to which ideation actually occurs in the course of officers' routine work. The trainings and Action Plans both required officers to come up with a new idea and constrained the number of such ideas they could report, making it potentially misleading to use the Action Plans as evidence of how innovative officers are. The interview data is a useful complementary data source in this respect, particularly with the respondents from the comparison divisions in which no member had participated in the productivity training recently and thus had not been primed to identify potential work process considerations.

We found that almost all respondents did have multiple innovation ideas – in divisions exposed to training as well as those not exposed – and could trace these ideas to particular moments in their work experience, suggesting that these ideas are not merely superficial responses to priming or training requirements. While some officers were of course more creative or active than others in identifying work process innovations, the ideation of potential innovations and work process improvements at lower- and middle-levels of the Ghanaian civil service appears to be a broad-based phenomenon rather than the product of a small number of exceptionally entrepreneurial individuals.

4.2 Supervisorial Hostility to Employee Voice

The abundance of officers' ideas contrasts sharply with their reluctance to voice them. Indeed, the majority of the ideas brought up by respondents in interviews had been neither voiced nor implemented, and interviewees almost universally pointed to supervisorial hostility as the overwhelming explanation. For example, one officer reported that supervisors "do not want to accept or welcome ideas from people that are below them" (Interview D3), and another

explained “As director they are the gods and so for you to suggest things, they will think ‘Who are you?! What have you seen?’” (Interview D1)

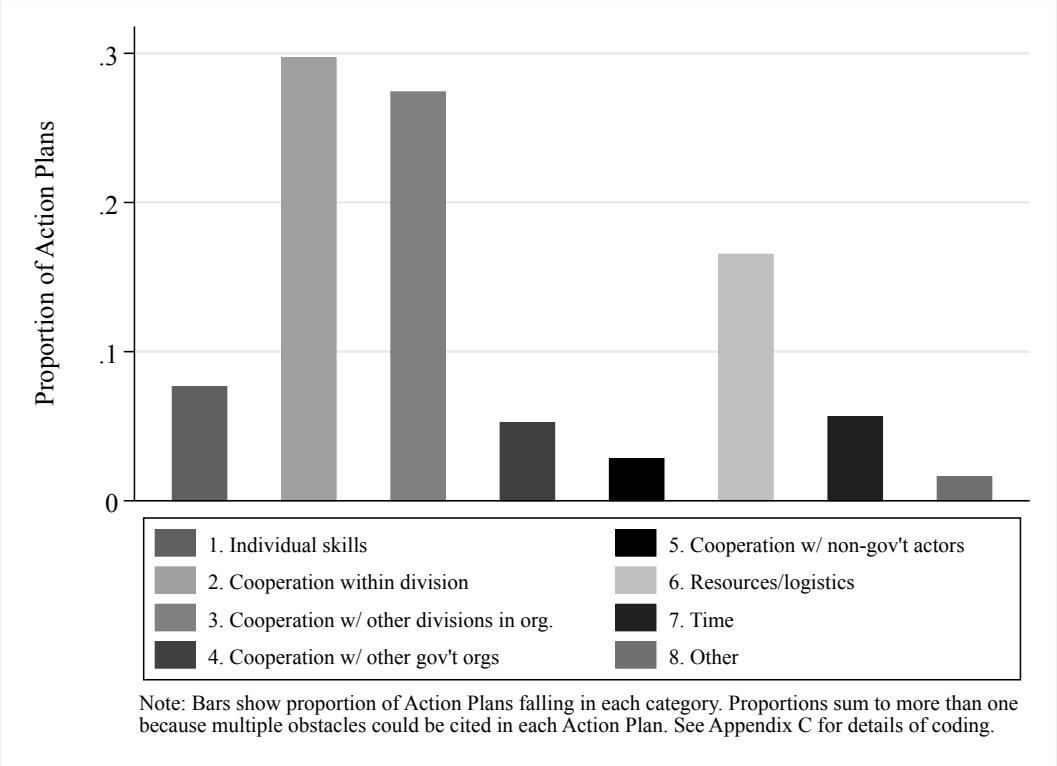
This phenomenon goes far beyond a general perception of unreceptiveness, as many respondents were able to point to specific occasions in which supervisors were actively hostile to employee voice. One officer reported that “One director warned us in a meeting to never speak out at such meetings” (Interview B1), while another explained:

