

A Field Study of the Antecedents and Performance Consequences of Perceived Accountability

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Building on theoretical and empirical work considering the implications of accountability on individual behavior, the authors explored the antecedents and consequences of individual perceptions of accountability for job performance. Using data from two field samples, the authors considered whether the manager's monitoring behavior thought to enhance perceptions of accountability for behaviors and outcomes predicted greater perceived accountability for task performance and interpersonal facilitation performance. They also explored whether perceived accountability mediated the relationship between monitoring behavior and subsequent performance. Hierarchical linear modeling indicated that subordinates of managers whose monitoring behavior reinforced perceptions of accountability perceived greater accountability for performance and that this perception mediated the relationship between managerial monitoring behavior and performance. The implications of these results and directions for future research are discussed.

Keywords: workplace accountability; managerial monitoring; performance management

A popular belief in modern culture is that holding individuals accountable for their actions and performance is an effective means to controlling their behavior and associated outcomes. Empirical studies of accountability have, however, delivered mixed results. For some analyses, the “accountability effect” on behavior and performance is positive, while

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other results support a negative relationship (e.g., Brtek & Motowidlo, 2002; Mero, Guidice, & Brownlee, 2007; Mero & Motowidlo, 1995). In their review of accountability research, Lerner and Tetlock concluded that “accountability is a logically complex construct that interacts with characteristics of the decision maker and properties of the task environment to produce an array of effects—only some of which are beneficial” (1999: 270). Today, the challenge for scholars and practitioners is twofold—to better understand how perceived accountability is enacted in a typical task environment and to improve our understanding of the subsequent influence that perception has on job performance.

While accountability theory has proven to be a useful perspective from which to understand and explain individual behavior and performance, additional theoretical development and empirical consideration is needed. Existing research suggests that perceptions of accountability may play a significant role in determining the effectiveness of requiring individuals to account for their behavior and performance as part of an organization’s monitoring efforts. Yet few studies have considered characteristics of the task environment that may lead to greater perceived accountability (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994). This inattention is likely due to the fact that most empirical studies of accountability have been conducted in laboratory settings, using college student samples, where accountability is manipulated by informing participants that they would have to justify their action to others. While experimental manipulations have shown a significant influence on behavior and performance, scholars have called for a broader consideration of accountability in field settings where individuals are subject to a complex nexus of monitoring and incentives that can influence perceptions, motives, and subsequent performance.

The current study addresses this gap in the literature in several ways. First, using the lens of accountability theory, we consider how accountability is enacted in actual organizations. Field settings allow us to examine the effect of specific, theoretically consistent managerial monitoring behavior (as a key characteristic of the task environment) on an individual’s perception of organizational expectations and priorities and, ultimately, that perception’s effect on the individual’s performance. Second, our study considers a robust conception of individual performance, one that includes both task and contextual performance. This multidimensional view allows us to better appreciate the influence of accountability on performance outcomes. These dimensions are also commonly considered in performance evaluations and thus result in findings of interest to a broader range to scholars and practitioners. Finally, the study’s design, which considers behaviors, perceptions, and performance, allows for a more realistic reflection of accountability in organizational settings. This design goes beyond simply considering whether individuals must justify their behavior and performance to an audience. Instead and in contrast to most previous studies, we consider accountability as an ongoing activity affected by the extent to which managers’ monitoring behavior reinforces individual answerability for performance.

Theoretical Framework and Hypotheses

Accountability Theory: An Overview

Early and rudimentary conceptualizations of accountability in organizations were considered in agency theory, a perspective on organizational governance that focuses on the

contractual relationship between the principal owners of a concern and the individual agents responsible for decision making and operations within that concern (Jensen & Meckling, 1976; Ross, 1973). According to agency theory, control of agent behavior is accomplished by aligning agent interests with those of the principal through the use of incentives and/or by monitoring agents to determine whether their behavior is consistent with organizational goals.

