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Process and Outcome Accountability

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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 *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 & Mitchell, 1978; Curley, Yates, & 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 & Mellers, 2011a).

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 & Mellers, 2011b), public schools (Chubb & Moe, 1988), equal employment opportunity enforcement (Tetlock, Vieider, & Grant, 2011), auditing (Cohen, Krishnamoorthy, Peytcheva, & Wright, 2011), investment strategies (Sutcliffe & McNamara, 2001), sales-force management (Anderson & Oliver, 1987; Cravens, Ingram, LaForge, & Young, 1993), health care (Grol, 2000), information systems development (Kirsch, 1996), human resource systems (Arthur, 1994), product manufacturing (Hammer & 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 & 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 & Rowan, 1977; Tetlock & Mellers, 2011a; 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 . For example, studies have shown that process accountability reduces escalating commitment to sunk costs , produces better calibrated probability judgments , enhances performance on tasks requiring analytical processing , enriches attentiveness and alertness in making judgments , and motivates more thorough information search and analysis .

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. Such reassurance rises in importance to the degree decision-makers believe they live in a world of irreducible uncertainty.

Experimental psychologists have also suggested that process accountability, by encouraging more thorough evaluation of available information (Brtek & Motowidlo, 2002; De Dreu, Koole, & Steinel, 2000; Ford & Weldon, 1981; Tetlock, 1983; Tetlock & Boettger, 1989) focuses decision-makers' attention on "how" questions. 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 provider's control). Process, as opposed to outcome measures, provide information that is actionable – i.e., identifying for clinicians which processes have the potential to affect patient outcomes – and thus can be used to provide feedback for quality improvement.

Outcome accountability, however, is not without its advocates. For example, de Langhe et al. 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 than those under outcome accountability. 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 that can lead to optimized desired outcomes (Simons, 2005; Tetlock & Mellers, 2011a).

The experimental work reviewed here suffers, however, 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 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 . To meet societal demands for rationality and fairness, organizations often adopt formal processes and rules for gathering, storing, communicating, and using information . These rules are deeply embedded within the institutions' symbolic systems, relational systems, routines, and artifacts and passed on to newcomers during organizational socialization (Van Maanen & Schein, 1979).

Laboratory experiments 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 & Motowidlo, 2002; De 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 , or to judgments of fictitious subject matter experts , or to judgments of team members , or based on the reactions of recipients of the decisions . In brief, the normative standards governing what constitutes a high quality decision were often known to the decision maker.

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 leads to more systematic, even-handed, and integratively complex thinking (Tetlock, 1983; Tetlock, Skitka, & 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). Conformity to inadequate or defective practices is a potentially predictable 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. 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 big effects on the cognitive, emotional, or behavioral responses of agents to accountability guidance. 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 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. If so, this suggests yet another possible explanation for the apparently greater cognitive benefits of process accountability. 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. For outcome accountability manipulations, the opportunity to justify one's outcomes face-to-face varied across studies. The studies that did allow for an interview were only to explain why they succeeded or failed in reaching optimal outcomes. In other cases, there was no face-to-face interaction with the interviewer and decision makers only received monetary bonuses for reaching optimal outcomes.

By the very act of evaluators asking about how subjects were making decisions, process accountability manipulations may have conveyed a sense of acceptance of the subject as an important contributor to the experiment and a valuing of his or her input. Outcome accountability, by contrast, was solely focused on the accuracy of the final judgments, with little regard for the competencies, abilities, and contributions of the subject.

There is no inherent reason, however, why process and outcome accountability must always be linked to positive and negative relational signals respectively. 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—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 arrangements that depict them as lazy and incompetent (Enzle & Anderson, 1993; Sutton & Galunic, 1996) – e.g., 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 & 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.

II. 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 arenas: disputes over the criteria for evaluating teacher performance in public schools, for evaluating the equal-employment opportunity 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 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; judge teachers on their teaching performance (lesson plans, clarity of delivery,...), not on student test scores; and judge 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.

On close inspection, however, debates over real-world accountability systems often pivot on judgments about the trustworthiness of the agents. In a correlational field study, Tetlock, Vieider, and Grant (2011) found a rather strong connection between support for outcome accountability and suspicions about agent trustworthiness. 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 often 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 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. (2011) also found a strong ideology-by-institutional-domain interaction. In early 21st-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 likelier 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 likelier to prefer strict outcome accountability for public school teachers and their unions.

Tetlock et al. (2011) 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 (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 little about the actual effectiveness of process versus outcome accountability.

