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Process Versus Outcome Accountability

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Abstract and Keywords

Private- and public-sector managers face a recurring organizational-design dilemma: the relative emphasis to place on process-versus-outcome accountability in evaluating employee performance. This chapter reviews experimental-psychological research that emphasizes the benefits of process accountability and then notes blind spots in that literature, especially the insensitivity to the relational signals that accountability manipulations convey about how evaluators view the evaluated. The chapter also examines real-world ideologically-driven debates over accountability design in which partisans tend to favor no-excuses forms of outcome accountability for those deemed untrustworthy and uncertainty-buffering forms of process accountability for the trustworthy. Finally, an integrative framework is proposed that examines how managers can balance the inevitable tradeoffs between decision-making control enhanced under process accountability and innovation fostered under outcome accountability, and sheds light on how agent empowerment can compensate for the deficiencies of both systems.

Keywords: accountability, process, outcome, ideology, empowerment, trustworthiness

Introduction

As this handbook attests, accountability is a multifaceted phenomenon that can be studied from a wide range of theoretical and methodological perspectives. This chapter grapples with a problem that has largely fallen between the disciplinary cracks: the choice that both private- and public-sector managers often face between oversight systems that focus on holding others accountable either for their efforts to achieve outcomes (with minimal regard for the accuracy or quality of those outcomes—pure

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process accountability) or for their effectiveness in actually delivering outcomes (with minimal regard for the processes utilized to arrive at these outcomes—pure outcome accountability) (Beach and Mitchell 1978; Curley, Yates, and Abrams 1986). Of course, the choice need not be dichotomous. Most accountability systems are evolving process-outcome hybrids that lean in one direction or another but that, depending on task and context, assign shifting weights to process-oriented versus outcome-oriented standards for judging performance (Eisenhardt 1985; 1989; Tetlock and Mellers 2011b).

Although one might suppose designing process or outcome accountability systems to be a dry, technocratic affair of “principals” crafting optimal incentives for “agents” who have varying degrees of risk aversion, debates between proponents of process-oriented vs. outcome-oriented systems have proven surprisingly spirited and even occasionally acrimonious, breaking out in diverse organizational domains, including intelligence analysis (Tetlock and Mellers 2011a), public schools (Chubb and Moe 1988), equal employment opportunity (EEO) enforcement (Tetlock, Vieider, Patil, and Grant 2013), auditing (Cohen, Krishnamoorthy, Peytcheva, and Wright 2011), investment strategies (Sutcliffe and McNamara 2001), sales-force management (Anderson and Oliver 1987; Cravens, Ingram, LaForge, and Young 1993), health care (Rubin, Pronovost, and Diette 2001), information systems development (Kirsch 1996), human resource systems (Arthur 1994), product manufacturing (Hammer and Stanton 1999), and business innovation (Coyne 1997; Simons 2005). Proponents of process accountability often argue that it is prudent to incentivize the adoption of best practices (processes) that employees can control—and, that it is both inefficient and unfair to hold subordinates responsible for outcomes beyond their control (a policy that merely rewards the lucky and punishes the unlucky (Bertrand and Mullainathan 2001)). By contrast, proponents of outcome accountability often counter that it is essential to pressure employees to find new ingenious ways of bringing “uncontrollable” outcomes under control (Simons 2005). In this view, process accountability can too easily degenerate into bureaucratic rituals in which employees adhere to widely-accepted processes within the organization and make excuses for poor outcomes by claiming that they did all they could within the bounds of organizational norms and “best practices” (Meyer and Rowan 1977; Tetlock and Mellers 2011b; Wilson 1989).

The remainder of this chapter is dedicated to exploring the actual and perceived consequences of process and outcome accountability—and is divided into three sections. First, we summarize the experimental literature on the actual pros and cons of process versus outcome accountability with respect to judgment and choice dependent variables—a literature that stresses the advantages of process accountability but that has serious methodological limitations. Second, we examine some real-world political debates that have arisen over the pros and cons of process versus outcome accountability—a body of work that highlights the perceived strengths and weaknesses of each type of accountability among observers of varying ideological persuasions but that sheds less light on actual strengths and weaknesses. Third, we propose a conceptual framework that

generates novel hypotheses about the conditions under which process and outcome forms of accountability are likely to improve or degrade the quality of judgment and choice and that offers guidelines for practitioners about how to achieve the best of both accountability worlds.