One limitation of agency theory is its assumption that the simple act of monitoring will necessarily align principal and agent interests. While this act may be an important component of accountability, missing is consideration of the mediating perceptions formed by agents. Effective governance not only involves holding a person to account via mechanisms such as monitoring, it also requires that the person actually perceive themselves as accountable for specific behaviors or outcomes and thus respond as agency theory suggests. Hence, attention on the relationship between the perception of accountability and the subsequent behavior consistent with that perception may well complement agency theory by compensating for one of its key limitations.

Accountability has been defined as “being answerable to audiences for performing up to certain prescribed standards, thereby fulfilling obligations, duties, expectations, and other charges” (Schlenker et al., 1994: 634). Although identifiability is likely to increase accountability, accountability creates identifiability by linking individuals to their behavior and its effects assuming individuals value the approval and respect of those to whom they are accountable (Mero et al., 2007; Tetlock, 1983, 1985).

Scholars interested in understanding how accountability influences organizational behavior have typically focused on judgment and decision making. This research has shown that holding individuals accountable affects the decision-making process, the information used to make decisions, and, ultimately, decision quality (e.g., Gordon, Rozelle, & Baxter, 1988; Mero & Motowidlo, 1995; Roch & McNall, 2007; Tetlock, 1983). For example, Mero et al. (2007) found that individuals accountable to a supervisory audience made more accurate rating decisions than individuals who were told they would be accountable to the ratee and those not held accountable. In contrast, individuals accountable to the ratee recorded a higher proportion of positive ratee behaviors and appeared to use that information to justify their inflated rating decisions. Brtek and Motowidlo (2002) likewise showed the impact accountability can have on behavior and decisions. This study found that when individuals were held accountable for the processes they used to rate interviewees, they not only were more attentive during the interview and took more notes, but also made more valid judgments than those not held accountable. The authors also found that “what” a person is accountable for had an important effect. Among their findings, interview validity was significantly higher for those individuals accountable for the decision process versus those accountable for only the decision outcome.

Other research has considered how organizational cues influence individuals' accountability perceptions. Tetlock (1985) proposed a model where individuals are viewed as politicians who react to accountability in ways that optimize their position within the social system. To maintain their social image and self-esteem, these individuals cope with accountability by scanning the environment for cues about behaviors and outcomes that are desired by those to whom they must account. If audience preferences are known, individuals are thought to behave as “cognitive misers,” pursuing those behaviors and outcomes that are

most acceptable and therefore, easiest to justify (Taylor & Fiske, 1978; Tetlock, 1983). Empirical evidence supports this coping strategy. Mero and Motowidlo (1995) found that accountable raters rated the performance of others more accurately when contextual cues encouraged accuracy and rated more leniently when cues encouraged inflated ratings. A plausible explanation for these findings, based on Tetlock's (1983) research, is that by behaving consistent with audience preferences, these individuals were better able to favorably manage the impression of others and thereby control their image. Key to this sequence of events is the individuals' perception of what they are accountable for and to whom must they account.

Schlenker (1986) considered how perceptions of accountability can be shaped in his discussion of the accountability pyramid. In this model, a necessary but not sufficient condition to establishing accountability is individual responsibility. As the psychological adhesive that helps determine causality (Schlenker et al., 1994), greater responsibility should be present when an individual's job prescriptions, identity, and events are linked. Stronger linkages are likely to occur when job prescriptions are tied to an individual's identity, thereby creating personal obligation; when job prescriptions are also linked to events in such a way that prescribed task requirements are unambiguous; and when an individual's identity is connected to those events in a way that makes it clear that the individual has personal control over those events (Christopher & Schlenker, 2005). Stated differently, organizational cues that provide task clarity and reinforce personal obligation and personal control over specific and consequential activities and outcomes should, according to this model, enhance perceived accountability by reinforcing individual responsibility.