> *Once we were having a team meeting and my colleague suggested an idea and our director said “I am the boss and you cannot decide”. In our informal little meetings, which we have without the director present, my colleague told us they were not going to talk again at meetings and has not done so since.* (Interview A4)

The prevalence of supervisorial hostility to subordinate voice from interviews is also supported by analysis of the types of obstacles officers report foreseeing in their Action Plans. Figure 2 shows that nearly half of all Action Plans report that the main obstacle they envision in implementing their Action Plans is the cooperation of colleagues in their own organization, either within their division or in other divisions. Together, these account for approximately four times as many Action Plans as reported that lack of resources was the main constraint. While officers often did not specify whether they were referring to the cooperation of their supervisor as opposed to other peers or junior colleagues – this reluctance to name specific colleagues or supervisors in writing is not surprising – the verbal descriptions of these obstacles expressed in the training sessions themselves and in subsequent interviews made it clear that their supervisor was typically the key colleague on whose cooperation they relied, and some officers even explicitly identified this in their Action Plan (e.g. Action Plan E10). Far from

being confined to a handful of leaders, the phenomenon of supervisorial hostility to voice seems to be the modal experience of civil servants in Ghana.

Figure 2: Obstacles to Action Plan Implementation



Note: Bars show proportion of Action Plans falling in each category. Proportions sum to more than one because multiple obstacles could be cited in each Action Plan. See Appendix C for details of coding.

What explains supervisors' frequent hostility to work process innovations suggested by officers under their supervision? Recalling the theoretical discussion in Section 2.2, employee voice may: threaten supervisors' *material* interests; pose a danger of running afoul of the *structural* rules and procedures regulating behavior in the civil service; challenge a general *cultural* aversion to innovation in the organization; or pose a *psychological* threat to supervisors' hierarchical position. We now investigate the extent to which our empirical evidence from Ghana is consistent with each of these explanations.

For the material explanation to pertain, subordinate voice or the potential work process innovations it might bring would need to pose some risk of material loss to supervisors. Since the rigid, almost entirely tenure-based promotion system of the Ghana Civil Service makes it practically impossible for supervisors to lose their jobs or for subordinates to be promoted ahead of them, the main potential material risk to supervisors would be if their subordinates' ideas closed off potential sources of rents, for example through stricter financial management procedures. However, we found no obvious examples of such ideas, either in interviews or Action Plans, as most ideas were oriented towards practical operational or administrative tasks.[vi] Indeed, to the extent officers' ideas bore on financial issues, they were as likely to create new opportunities for rent-seeking rather than reduce them. For example, one officer proposed auctioning off twelve broken-down vehicles owned by the ministry, creating opportunities for capture by superior officials (Interview B1). While supervisors may rationally oppose innovations that restrict their rent-seeking opportunities – whether imposed from outside or proposed from within – it seems implausible that this explains their widespread hostility to employee voice in this context.

The structural explanation poses that supervisors may rationally discourage subordinates from trying to implement new ideas if these ideas are likely to push the constraints of existing rules and procedures, and thus result in sanctions against their supervisor and/or unit. In this view, supervisors' negative attitudes are actually aimed at protecting themselves and their subordinates. But while it seems natural that supervisors would block specific ideas that posed such a risk, a blanket policy of hostility to subordinate voice would seem an extreme response. It seems an even more implausible explanation because – as with the material explanation – we find no examples of ideas that potentially contravene civil service regulations, of supervisors justifying their discouragement in these terms, or of such sanctions ever having

occurred. To the extent that officers' innovation ideas interact at all with formal rules and regulations, they actually tend to push in the direction of strengthening compliance with these requirements. This is evident in the frequency with which innovation ideas are related to the implementation of nominally existing processes, as well as the prevalence of compensatory innovations such as proactively reaching out to other divisions and organizations to inform them of reporting deadlines. Rather than creating a clash with bureaucratic structures and procedures, officers' ideas are far more likely to reinforce and strengthen them.

The near-universality with which lower- and middle-level officers perceive their supervisors as hostile to promotive voice does seem to suggest that there is an element of shared norms and expectations – key components of organizational culture – at work. Similarly, the experience shared by many young officers of voicing ideas only to be reprimanded also suggests that there is a process of learning or acculturation that spreads and cements these expectations. For instance, one officer explained, "There are factors within our system which make me feel that I do not want to be deviant for trying to change things. People continue doing things and it stays the same. Things are done in a hierarchy." (Interview G4) At first glance, then, the cultural explanation for supervisorial hostility to employee voice seems to fit with much of the empirical evidence.