The Laboratory Literature on Process versus Outcome Accountability

Experimental research on process versus outcome accountability tends to emphasize the relative benefits of process accountability (Lerner and Tetlock 1999). For example, studies have shown that process accountability reduces escalating commitment to sunk costs (Simonson and Staw 1992), produces better-calibrated probability judgments (Siegel-Jacobs and Yates 1996), enhances performance on tasks requiring analytical (p. 71) processing (Langhe, Osselaer, and Wierenga 2011), enriches attentiveness and alertness in making judgments (Brtek and Motowidlo 2002), and motivates more thorough information search and analysis (Doney and Armstrong 1996).

Experimental psychologists have advanced a number of reasons why, relative to outcome accountability, process accountability often yields more empirically accurate and logically defensible judgments. For instance, they have proposed that outcome accountability pushes decision-makers' stress levels into a super-optimal zone that rigidifies cognition, whereas process accountability mitigates evaluation apprehension by reassuring decision-makers that they will be "socially safe" as long as they deploy defensible procedures (Siegel-Jacobs and Yates 1996). This reassurance is especially important for decision-makers who believe they live in a world of irreducible uncertainty (Hammond 1995).

Experimental psychologists have also suggested that process accountability, by encouraging more thorough evaluation of available information (Brtek and Motowidlo 2002; Dreu, Koole, and Steinel 2000; Ford and Weldon 1981; Tetlock 1983; Tetlock and Boettger 1989) focuses decision-makers' attention on "how" to make sound decisions (Siegel-Jacobs and Yates 1996). Outcome accountability, by contrast, merely conveys to the decision-maker that judgments need to be accurate without providing guidance on how to achieve this goal. This argument is also advanced in debates about how best to improve health care quality (a sector where outcomes are often beyond the provider's control). Process, as opposed to outcome, measures provide information that is actionable—i.e., they identify for clinicians which processes have the potential to affect patient outcomes—and thus can be used to provide feedback for quality improvement (Rubin et al. 2001).

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Outcome accountability, however, is not without its advocates. For example, Langhe et al. (2011) demonstrate that the benefits of process accountability accrue only for tasks with certain characteristics. They found that although outcome accountability decreased performance on simple tasks that required analytical processing, it increased performance on configural tasks that required more holistic processing. Studies have also found that pressures to justify procedures can lead people under process accountability to shift decision-making weights rapidly, causing them to fall prey to the decoy effect and to adopt narrower decision-making strategies (Slaughter, Bagger, and Li 2006). Lastly, Arkes, Dawes, and Christensen (1986) found that when held accountable for the accuracy of their judgments, decision makers were less likely to base their judgments on linear additive rules that the experimenters explicitly conveyed to them to complete the probabilistic task, instead setting out to find more optimal outcomes beyond what decision process norms allowed. This suggests that outcome accountability can sometimes motivate decision makers to seek novel and ingenious strategies that compensate for inadequate established procedures, in order to optimize desired outcomes (Simons 2005; Tetlock and Mellers 2011b).

However, the experimental work reviewed here suffers from at least two major methodological limitations which call into question its applicability to actual organizations. The first concerns the mismatch between experimental manipulations of (p. 72) process accountability and real-world forms of process accountability. Institutional theorists have long noted that decision makers in social systems are typically constrained by normative guidelines when they select judgment and choice strategies (Edelman 1985; Feldman and March 1981; Meyer and Rowan 1977; Pfeffer 1981). To meet societal demands for rationality and fairness, organizations often adopt formal processes and rules for gathering, storing, communicating, and using information (Feldman and March 1981). These rules are deeply embedded within the institutions' symbolic systems, relational systems, routines, and artifacts (Scott 2008) and passed on to newcomers during organizational socialization (Maanen and Schein 1979).

However, the vast majority of laboratory experiments reviewed above have tended to create unusual (deliberately normatively ambiguous) forms of process accountability in which participants are unaware of what their evaluators deem to be "effective" or "quality" procedures for making judgments and decisions (Ashton 1992; Brtek and Motowidlo 2002; Dreu et al. 2000; Slaughter et al. 2006). By contrast, decision makers under outcome accountability are often told that their performance evaluations will be based on comparison of their responses to predictions derived from statistical models (Arkes et al. 1986; Langhe et al. 2011; Siegel-Jacobs and Yates 1996), or to the judgments of fictitious subject matter experts (Brtek and Motowidlo 2002; Slaughter et al. 2006), or to judgments of team members (Klimoski 1972), or based on the reactions of recipients of the decisions (Adelberg and Batson 1978; Fandt and Ferris 1990). In brief, the normative standards governing what constitutes a high quality decision were often known to the decision maker.