III . An Integrative Framework: Accountability and Empowerment

In this section, we attempt to correct for the aforementioned 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 (March, 1988): 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).

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 & 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 & Sharfman, 1993; Hackman & Wageman, 1995). Drawing on perspectives on organizational politics, it is also worth noting 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 the information use of its agents (Eisenhardt, 1985; Fama & Jensen, 1986).

Of course, there is always the risk that best practices will ossify into bureaucratic ritualism and persist long after changing environments have rendered them obsolete. Such stagnation is often explained by a mixture of organizational processes. For instance, organizational socialization, the process by which one learns ‘the ropes’ of particular organizational roles, fosters the internalization of standard practices among newcomers and shapes their perspectives for interpreting new information (Van Maanen & Schein, 1979: 211). As these processes become widely adopted, they become taken for granted as “the way things are done” (Berger & Luckmann, 1966). These repetitive patterns come to be automated and unfold unconsciously (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). The resulting rigidity is often labeled organizational inertia (Mintzberg, 1978; Starbuck, 1983; Tushman & Romanelli, 1985).

The net result is that managers confront trade-offs between control and innovation: they want to encourage process compliance but they also encourage creative workarounds for processes that have outlived their usefulness. This trade-off is a recurring refrain in management theory (Detert, Schroeder, & Mauriel, 2000; Eisenhardt & Tabrizi, 1995; Levinthal & March, 1993; Shea & Howell, 1998; Sitkin, Sutcliffe, & 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 & Trope, 1998; Trope & Liberman, 2003) and regulatory focus theory (Higgins, 1997, 1998)-- imply that process accountability systems are more conducive to achieving goals of control and outcome accountability, 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. Agents adopt low-level, concrete construals of their tasks and a prevention-focused emphasis on duties, obligations, and compliance (Liberman, Idson,

Camacho, & Higgins, 1999). The resulting mindset enables detailed attention to control of 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 construals of tasks and motivates promotion-focused coping that includes proactive information searching, risk-taking, and openness to change (Liberman, Molden, Idson, & Higgins, 2001). This high-level processing also facilitates novel thinking because it renders common associations, which impede innovation, less accessible (Friedman, Fishbach, Forster, & Werth, 2003; Marsh, Ward, & Landau, 1999; Smith, Ward, & Finke, 1995). This, coupled with promotion-focused motivation, enables agents to think beyond standard practices and to experiment with new methods of achieving better outcomes (Arkes, Dawes, & Christensen, 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 & 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 & 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 & Tabrizi, 1995; Sutcliffe et al., 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 decision 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,” making them easy leverage for agents seeking to assure evaluators that due diligence was exercised. Coping becomes a classic case of strategic conformity in which people merely shift behaviors in accord with the views of their evaluators to gain approval and avoid disapproval (Tetlock, 1983; Tetlock, Skitka, & Boettger, 1989). And conforming to decision practices confers political cover, regardless of whether the chosen processes are negative or positive (Feldman & March, 1981). When negative outcomes flow from deficient processes, the defense is that everything was done “by the book” – and the agent could not have done otherwise (“my hands were tied”) or that the use of procedures was a sign of one’s commitment to the institution (Berger & Luckmann, 1966; Scott, 2008).

Agency theories in micro-economics also highlight potential pitfalls of outcome accountability (e.g., 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 & Feltham, 1978; Harris & Raviv, 1979; Shavell, 1979). Agents may then resort to various forms of corner-cutting and shirking (Baker, Gibbons, & 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 & 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 places constraints on the risks that investment decision makers are allowed to make to mitigate excessive risk-taking, but also incentivizes maximizing returns within those guidelines (Tetlock & Mellers, 2011).

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 (e.g. Komorita & Barth, 1985) and on goal conflict (Locke, Smith, Erez, Chah, & 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 (Barnes, Hollenbeck, Jundt, DeRue, & Harmon, 2010; Ferrin & Dirks, 2003; Quigley, Tesluk, Locke, & Bartol, 2007; Snizek, May, & Sawyer, 1990; Wageman, 1995). Competing goals also have the potential to produce analysis-paralysis (Ethiraj & Levinthal, 2009).