Yet the idea that there are shared expectations, norms, and beliefs against employees' promotive voice in the organization runs afoul of another salient piece of evidence: lower- and middle-level officers overwhelmingly view the hierarchical nature of their workplaces as illegitimate, ineffective, and rooted in supervisors' egos and insecurities. This is clearly expressed in the following responses from interviewees:

"Superiors think that they know it all and that you are a small boy. They think 'what are you going to say that I do not know?' The boss can say I have been here for 15 years, I have served on this project and for a junior officer to bring in a good idea it will look like they think that they know best." (Interview A2)

"This is an ego problem; seniors may think 'why did I not think of this?'. They won't take the idea on board. If they did not come up with the idea, they feel that they are not smart enough…The hierarchy is eating the issue up." (Interview F3)

Interviewees were explicit in identifying hierarchical relationships as the cause of this supervisorial hostility: "Because of vertical reporting, ideas are stifled and it ends there." (Interview A1) After explaining that their director had warned his staff never to speak out with ideas or information in meetings, another officer expressed frustration and also showed how this hostility led directly to disengagement:

"Why? Is it because our contributions may be stronger? Is it because it looks as if we are undermining their power? When the big man speaks, the juniors should not speak…This depresses you as you wonder what is your presence? Is it just to occupy space and time? I do not have an option. You keep the idea to yourself and then you go along singing the same tune and at the end of the month take your salary." (Interview B1)

The differences in supervisors' attitudes towards innovation depending on the source of the idea is another sign that supervisorial hostility to employee voice is less about anti-innovation attitudes or the nature of the ideas than about reinforcing their status in the organizational

hierarchy. There is a widespread perception that supervisors "are more comfortable talking about ideas with their level of staff" than with subordinates. (Interview D1) For instance, another officer reported that:

> *"[It is] 100% [true] that seniors are more accepting of an idea that comes from a colleague of equal or higher ranking than from a junior officer. This is the nature of the system…You think to listen to someone higher even if the idea isn't good versus someone lower with good ideas."* (Interview A2)

Even some supervisors acknowledged the frequent hostility that subordinates face in voicing ideas:

> *"In my experience, innovative ideas have been few as people are afraid or shy to share ideas as they end up not getting support from seniors. Something like facial expressions can do so much and people will then give up. There is this state of giving up and so few have come out with any grand ideas."* (Interview F2)

Similarly, officers perceived ideas coming from external sources as having a greater likelihood of acceptance: "I am not pursuing the data science idea I have, I would rather wait for a development partner to suggest it. Change coming from the outside is more receptive [sic] than [ideas coming from] here." (Interview A5) Others describe finding strategies to voice ideas without provoking anger from their supervisors: "as a junior you can massage the issue and make it look like the idea comes from them…Your change will be implemented but this is not a good process." (Interview H5) This variation in openness to innovative ideas depending on the status of the idea's source is widely viewed as illegitimate and undesirable: "to be an

outstanding director, you have to be willing to welcome ideas whether the person is younger or older. You cannot measure due to age, rank or profession." (Interview D3)

Taken together, this evidence suggests that supervisorial hostility to employee voice is less about a shared cultural norm throughout the organization than about the exercise of power to reinforce the status differences associated with organizational hierarchy. Similarly, the centrality of supervisors' egos and of notions of respect and deference is consistent with the explanation that hostility to employee voice is rooted in supervisors' psychological attachment to hierarchy: employee voice threatens supervisors' sense of superior status and the expectations of behavior they internalize due to their status, and so supervisors react with hostility to employee voice (Fast *et al* 2014).

Following Fast *et al* (2014), a final empirical implication of this theory is that cross-sectional variation among supervisors in voice aversion should be negatively correlated with supervisors' sense of self-efficacy. The more insecure a supervisor is about their effectiveness in their role, the greater the psychological threat posed by subordinates' promotive voice and thus the more hostile they will be to it. While our limited sample of divisions and ability to measure supervisors' sense of self-efficacy precludes us from testing this hypothesis formally, one of the interviewed supervisors acknowledged exactly this effect: "When [they as supervisors] feel insecure then they can feel threatened that you will take their shine" by proposing new ideas to them. (Interview A6) Similarly, some interviewees suggested that supervisors who felt "threatened" by new ideas could react by "sweep[ing] it under the carpet" or retaliating – "Your wings could be clipped." (Interview F3)