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The benefits of process accountability in the lab then are not wholly surprising. Most research demonstrates that under normative ambiguity, people select the most broadly defensible decision strategies possible, which in turn, leads to more systematic, even-handed, and integratively complex thinking (Tetlock 1983; Tetlock, Skitka, and Boettger 1989). However, process accountability in organizations with well-defined norms about what constitutes “quality” procedures could potentially degrade quality of judgment and choice if it simply encourages decision makers to rely on the acceptability heuristic to convince influential constituencies that their processes are rational and that they are reasonably intelligent (Pfeffer 1981; Schlenker 1980; Tedeschi 1981)—after all, utilizing widely accepted beliefs of what is deemed “intelligent” often serves to assure managers that due care was taken to make rational decisions (Langley 1989). As such, conformity to inadequate or defective practices can be a potential consequence of heavy-handed types of process accountability.

The second limitation concerns the extent to which experimental manipulations of process and outcome accountability convey socio-relational signals to the decision maker. The imposition of accountability systems often places the decision maker in a de facto subordinate relationship by defining to whom he or she is accountable and the normative grounds under which evaluations will be made (Tetlock 1985). Situated-identity theory and related frameworks suggest that people in any interpersonal interaction are in a continuous process of negotiating identities vis-à-vis each other, often alternating rapidly between the roles of claiming identities for themselves (e.g., trustworthy, competent, likable) and granting, to varying degrees, the identity claims of others (Tetlock 1984). In principle, everything people do can be scaled for its identity implications—if I do x or y, what conclusions will others draw about my character? Given that this other party has acted in x or y fashion toward me, what message does that send about the types of situated identities that they are prepared to grant me in this situation?

These micro-signals can have major effects on the cognitive, emotional, or behavioral responses of agents to accountability demands. An ongoing meta-analysis of the accountability literature by Vieider and Tetlock (2011) sheds light on the various micro-signals that can be conveyed between principal and agent and the sensitivity of these signals to minimal changes in context or messaging. A shift in one or two words can reframe accountability from polite request to categorical demand (from “we ask that you explain how you reached your conclusions...” to “you will be required to explain how you reached your conclusions...”) and from an inquisitorial-prosecutorial tone to a friendly expression-of-curiosity tone (from “justify/defend your views” to “help us to understand why you see things as you do”). A shift in one or two words can also change from whom people believe the request or demand has sprung; an audience more likely to be sympathetic (e.g., members of one’s team or in-group) or intelligently skeptical (e.g., neutral experts) or hostile (e.g., members of a rival team or out-group); an audience comprised of lower-, same-, or higher-status persons (e.g., fellow students or doctoral fellows); an audience whose goal is simply judging you (e.g., someone “grading” your

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responses) versus one whose goal is getting to know you and treating you with respect as someone who has a capacity to contribute to the investigation (e.g., someone who is genuinely curious about your views).

Although the effects of various micro-signals on decision-making remain to be fully investigated, it is quite plausible that previous studies have conveyed more positive relational signals to those under process accountability than to those under outcome accountability. For example, in most process accountability manipulations, participants were informed that an interview would be conducted where they would be asked about the processes they utilized to make their decisions, potentially conveying a sense of acceptance of the subjects as important and valuable contributors to the experiment (Arkes, Christensen, Lai and Blumer 1987; Ashton 1992; Brtek and Motowidlo 2002; Dreu, Beersma, Stroebe, and Euwema 2006; Dreu et al. 2000; Langhe et al. 2011; Ford and Weldon 1981; Hagafors and Brehmer 1983; McAllister, Mitchell, and Beach 1979; Rozelle and Baxter 1981; Siegel-Jacobs and Yates 1996; Simonson and Nye 1992; Simonson and Staw 1992; Tetlock and Boettger 1989; Tetlock and Kim 1987). For the outcome accountability manipulations, the opportunity to justify one's outcomes face-to-face varied across studies, and quite likely signaled a lack of respect and regard for the competencies, abilities, and contributions of the subjects. The studies that did allow for an interview were only conducted so the participants could explain why they succeeded or failed in reaching optimal outcomes (Adelberg and Batson 1978; Brtek and Motowidlo 2002; Fandt and Ferris 1990; Klimoski 1972; Simonson and Staw 1992). In other cases, there was no face-to-face interaction with the interviewer, and decision makers only received monetary bonuses for reaching optimal outcomes (Arkes et al. 1986; Langhe et al. 2011; Siegel-Jacobs and Yates 1996; Slaughter et al. 2006). If this analysis of the relational signals in each accountability condition is accurate, it suggests another possible explanation for the cognitive benefits of process accountability.