Accountability is brought into play when there is an evaluating audience "looking down" on the enactment of individual responsibility (Schlenker, 1986; Schlenker et al., 1994). In the pyramid, audience oversight establishes the "evaluative reckoning" that is a critical part of the monitoring process found in most organizations (Schlenker & Weigold, 1989). In studies of formal control systems, the audience is composed of individuals higher in hierarchical status, such as owners, managers, or the board of directors. In this study, we consider managers as the audience that strongly influences perceptions of accountability in their employees.

Managers' Monitoring Behavior and Individuals' Perceptions of Accountability

A central thesis of this article is that through their monitoring behavior, managers provide important cues to their employees that clarify tasks and reinforce personal obligation and control of important organizational behaviors and outcomes. Managerial monitoring behavior is defined as a form of direct supervision that considers the extent to which the manager engages in administrative behaviors that reinforce perceptions of accountability in the manager's employees. For example, through their questioning of employees, managers can communicate performance priorities. Asking about the status of different outcomes provides a cue to the employee that the manager cares about a particular outcome. The more the manager asks questions, the stronger the subsequent impression of importance for that outcome. Observing work behaviors and outcomes also indicates priorities and gives the manager the

opportunity to provide performance feedback. Thus, we propose that managerial monitoring behavior is an important contextual component of the task environment and assume that the more an employee is exposed to the behavior and the content it communicates, the greater the employee's perception of accountability for specific content-related behaviors and outcomes. Simply put, we suggest that a critical part of an organization's control system is manifested through managerial monitoring behavior as it is through this behavior that managers signal to employees their accountability for specific behaviors and outcomes.

Scholars have paid only limited attention to aspects of the ongoing monitoring process that influence perceptions of accountability. Laboratory studies of accountability have typically placed participants into groups where at least one group was told that they would have to justify their decision or actions to a person of authority at the end of the experiment (e.g., Mero et al., 2007; Mero & Motowidlo, 1995). These studies introduced accountability as a static condition where individuals were led to believe either that they would have to justify decisions or actions to others or that their decisions and actions would remain anonymous. In field settings, perceived accountability is likely a function of a dynamic perceptual and judgment process, influenced by ongoing control mechanisms manifested through the manager's monitoring behavior.

Social information processing theory (Salancik & Pfeffer, 1978) helps explain this dynamic process of how priorities communicated through managerial monitoring behavior can influence employee perceptions. Accordingly, individuals gather information about organizationally important attitudes, beliefs, and expectations from people in their work group and use those perceptions to guide their own attitudes, expectations, and behavior (Salancik & Pfeffer, 1978). Thus, the theory focuses on how the environment, through social cues, assists in sense making and defining social reality, thereby resulting in relatively consistent interpretations, expectations, and behavior among members of a group (Cole & Bedeian, 2007; Zalesny & Ford, 1990).

In a work context then, managerial monitoring behavior provides cues to employees about what is important to the manager (and presumably the organization). These cues are one form of prescriptions found in the accountability pyramid described by Schlenker et al. (1994) since these cues are capable of effectively communicating what goals the manager hopes to achieve through the employee (e.g., increased sales, lower costs, or greater cooperation), how the employee is expected to contribute to or facilitate achievement of those goals, and what the benchmark of success will be when performance is assessed. When the employees' identity or image in the organization is considered contingent on their job performance in relation to publicized goals, employees are also expected to look for cues on the preferences of those who will pass judgment on their character and/or evaluate their performance so that they will be better able to respond accordingly to maintain a positive identity or image in the organization. Such preferences, we suggest, will be communicated through the manager's monitoring behavior. Finally, managerial monitoring behavior will also signal which prescriptions and events are strongly tied together as well as the levels of personal control and obligation that will be attributable to the employee.