5. Challenges for Voice-Promoting Interventions

This understanding of bottom-up work process innovation and employee voice – as well as supervisorial hostility to it – is important not just to day-to-day bureaucratic behavior, but also to analyzing efforts to encourage greater work process innovation. This section discusses how these patterns of innovation and voice manifested themselves in the Ghana Civil Service's individual- and team-level productivity trainings, which sought to encourage innovation and promotive voice among lower- and middle-level civil servants. While this paper does not attempt to assess whether the intervention "worked" overall in the sense of a quantitative impact evaluation, our rich qualitative data enables us to analyze of the mechanisms through which the intervention interacted with the opportunities for and barriers to innovation. The findings of the preceding section: civil servants found the trainings useful in encouraging and developing the ideation of potential work process innovations, but supervisors' hostility proved a barrier to implementing them, even (and perhaps especially) when supervisors themselves were included in the training.

Officers reported that trainings did indeed lead to changes in self-reported attitudes towards productivity and innovation, with most officers stating that they found the training helpful and many able to point to more specific insights they had gained. For example, one officer explained how the training led to improved communication and mentoring practices:

> *"My way of doing things has changed as a result of the SoS training. I have realized that I will be moving up in seniority. This training has been a plus, and now I have the time to take juniors through the work and let them know what I am expecting of them,*

rather than [just] making the amendments [on their work] and sending it to them. I talk through the changes with them." (Interview G1)

Other officers also reported concrete follow-up actions, with one officer reporting: "In response to the SoS training I had been on, I observed and conducted a review of the workplace to find out the issues that was [sic] affecting staff and wrote a report on it, which was presented to the Chief Director." (Interview C6) Another officer reported "I have established a technical officers group and we have created a platform to share information about our work tasks, and to develop ideas. One month ago, I asked everyone to come up with a proposal that would develop our ministry and enhance the industry…We need 'smart proposals' using little resources…" (Interview B1)

These types of changes are consistent with Section 4.1's analysis of the types of innovations proposed in officers' Action Plans: innovations tend to be minor and incremental but nevertheless meaningful steps towards better work processes. Officers also commonly stated that they valued the training, with officers who took part in the training saying they wished it took place earlier in the overall two-week SoS training, and numerous officers from the comparison group of divisions (in which no officers had taken part in the SoS training, and which were thus not primed to discuss training) expressing a desire for more training.

But while officers found the trainings themselves valuable for generating ideas, the expectation of supervisorial hostility to them voicing these ideas upon returning to their workplaces cast a shadow over the trainings. These dynamics were even more pronounced in the team-level trainings, in which an entire division conducted the same innovation training together with their supervisor. While some officers expressed that it was useful to have their supervisor

present at the discussion, at least as common was the reaction that the supervisors' presence was actually counterproductive. For example, one officer explained: "With your superior [present] it was not beneficial. You have to be cautious about the superior-subordinate relationship…I could not voice my feelings." (Interview G6) Participants and facilitators alike expressed a perception that the quality of conversations in team-level trainings in which the supervisor was present (as opposed to those which the supervisor could not attend) was lower on average, with diagnosis of problems tending towards neutral and inoffensive topics rather than more significant problems of team dynamics. Indeed, the team-level Action Plans are significantly more likely that the individual Action Plans to propose anodyne measures such as accessing resources (30.1 percent of team-level Action Plans, versus 20.2 percent of individual-level Action Plans) or providing training (29.8 percent versus 20.3 percent), and less likely to propose further meetings within the division in which internal team dynamics could be addressed (31.9 percent versus 46.3 percent).

This decidedly mixed reaction to including supervisors in innovation conversations demonstrates the importance of understanding the mechanism driving supervisorial attitudes to employee voice. If there were a shared cultural norm of not discussing such ideas, then a group-based intervention would be necessary to collectively stimulate understanding and commitment among team members in order to shift the whole team out of their un-innovative equilibrium. However, if the main constraint on innovation was instead supervisors' psychologically driven hostility to employee voice then including supervisors may actually have reduced the intervention's effectiveness. Alternatively, an intervention targeted specifically at supervisors' attitudes could have been a useful complement or perhaps even cost-effective substitute for the main intervention, since these supervisorial attitudes appear to

be a significant constraint while innovative ideas from lower- and middle-level officers do not appear to be.