There is no inherent reason, however, why process and outcome accountability must always be linked respectively to positive and negative relational signals. For instance, it is easy to imagine forms of process accountability that convey to participants a lack of respect for the competencies of the decision maker—e.g., they are being held accountable for processes because the evaluators lack the confidence in their ability to choose sound processes on their own and want to ensure that they are adopting agreed-upon strategies to achieve desired objectives (Jaworski 1988; Merchant 1988). Here we should expect the effects of process accountability to be less beneficial. Substantial bodies of work in social psychology and organizational behavior demonstrate that people react negatively to institutional control systems that depict them as lazy and incompetent (Enzle and Anderson 1993; Schoorman, Mayer, and Davis 2007; Sutton and Galunic 1996). For example, instituting close-knit monitoring systems that signal lack of trust has been shown to lead experimental agents to become less creative (Amabile 1979), less trustworthy (Malhotra and Murnighan 2002), and less willing to engage in organizational citizenship behavior crucial for the effective function of most collectivities (Organ 1988).

Because of the lack of consideration of normative structures and relational micro-signaling in laboratory research on process and outcome accountability, it is difficult to generalize these studies to supplement a broader understanding of these accountability systems as they operate in organizational life. As an alternative, we now turn our attention to real-world debates about these accountability systems in the realm of public policy.

Real-World Debates about the Pros and Cons of Process versus Outcome Accountability

Debates over the merits of process vs. outcome accountability have popped up in a variety of policy arenas. Here we focus on three spheres: disputes over the criteria for evaluating teacher performance in public schools, for evaluating the equal employment opportunity (EEO) performance of personnel managers, and for evaluating the accuracy of national intelligence estimates generated by intelligence analysts.

The same underlying question about normative ground rules recurs across domains. To what extent should people be responsible for *how* they do their jobs (trying hard to achieve organizational goals using best known practices) and secondarily for *what* they actually accomplish, versus responsible for *what* they accomplish and secondarily for *how* they manage to do it? Proponents of pure-process accountability favor (p. 75) the former—enforcing EEO norms on the basis of how carefully managers ensure that personnel decisions are grounded in job-relevant performance data, not on statistical quotas specifying the target representation of minorities across jobs; judging teachers on their teaching performance (e.g., lesson plans, clarity of delivery), not on student test scores; and judging intelligence analysts on how rigorously they assess available evidence, not on whether they get it right or wrong. By contrast, proponents of pure-outcome accountability favor the latter, shifting focus from evaluating inputs to evaluating outcomes—evaluating managerial efforts to create an EEO workplace by the actual minority numbers in the firm; evaluating teacher performance by student test scores; and evaluating intelligence analysts' efforts by actual predictive track records.

In a correlational field study, Tetlock et al. (2013) found a rather strong connection between support for outcome accountability and suspicions about agent trustworthiness, or perceptions of how likely these agents are to be “opportunistic” when no one is looking. Managers often tacitly assume that outcome accountability is harder to game than is process accountability—and therefore more appropriate for less conscientious or honest agents. Process accountability is seen as too vulnerable to the critique of “cosmetic compliance” in which skeptics worry that it is too easy to fake inputs: for personnel officers in corporations to pretend to be in compliance with equal-employment-opportunity rules even though they are not and minority advancement is languishing; or for public school administrators to pretend to implement best educational practices even

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though they are not and student achievement test scores are languishing; or for intelligence analysts to pretend to be in compliance with rigorous epistemic norms for processing evidence even though they are not and serious errors are creeping into national intelligence estimates. Political observers may offer kinder, gentler forms of process accountability only to those agents whom they classify as trustworthy.

Consistent with this reasoning, Tetlock et al. (2013) found a strong ideology- by-institutional-domain interaction. In early twenty-first-century America, liberal managers tended to be more skeptical of private-sector corporations and more tolerant of public-sector employees and their unions whereas conservatives tended to have the mirror-image orientation. As such, American liberals were more likely to prefer low-tolerance-for-excuses, outcome accountability for personnel decision-makers charged with implementing equal employment opportunity laws in private sector organizations, whereas American conservatives were more likely to prefer strict outcome accountability for public school teachers and their unions.

Tetlock et al. (2013) also examined the extent to which liberals and conservatives would alter their accountability-regime preferences in response to evidence. They found that ideologically motivated observers often find ingenious ways of preserving their preconceptions about agent trustworthiness. For example, participants were informed that teachers have responded to an outcome accountability system by finding sneaky ways of adjusting test scores. The dominant reaction of liberals was that, although this was deplorable, the outcome-accountability system drove teachers to this desperate measure (p. 76) (thereby protecting the perception of teachers as fundamentally trustworthy, albeit corruptible by a flawed system). Liberals thus preferred shifting from an outcome to a process accountability system. The dominant reaction of conservatives was that the cheating reinforced their view of the public school system—and of the need for more rigorous outcome accountability.