In summary, individuals should perceive greater accountability when working for managers whose style of supervision (i.e., monitoring behavior) more frequently establishes, clarifies, and enhances the connection between individuals and their respective performance. This

is realized through acts such as asking employees to explain their activities and progress toward achieving particular outcomes. Under these conditions, when managers more frequently require employees to justify work activities and outcomes, the employee should perceive greater accountability—particularly when compared to employees of managers whose supervisory style exhibits fewer of those monitoring behaviors or exhibits those behaviors less frequently. Our study focuses on two perceptions about work activities and outcomes important to the organization's success: the perceived importance of task performance and the perceived importance of being helpful and cooperative with other organizational employees.

Hypothesis 1a: Managerial monitoring behaviors of accountability for task performance will be positively related to perceived accountability for task performance.

Hypothesis 1b: Managerial monitoring behaviors of accountability for interpersonal performance will be positively related to perceived accountability for interpersonal performance.

Accountability as a Control Mechanism for Subsequent Performance

When individuals perceive themselves as accountable for a behavior or an outcome we suggest that they are more likely to engage in the behavior or are more motivated to achieve the outcome. As a component of the task environment, research suggests that accountability interacts with individual characteristics and contextual factors to influence both the process and outcome of organizational decision making and behavior (Lerner & Tetlock, 1999). Of relevance here is existing evidence that information within the accountability context influences the relationship between accountability and subsequent action. For example, Mero and Motowidlo (1995) found that raters who believed they would have to account for their decisions were more accurate in their ratings when they did not have a priori cues about the audience's preferred outcome of the performance appraisal process. In contrast, raters in the accountability condition exacerbated judgmental biases when there was a priori information about audience preferences. Specifically, these raters responded to the justification requirement by tailoring decisions toward the preferences of the audience to whom they were accountable.

This discussion suggests that accountable employees should attend to information available within the work context, information such as that communicated through managerial behavior. This information provides cues about the importance of different behaviors and outcomes for which the employee can be held accountable. The resulting perception of accountability will then be an important determinant of subsequent performance. Consistent with a popular adage from military culture that says "it is not what is expected but what is inspected," this perception of accountability may provide a stronger influence than written statements of duties and responsibilities. Ferris, Munyon, Basik, and Buckley (2008), paraphrasing Lewin (1936), highlighted the importance of such perceptions over officially articulated requirements when they suggested that perceptions are the filter through which individuals experience the accountability system. In modern organizations, where employees are subject to a complex nexus of cues, including both formal and informal communications about organizational preferences and concerns, behaviors and outcomes for which the

employee must account can, as suggested earlier, serve to guide the employee's attention toward preparing for an impending justification event. In this sense, those salient behaviors and outcomes should become a higher priority for thought and action than those for which there is not a perceived need to account. These priorities should be reflected in their influence on the employee's job performance.

Job performance, as considered in this research, includes assessments of both task and contextual performance. Task performance represents the effectiveness with which job incumbents engage in behaviors that support the core operations of the organization (Borman & Motowidlo, 1997). Originating from research in employee selection (Motowidlo, 2000), contextual performance considers a broad class of volitional behaviors (e.g., interpersonal helping and working hard) that support the social and motivational environment within which organizational work is carried out (Borman & Motowidlo, 1993; Motowidlo & Van Scotter, 1994). These behaviors, while not necessarily part of the formal job description, are often valued by the organization (MacKenzie, Podsakoff, & Fetter, 1991, 1993) and therefore (like formalized tasks) are monitored, evaluated, and rewarded within the organizational control system.