6. Conclusion

This article has sought to demonstrate that: 1) while lower- and middle-level civil servants in Ghana routinely identify potential work process innovations, they rarely voice them due to hostility from their supervisors; 2) this hostility is motivated by supervisors' psychological attachment to their hierarchical positions; and 3) these hierarchical dynamics had unanticipated negative consequences for a government innovation promotion intervention.

While our findings of course pertain to our empirical context – the civil service of Ghana – the core theoretical contribution is likely to be of much wider relevance. The existing organizational psychology literature on supervisorial aversion to employee voice derives from the very different context of private sector firms in OECD countries (Milliken *et al* 2003; Ashford *et al 2009*; Fast *et al* 2014), and the mechanism is anecdotally widespread in many governments. Of course, this is not to argue that all aversion to employee voice is psychologically motivated, and in other contexts the material, structural, and cultural theories may well apply. Rather, our unique empirical context allows us to disentangle these explanations to better identify and articulate how supervisors' psychological attachment to their hierarchical positions can lead to hostility to employee voice. Given the centrality of hierarchy to public bureaucracies worldwide and the increasing attention to behavioral factors in public administration, this insight is likely to have broad theoretical and empirical relevance.

Endnotes

[i] During the study period, CSTC experimented with introducing a new productivity curriculum, so that within each day of productivity training half of participants took the "old" version of the training and half took the "new" version. Both versions shared the objective of stimulating officers to think critically about productivity and work processes in their organizations and how to improve them, with some differences in course content and style.

[ii] The new version of the productivity training included the development of an Action Plan during the day of productivity training itself. As a result, participants in the new version of the training completed two Action Plans during their training: one during the productivity training, and one at the end of the SoS training. These were not necessarily focused on the same topic.

[iii] The sampled divisions came from the following ministries: Ministry of Gender, Children and Social Protection; Ministry of the Interior; Ministry of Foreign Affairs; Ministry of Local Government and Rural Development; Ministry of Youth and Sport; Ministry of Tourism, Culture and Creative Arts; Ministry of Environment, Science, Technology and Innovation; Ministry of Transport; and Ministry of Food and Agriculture.

[iv] This figure includes Action Plans from both the old and new versions of the SoS training, as discussed above.

[v] For each Action Plan, coders assigned subjective scores on a 1-5 Likert scale for the level of detail, feasibility, and level of ambition of the Action Plan. On each indicator, PPME divisions were not significantly different from other divisions.

[vi] One officer mentioned supervisors' material interests as a potential motivation for resistance to an idea, but could not provide an example (Interview A9).

References

Albury, David. 2005. "Fostering Innovation in Public Services." *Public Money and Management* 25(1): 51-56.

Andersen, Lotte Bogh, Bente Bjornholt, Louise Ladegaard Bro, and Christina Holm-Petersen. 2018. "Achieving High Quality Through Transformational Leadership: A Qualitative Multilevel Analysis of Transformational Leadership and Perceived Professional Quality." *Public Personnel Management* 47(1): 51-72.

Andrews, Matt. 2013. *The Limits of Institutional Reform in Development: Changing Rules for Realistic Solutions*. Cambridge: Cambridge University Press.

Ashford, Susan, Kathleen Sutcliffe, and Marlys Christianson. 2009. "Speaking Up and Speaking Out: The Leadership Dynamics of Voice in Organizations." In: Greenberg, J, Edwards, M (eds) *Voice and Silence in Organizations*. Bingley: Emerald Group Publishing Ltd, 175–202.

Baer, Markus, and Michael Frese. 2003. "Innovation is not enough: climates for initiative and psychological safety, process innovations, and firm performance." *Journal of Organizational Behavior* 24: 45-68.

Cuddy, A. J. C., Glick, P., & Beninger, A. 2011. "The dynamics of warmth and competence judgments, and their outcomes in organizations." *Research in Organizational Behavior,* 31: 73–98.

Curry, Leslie, Marie Brault, Erika Linnander,…,Elizabeth Bradley. 2018. "Influencing organisational culture to improve hospital performance in care of patients with acute myocardial infarction: a mixed- methods intervention study." *BMJ Quality and Safety* 27(3): 207-217.

Damanpour, Fariborz, and Marguerite Schneider. 2008. "Characteristics of Innovation and Innovation Adoption in Public Organizations: Assessing the Role of Managers." *Journal of Public Administration Research and Theory* 19: 495-522.