The flipside pattern arose when liberals and conservatives learned that corporate personnel managers had responded to an outcome accountability system mandating numerical goals for minority advancement by finding sneaky ways of playing the numbers. Now the dominant reaction of conservatives was that, although this was deplorable, the perverse outcome-accountability system drove managers to this extreme (again, thereby protecting the perceived trustworthiness of the agents who had been corrupted by a flawed accountability system). By contrast, liberals saw the pattern of cheating as reinforcing their view of continuing racial bias among managers—and their view of the need for even more rigorous outcome accountability.

These ideologically driven debates over accountability systems tell us quite a bit about the power of motivated reasoning in managerial judgments about how to design accountability systems. All too often, managers appear to be prisoners of their accountability preconceptions. Unfortunately, however, these debates tell us little about the actual effectiveness of process versus outcome accountability.

An Integrative Framework: Accountability and Empowerment

In this section, we attempt to correct for the limitations of both previous laboratory work on accountability and correlational field studies of debates over accountability design. We propose an integrative framework for exploring the impact of process and outcome accountability grounded in the classic tension between exploitation and exploration in organizational learning (Levitt and March 1988; March 1991): the tension between extracting maximum utility from established routines (by encouraging process compliance with best practices, often by reducing discretion by relying on statistical models) and the need to encourage agents to think outside the proverbial box (by identifying shortcomings in standard processes and innovating). We shall also argue that the effects of process and outcome accountability hinge less on the process–outcome distinction than they do on the social-identity signals that accountability sends to employees about how managers view them—and the resulting impact on psychological empowerment. Those forms of process and outcome accountability that “empower” employees are more likely to stimulate innovation whereas those that “disempower” employees are more likely to yield perfunctory compliance (if not passive or active resistance).

(p. 77) **The Challenge of Balancing Control and Innovation**

Organizations are often under pressure—from both regulators and competitors—to standardize decision practices to conform to best practice guidelines of one form or another (Sutcliffe and McNamara 2001). This trend is evident in many settings, including intelligence analysis, risk analysis of financial products, tax compliance, patient medical care, product manufacturing companies, and human resources (e.g., termination, layoff, and hiring processes). By formalizing decision processes, organizations can both communicate regulatory compliance and exploit existing knowledge routines for enhancing reliability (Dean and Sharfman 1993; Hackman and Wageman 1995). Research on organizational politics suggests that control over process is a key source of power (Crozier 1964; Pettigrew 1973), and given the information asymmetries about how things really work that often favor employees over management, implementing formal procedures is one means by which management can reduce its disadvantage and gain control over its agents (Eisenhardt 1985; Fama and Jensen 1986).

Of course, there is always the risk that best practices will ossify into bureaucratic ritualism and persist long after a changing world has made them obsolete. Such stagnation is often explained by a mix of organizational processes. For instance, organizational socialization, the process by which one learns “the ropes” of particular roles, fosters the internalization of standard practices among newcomers and shapes their perspectives for interpreting new information (Maanen and Schein 1979). These practices gradually become taken for granted as “the way things are done” (Berger and Luckmann 1966)—and eventually become automated and unfold unconsciously (DiMaggio and Powell 1983; Meyer and Rowan 1977). This automation can result in rigidities or organizational inertia (Mintzberg 1978; Starbuck 1983; Tushman and Romanelli 1985).

The net result is that managers confront trade-offs between control and innovation. They want to encourage process compliance but also to encourage creative workarounds for processes that have outlived their usefulness. This trade-off is a recurring refrain in management theory (Detert, Schroeder, and Mauriel 2000; Eisenhardt and Tabrizi 1995; Levinthal and March 1993; Shea and Howell 1998; Sitkin, Sutcliffe, and Schroeder 1994).

Linking Process and Outcome Accountability to Balancing Control and Innovation

Accountability can shape how decision makers perform this balancing act. Two theories in social psychology—construal level theory (Liberman and Trope 1998; 2003) and regulatory focus theory (Higgins 1997; 1998)—imply that process accountability is more conducive to achieving goals of control and outcome accountability is more conducive to innovation. Pure process accountability directs attention toward the “means” of the judgment task, rather than the “end” of accuracy, in order to meet evaluation demands. As a result, agents adopt low-level, concrete interpretations of their tasks and a

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prevention-focused emphasis on duties, obligations, and compliance (Lieberman, Idson, (p. 78) Camacho, and Higgins 1999). The resulting mindset enables detailed attention to control how one makes up one's mind whereas the resulting prevention-focused motivation enables compliance with standard decision practices of the organization.