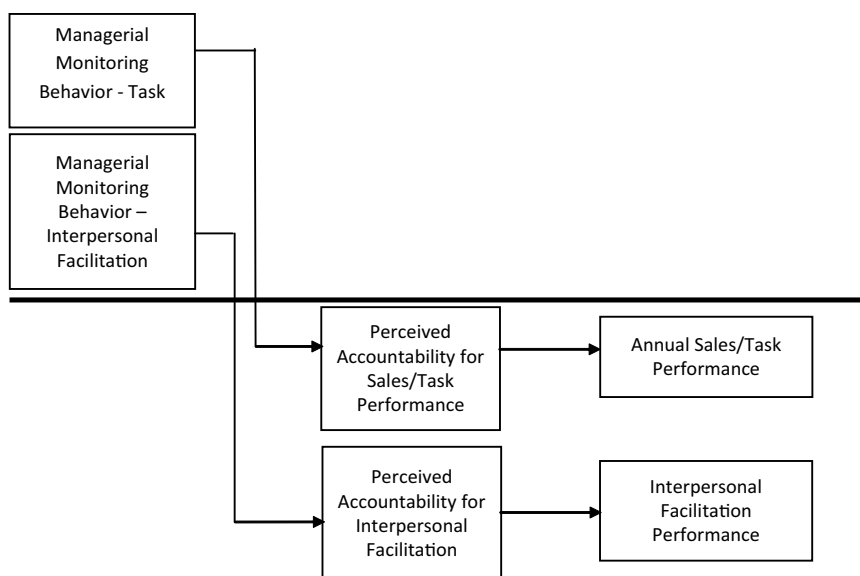
The above discussion suggests that it is necessary for research to consider both task and contextual performance when exploring the effects of perceived accountability in organizations. Accordingly, we suggest that when employees perceive themselves as accountable for achieving a prescribed level of task performance, they will engage in the behaviors necessary for achieving or maintaining their identity as valued contributor to the organizations' core operations. Their ability to live up to this obligation should manifest itself in the organization's measure of task performance (i.e., supervisory ratings of performance or objective measures such as sales).

In a similar manner, when employees perceive themselves as accountable for helping and cooperating with others, it is assumed that they will engage in the types of behaviors necessary for achieving or maintaining their identity as a valued supporter of the organization's social and psychological environment. Their ability to live up to this obligation should manifest itself in positive managerial ratings of interpersonal facilitation (the dimension of contextual performance focused on helping and cooperative behavior). Furthermore, we do not expect perceived accountability for one type of performance to influence performance on the other type. Although task and interpersonal facilitation performance are often correlated with each other (e.g., Borman & Motowidlo, 1997; Conway, 1999), they are distinct constructs with distinct components (Van Scotter & Motowidlo, 1996). When accountability perceptions are clearly focused on one aspect of performance, for example helping others, we expect increased performance on that distinct dimension of performance, rather than on other aspects of performance beyond the accountability perceived on that aspect. Any improvements in other aspects of job performance, if they do occur, are expected to be a function of the synergy between performance measures, not the result of managerial monitoring.

Hypothesis 2a: Perceived accountability for task performance will be positively related to task performance, but not interpersonal performance.

Hypothesis 2b: Perceived accountability for interpersonal performance will be positively related to interpersonal performance, but not task performance.

Figure 1
A Cross-Level Mediation Model



Combining the first two sets of hypotheses, we suggest that perceived accountability serves as a mediator between managerial monitoring behavior and employees' job performance. As depicted in Figure 1, our model proposes that employees' performance is a function of their perception of behaviors and outcomes for which they are accountable as conveyed and reinforced by their manager's monitoring behavior. Employees perceiving greater accountability for a specific behavior or outcome should subsequently focus greater attention and energy toward its attainment, thereby resulting in higher performance on that behavior or outcome.

Hypothesis 3a: Perceived accountability for task performance will mediate the relationship between managers' monitoring behavior of accountability for task performance and subsequent task performance.

Hypothesis 3b: Perceived accountability for interpersonal performance will mediate the relationship between managers' monitoring behavior of accountability for interpersonal performance and subsequent interpersonal performance.

Method

Two samples were obtained to develop and validate the new measures of managerial monitoring and perceived accountability used in our study as well as test the proposed

model. Sample 1 was used to develop the new measures. Because the managerial monitoring measure was substantially changed based on validation results from Sample 1, we collected a second sample to reduce the risk of capitalizing on chance in the creation of the monitoring measure and to test the robustness of the other findings. We also introduced the measure of managerial monitoring of interpersonal facilitation in Sample 2 to allow us to test Hypotheses 1b and 3b.