Detert, James, and Ethan Burris. 2007. "Leadership Behavior and Employee Voice: Is the Door Really Open?" *Academy of Management Journal* 50(4): 869-884.

Edmondson, Amy. 1999. "Psychological Safety and Learning Behavior in Work Teams." *Administrative Science Quarterly* 44(2): 350-383.

Edmondson, Amy, and Zhike Lei. 2014. "Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct." *Annual Review of Organizational Psychology and Organizational Behavior*, 23-43.

Fast, Nathanael, Ethan Burris, and Caroline Bartel. 2014. "Managing to Stay in the Dark: Managerial Self-Efficacy, Ego Defensiveness, and the Aversion to Employee Voice." *Academy of Management Journal* 57(4): 1013-34.

Fernandez, Sergio, and Tima Moldogaziev. 2012. "Using Employee Empowerment to Encourage Innovative Behavior in the Public Sector." *Journal of Public Administration Research and Theory* 23: 155-187.

Frazier, M. Lance, and Stav Fainshmidt. 2012. "Voice Climate, Work Outcomes, and the Mediating Role of Psychological Empowerment: A Multilevel Examination". *Group and Organization Management* 37(6): 691-715.

Hassan, Shahidul. 2015. "The Importance of Ethical Leadership and Personal Control in Promoting Improvement-Centered Voice among Government Employees." *Journal of Public Administration Research and Theory* 25: 697-719.

Hassan, Shahidul, Leisha DeHart-Davis, and Zhongnan Jiang. Forthcoming. "How Empowering Leadership Reduces Employee Silence in Public Organizations." *Public Administration*.

Higgins, E. T. 1987. "Self-discrepancy: A theory relating self and affect." *Psychological Review* 94: 319–340.

Honig, Dan. 2018. "Goin' Out to the Country: World Bank Staff Decentralization and Aid Project Success." Mimeo.

Katz, D., & Kahn, R. L. 1978. *The social psychology of organizations.* New York: John Wiley & Sons.

Kay, Kerenssa, Daniel Rogger, and Iman Sen. 2018. “Bureaucratic Locus of Control.” Mimeo.

Martinez, Elizabeth, Nancy Beaulieu, Robert Gibbons, Peter Pronovost, and Thomas Wang. 2015. “Organizational Culture and Performance.” *AER Papers and Proceedings* 105(5): 331-335.

Milliken, Frances, Elizabeth Morrison, and Patricia Hewlin. 2003. “An Exploratory Study of Employee Silence: Issues that Employees Don’t Communicate Upward and Why”. *Journal of Management Studies* 40(6): 1453-76.

Moldogaziev, Tima, and William Resh. 2016. “A Systems Theory Approach to Innovation Implementation: Why Organizational Location Matters.” *Journal of Public Administration Research and Theory*, 677-692.

Morrison, Elizabeth. 2014. “Employee Voice and Silence.” *Annual Review of Organizational Psychology and Organizational Behavior*, 173-97.

Morrison, Elizabeth, Dishan Kamdar, and Sara Wheeler-Smith. 2011. “Speaking Up in Groups: A Cross-Level Study of Group Voice Climate and Voice”. *Journal of Applied Psychology* 96(1): 183-191.

Nembhard, Ingrid, and Amy Edmondson. 2006. “Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams.” *Journal of Organizational Behavior* 27: 941-966.

Salge, Torsten. 2010. “A Behavioral Model of Innovative Search: Evidence from Public Hospital Services.” *Journal of Public Administration Research and Theory* 21: 181-210.

Schein, Edgar H. 1985. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.

See, Kelly, Elizabeth Morrison, Naomi Rothman, and Jack Soll. 2011. “The detrimental effects of power on confidence, advice taking, and accuracy.” *Organizational Behavior and Human Decision Processes* 116: 272-285.

Teodoro, Manuel. 2011. *Bureaucratic Ambition: Careers, Motives, and the Innovative Administrator.* Baltimore: Johns Hopkins University Press

Torfing, Jacob, and Peter Triantafillou. 2016. *Enhancing Public Innovation by Transforming Public Governance.* Cambridge: Cambridge University Press.

Walker, Richard. 2008. “An Empirical Evaluation of Innovation Types and Organizational and Environmental Characteristics: Towards a Configuration Framework.” *Journal of Public Administration Research and Theory* 18, 591-615.