By contrast, pure outcome accountability tends to direct attention toward ends rather than means—an end-state focus that facilitates high-level, abstract mental interpretations of tasks and motivates promotion-focused coping that includes proactive information-searching, risk-taking, and openness to change (Lieberman, Molden, Idson, and Higgins 2001). This high-level processing also facilitates novel thinking because it renders common associations, which impede innovation, less accessible (Friedman, Fishbach, Förster, and Werth 2003; Friedman and Förster 2001). This, coupled with promotion-focused motivation, enables agents to think beyond standard practices and to experiment with new methods of achieving better outcomes (Arkes et al. 1986).

The relationship between process and outcome accountability and the actual achievement of control and innovation goals is however inevitably precarious, because both systems have the potential to backfire. We can deduce this precariousness from construal-level theory itself, which posits that activation of abstract (concrete) construal levels automatically deactivates concrete (abstract) construal levels (Trope and Liberman 2010). In this view, low-level or concrete construals induced by process accountability must subtract attention from the high-level or abstract attributes of the judgment task. This “getting lost in the trees” phenomenon can cause agents to stick with standard practices with little to no recognition of their shortcomings in achieving outcomes. The control that an organization tries to achieve through process accountability can thus spiral downward into blind conformity that sustains deficient decision practices.

Conversely, high-level construals induced by outcome accountability necessarily subtract attention from how judgments are made. Under outcome accountability, decision-making increasingly relies on “intuitive” means or what feels “right” in the race to achieve optimal judgments (Brtek and Motowidlo 2002). This can be detrimental for organizations as innovation not only requires discovering more effective practices but also cross-validation testing and codification of the new practices so they can be implemented elsewhere in the organization. Standard practices are supposed to prescribe effective strategies—and this is thwarted if these processes are never incorporated into collective memory (Eisenhardt and Tabrizi 1995; Weick, Sutcliffe, and Obstfeld 1999).

Organizational theories also lend support to this analysis of process and outcome accountability. As noted before, pressures to adopt “sound” processes under process accountability can cause people to seek out the most easily defensible procedures—as standard practices offer political cover that allows agents to claim competence, rationality, and legitimacy, with minimal risk of pushback (Langley 1989; Pfeffer 1981; Schlenker 1980; Tedeschi 1981). After all, these practices represent “how we do things here,” offering political cover to agents seeking to assure evaluators that due diligence was exercised. Coping reduces to conformity in which people merely shift their views in

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accord with those of their evaluators (Tetlock 1983; Tetlock et al. 1989). Moreover, conformity confers political cover, regardless of whether the chosen processes yield negative or positive outcomes (Feldman and March 1981). When negative outcomes flow from deficient (p. 79) processes, the defense is that everything was done “by the book” (“my hands were tied”) or that the use of procedures was a sign of one’s commitment to the institution (Berger and Luckmann 1966; Scott 2008).

Agency theories in micro-economics also highlight the potential pitfalls of outcome accountability (Eisenhardt 1989). Outcome-based contracting transfers risk to the agent, which can be problematic when outcomes are only partly a function of the agents’ behaviors and can be affected by exogenous factors—and the agent is rewarded or penalized for outcomes partly outside his or her control (Demski and Feltham 1978; Harris and Raviv 1979; Shavell 1979). Agents may then resort to various forms of corner-cutting and shirking (Baker, Gibbons, and Murphy 2002). Again, the conclusion is similar: outcome accountability can reduce attention to “how” questions, which means that, even if outcome accountability stimulates innovation, it will be hard to reproduce the success as long as the inattention to process prevents us from learning which processes should be replaced and which implemented to increase overall effectiveness (Douglas and Judge 2001).

The result is a design dilemma: implement process accountability to minimize variance in decision-making and increase reliability (ensuring some control over how decisions are made), but run the risk of prolonged reliance on deficient practices with little regard for outcomes, or implement outcome accountability to encourage attention to actual outcomes (ensuring some innovation and flexibility), but run the risk of encouraging gaming of poorly understood metrics.

The best path forward would appear to be some form of compromise—movement toward various hybrid systems that blend features of process and outcome accountability as appropriate to each new context. Indeed, many hybrids of process and outcome accountability do exist—such as RAROC (risk-adjusted return on capital) guidelines that place constraints on the risks that investment decision makers are allowed to make to mitigate excessive risk-taking, but also incentivize maximizing returns within those guidelines (Tetlock and Mellers 2011b).