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

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 best interests of principals to communicate to agents that they are legitimate, just, and fair, to encourage norm internalization (Tyler, 1999). And given that agents 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 & Oldham, 1980), competence refers to confidence in one's capability to perform work activities (Bandura, 1989), self-determination involves a sense of personal control and autonomy in initiating and directing one's actions (Deci, Connell, & Ryan, 1989), and impact is the degree to which a person can influence key organizational outcomes and beneficiaries (Ashforth, 1989). These four cognitions of empowerment have been shown to lead to increased 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 the relational factors and micro-signaling between principal and agent that will compensate for the deficiencies in each accountability system – i.e., prevent continued conformity to decision practices that are inadequate in making superior judgments under process accountability and prevent inattention to processes under outcome accountability so that organizations can codify lessons. In 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 & 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 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 means 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 is accountable for and end-state goals involving the well-being of identifiable beneficiaries – e.g., 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 merely sharing about how jobs can make a difference in 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 geared towards benefitting the organization, in particular, the importance of "process" for long-term organizational effectiveness. Inattention to decision processes under outcome accountability is perhaps exacerbated when decision makers find little to 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 on organizational justice suggest otherwise. When principals act in a procedurally fair manner to agents, agents may experience substantial autonomy even though embedded in a complex accountability system.

Process accountability can enhance procedural justice when principals adopt more egalitarian-adversarial than hierarchical-inquisitorial approaches to managing Agents. The adversarial model requires fair exchanges between principals and agents, where information is exchanged as to the reasons why certain procedures were or were not used. People have a tendency to believe that after an authority has provided opportunities for “voice” and asked for their opinions, their views will be taken into consideration when determining the distribution of outcomes (Avery & Quinones, 2002; Barry & Shapiro, 2001; Greenberg, 2000; Shapiro, 1993; Tyler, 1987). Given this, when being evaluated under accountability systems, the opportunity for “voice” that is reflective of more

adversarial models of justice may provide agents with a sense of autonomy in determining what procedures to adopt in making their decisions, as they will have the chance to defend and justify their actions to a receptive audience. This sense of self-determination can, subsequently, enhance motivation to discontinue use of inadequate decision practices in favor of more effective ones, as the use of these procedures are likely to be well-received, if agents are allowed to justify them as reaching better outcomes.

Self-determination and autonomy can also be enhanced under outcome accountability when principals adopt more adversarial approaches to managing agents. That is, the opportunity for “voice” may provide agents with a sense of freedom from having to optimize outcomes if processes that would lead to these outcomes counter other organizational norms and values considered to be appropriate, as they will have an opportunity to explain and defend the reasons why outcome demands were or were not met. Essentially, procedural fairness may increase the perception that principals will be lenient in their evaluations of the agent.

Principals can also instill a sense of competence in agents by conveying a sense of respect when implementing process and outcome accountability systems. Respect sends the signal that agents are valued and high status members in the organization (Smith & Tyler, 1997; Smith, Tyler, Huo, Oritz, & Lind, 1998; Tyler, DeGoey, & 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 therefore monitors processes to determine which procedures do or do not lead to desired outcomes (thereby signaling employee competence in making meaningful contributions). On the contrary, respect can be signaled through outcome accountability by emphasizing that the organization is confident in the skills, abilities, and ingenuity of employees to obtain outcomes and that it is decreasing the monitoring of procedures and 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 & Tyler, 2009; Smith & Tyler, 1997), suggesting that respected people are likely to emphasize their personal attributes through channels such as counter-normative dissent (Packer, 2008). Some reasons for this that have been advanced to explain why

this is the case include the fact that the high standing of respected members (a) increases their perceptions that successful dissent will lead to rewards (e.g., Hirschman, 1970; Sherif & Sherif, 1967), and (b) decreases the threat of penalties for engaging in dissent as they have a greater latitude of deviance before being “rejected” (e.g., Hollander, 1958; Kelley & Shapiro, 1954; Phillips & Zuckerman, 2001).

Respect, by increasing one’s feelings of competence, can also encourage attention to decision processes and decrease reliance on intuitive judgment and decision-making under outcome accountability. Respect on the behalf of organizational authorities has been shown to be linked to increased social identification (Simon & Sturmer, 2003; Spears, Ellemers, Doosje, & Branscombe, 2006), where employees cognitively merge their sense of self with the group (Tajfel & Turner, 1986). When highly identified, group members work towards achieving organizational goals (Crocker & Major, 1989), suggesting that employees who feel respected and competent under outcome accountability are likely to feel motivated to increase attentiveness to decision processes in the hopes of benefitting organizational goals of control.

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 and your team achieve valuable shared objectives." Exploring the social-identity messages conveyed by different types of accountability can help us to achieve a deeper understanding of the complicated patchwork quilt of laboratory results on accountability and of 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 may never disappear, managers should be able to get more of the benefits of both control and innovation 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.