Unfortunately, designing viable hybrid models is easier said than done. Hybrid models often go astray—bringing out the worst rather than the best consequences of process and outcome accountability. For example, consistent with work on social dilemmas (Komorita and Barth 1985) and on goal conflict (Locke, Smith, Erez, Chah, and Schaffer 1994), research on hybrid individual vs. collective rewards in teamwork shows that members cope with contradictory pressures to maximize personal vs. group interests by concentrating on one goal (at the expense of the other), thus undermining performance (Quigley, Tesluk, Locke, and Bortol 2007; Sniezek, May, and Sawyer 1990; Wageman

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1995). Competing goals also have the potential to produce “analysis-paralysis” (Ethiraj and Levinthal 2009).

Some trade-offs are inevitable here but we suspect that the hypothesized adverse effects of both process and outcome accountability can often be contained by designing accountability systems that “empower” agents. Specifically, agents who feel empowered under process accountability are likely to resist conformity to deficient standard practices as well as attend to outcomes whereas those who feel empowered under outcome accountability are likely to attend to processes as well as outcomes, thereby facilitating organizational learning.

(p. 80) The key to “empowering” agents lies in the micro details of the symbolic interactions between principals and agents—and the meanings that participants assign to their relationships within the accountability system. Principals are concerned with establishing the legitimacy of their authority and agents with evaluating the legitimacy of that authority. Given that principals cannot always monitor agents, it is in their best interests to communicate to agents that they are legitimate and fair, in order to encourage norm internalization (Tyler 1997). And given that agents who enter authority relationships are vulnerable to both exploitation (with attendant loss of outcomes) and exclusion (with attendant loss of social identity) (Lind 2001), it is in their best interests to be sensitive to the micro-signals that authorities intentionally or unintentionally communicate about how they see the agents and why they feel the agents need to be held accountable in certain ways rather than others.

Factors that Empower Agents through Process and Outcome Accountability

Psychological empowerment is theoretically an additive function of four factors that reflect an individual’s active (as opposed to passive) orientation to his or her work: meaning, competence, self-determination, and impact (Spreitzer 1995; 1996). According to Spreitzer, meaning involves the fit between the requirements of a person’s work role and his or her beliefs and values (Hackman and Oldham 1980), competence refers to confidence in one’s capability to perform work activities (Wood and Bandura 1989), self-determination involves a sense of personal control and autonomy in initiating and directing one’s actions (Deci, Connell, and Ryan 1989), and impact is the degree to which a person can influence key organizational outcomes and beneficiaries (Ashforth 1989). These four factors of empowerment have been shown to increase innovation and initiative (Spreitzer 1995).

This analysis meshes with our concern for balancing control and innovation through process and outcome accountability. To reiterate, our goal is to explain how relational factors can compensate for the deficiencies in each accountability system—that is, prevent continued conformity to inadequate decision practices under process accountability and prevent codification of processes under outcome accountability. In

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explicit conditions of process accountability, empowerment is hypothesized to induce an implicit sense of outcome accountability; conversely, in explicit conditions of outcome accountability, empowerment is hypothesized to induce an implicit sense of process accountability.

Meaning and Impact

To empower agents via process accountability, agents need to see the system as providing meaningful opportunities to improve the welfare of others by adopting sound practices that yield better decisions (Hackman and Oldham 1976). Agents then feel their own actions will make a difference for others, increasing the sense of having a prosocial impact (Grant 2007; Grant et al. 2007). A loss in meaning and sense of impact can cause an agent simply to conform to inadequate processes as the only end in sight. This may be especially likely when a decision maker perceives that he or she is being held accountable for processes only as a means for an organization to meet external regulatory demands or as a way to keep order.

Principals can increase the meaning of the accountability system and the agent's perceived impact by communicating cues that induce a psychological connection between the decision processes he or she must justify and end-state goals involving the well-being of identifiable beneficiaries—for example, standard medical procedures are linked to benefitting patients, decision criteria for making intelligence forecasts are linked to benefitting national security, procedures for air traffic control are linked to passenger safety. Research demonstrates that perceptions of task significance can be enhanced by frequently communicating how jobs can make a difference to the lives of others (Grant 2008), suggesting that continuous messaging about how decision processes enhance the welfare of beneficiaries can imbue otherwise arbitrary rules with significance.

By contrast, outcome accountability already focuses agents on end-state outcomes so the challenge is instilling a sense of meaning and impact around the importance of “process” for long-term organizational effectiveness. Inattention to decision processes under outcome accountability is exacerbated when decision makers find little or no meaning in the decision processes themselves. However such inattention can be curbed when agents see the processes as benefitting the organization, in essence, creating a mental link between process and outcome.

Self-Determination and Competence

Accountability and self-determination may seem inherently at odds, but theories of organizational justice suggest otherwise. When principals act in a procedurally fair manner towards agents, agents may experience substantial autonomy even though embedded in a complex accountability system of normative constraints.

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Process accountability can enhance procedural justice when principals adopt more egalitarian-adversarial (as opposed to hierarchical-inquisitorial) approaches to resolving disputes over who should be responsible for what. Adversarial models stress the importance of “voice,” of convincing all parties that they have equal opportunities to present their perspectives. People tend to believe that after an authority has provided opportunities for “voice” by soliciting their opinions, those opinions will be taken into consideration when determining the distribution of outcomes (Avery and Quiñones 2002; Greenberg 2000; Tyler 1987). Given this well-established empirical result, the opportunity for “voice” inherent in more adversarial models of justice should provide agents with a sense of autonomy in determining which procedures to adopt in decision-making, as they will have the chance to defend their actions to a receptive audience. This sense of self-determination can give decision makers the confidence necessary to abandon inadequate decision practices in favor of more effective ones because they believe their accounts will be given a fair hearing. (p. 82)

Self-determination and autonomy can also be enhanced under outcome accountability when principals adopt more egalitarian-adversarial approaches to managing agents. The opportunity for “voice” may provide agents with a sense of freedom to deviate from optimizing outcomes when doing so would require processes that violate other organizational norms and values. This greater sense of freedom is rooted in the sense that they will have an opportunity to explain the reasons behind their deviations—and their accounts will be taken seriously.

Principals can also instill a sense of competence in agents by conveying respect when implementing process and outcome accountability systems. Giving respect signals that agents are valued, high status members in the organization (Tyler and Smith 1997; 1998; Tyler, DeGoey, and Smith 1996), increasing the self-efficacy they feel in conducting their tasks and coping with accountability demands. Respect can be signaled through process accountability by emphasizing that the organization sees employee potential in providing feedback for quality improvement initiatives, and that the organization encourages employees to monitor which processes do or do not lead to desired outcomes (thereby signaling employee competence in making meaningful contributions). Respect can be signaled through outcome accountability by emphasizing that the organization is confident in the skills and ingenuity of employees to obtain outcomes and that it is decreasing the monitoring of processes so as to allow for autonomy and flexibility.

Perceptions of competence enhanced through respect have the potential to encourage agents to abandon deficient standard practices. Some scholars have argued that respect makes the individual characteristics of the receiver salient (Blader and Tyler 2009; Smith and Tyler 1997), suggesting that respected people are more likely to “stand up” by engaging in riskier behavior such as dissent (Grant and Patil 2012; Packer 2008). Possible explanations include: (a) higher status increases perceptions that dissent will lead to rewards (Hirschman 1970; Sherif and Sherif 1967); (b) higher status decreases the threat

of penalties for dissent (Hollander 1958; Kelley and Shapiro 1954; Phillips and Zuckerman 2001).

Respect, by increasing feelings of competence, can also encourage attention to “how one thinks” and decrease reliance on intuition (incommunicable private knowledge) under outcome accountability. Respect from organizational authorities has been linked to increased social identification (Simon and Stürmer 2003; Spears, Ellemers, Doosje, and Branscombe 2006), in which employees feel part of the group (Tajfel and Turner 1986) and work toward achieving organizational goals (Tyler and Blader 2000). These findings suggest that employees who feel respected and competent under outcome accountability are more likely to attend to decision processes if they believe doing so will promote organizational goals of control.

(p. 83)

Concluding Remarks

Accountability is often defined as the answer to the question “who must answer to whom, for what, under whose ground rules?” (Tetlock 1985). Our analysis adds the “why?” question: “why do people believe they are accountable?” It matters whether people think the answer is “because we lack confidence in your integrity or competence” or “because we want to help you achieve objectives we all share.” Exploring the social-identity signals conveyed by different types of accountability can help us achieve a deeper understanding of the complicated patchwork quilt of laboratory results on accountability and the often acrimonious debates that arise in the real world over how best to design accountability systems. And understanding the messages that their accountability systems send to employees can help managers cope more effectively with the classic trade-off between control and innovation. Although the trade-off will never disappear, managers should be able to push out the Pareto frontier for trade-offs between control and innovation and get more of the best of both worlds, to the degree they design accountability systems that send “empowering” messages to employees, messages of the form: the work we do together is meaningful; we value your contributions to the collective effort; we take your point of view seriously; and we plan to continue working together to achieve shared goals in a mutually respectful fashion.

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