Sample 1

The first sample belonged to an organization that sells commercial construction components. The organization's structure is similar to typical sales organizations where sales staff work in locations separate from regional headquarters and where supervision is achieved by having sales managers periodically accompany their staff on visits to customers, to regional headquarters, and to trade shows and conferences as well as through written statistical reports and by means of phone and virtual communications.

In this sales context, the manager's monitoring behavior is expected to be an important factor in a salesperson's perceptions of accountability. Sales managers typically prescribe a specific level of sales performance that each salesperson will be answerable for within an established time frame (e.g., weekly, monthly, quarterly, or annually). The ability to meet or exceed this quantitatively prescribed benchmark as well as exceed the performance of other salespeople are often important parts of a salesperson's identity. Indeed, sales organizations encourage this perception by tying incentives, awards, and other forms of recognition to exceeding sales goals. Compensation for sales staff in Sample 1 included commissions for meeting or exceeding sales objectives, which were determined by each manager in consultation with the sales staff based on goals assigned at corporate and then regional levels.

A bottom-line orientation is, however, not the only item considered when determining a salesperson's contribution to the organization (MacKenzie et al., 1991, 1993; Piercy, Cravens, Lane, & Vorhies, 2006). In many organizations, such as the one considered here, the expectation exists that the sales staff will also provide social and psychological support to other organizational members. This support can include providing customer feedback on products, cooperating with others, helping less experienced colleagues in skill development, and helping colleagues in ways beyond their direct selling role. Given that cooperative and supportive behavior among sales staff improves overall sales performance and organizational functioning, managers in Sample 1 confirmed that they consider supportive behaviors in overall subjective performance assessments and that the company gives an annual "citizen" award that is associated with a cash prize.

Participants included 198 sales staff and their immediate sales manager. The researchers met with participants to discuss methods for completing the surveys that were being used in the study. After the briefing, participants were given their respective survey and a stamped, preaddressed envelope to be returned to the researchers upon completion. Weekly reminders were sent to participants via email for four consecutive weeks. To maintain confidentiality, each participant was assigned an identification number known only to the researchers.

Among the sales staff, there were 164 usable surveys measuring perceived accountability. Aside from a small handful of surveys that were excluded due to missing data, other reasons

for not participating included workload, illness, and other personal reasons. Surveys were also completed by managers of the sales staff. The managers completed the survey that measured their own monitoring behavior and that assessed employee performance. In total there were 28 groups (organized by sales manager) with 5 to 7 sales members in each group. Among the sales staff, there were 102 men and 62 women. Their average age was 38 years old, with a range of 21 to 52 years. The average tenure among the sales staff was 7 years, with a range of 1 to 21 years of employment with the organization.

Sample 1 data were collected in two parts. Demographics, perceived accountabilities, managerial monitoring behavior, and subjective contextual performance were measured at Time 1 by means of surveys administered to the sales staff and sales managers. For the second part, 6 months later, objective sales performance data were drawn from organizational archives that provided the results of the previous 12 months of individual sales performance.

Sample 2

The second sample came from an organization that sells, installs, and maintains commercial heating, ventilating, and cooling systems for commercial buildings across the globe. Our data, however, were collected from individuals in the organization's U.S. facilities. The organization is structured with a central headquarters housing corporate staff, regional operating units responsible for supervising and coordinating activities of local operating units, and local operating units responsible for product sales, installation, and service. Local operating facilities are led by a senior office manager who supervises both office staff as well as field technicians.

Office managers are trained and certified technicians with significant experience in the field. These managers supervise the daily activities of field technicians, including providing technician assignments, consulting on field assignments, and dealing with technical issues and customer concerns. The managers, in coordination with regional human resources staff, make all hiring and promotion decisions as well as conduct all performance evaluations of technicians. Office managers are also responsible for establishing office and individual goals in terms of meeting quarterly and annual sales and service goals in their area. Meeting these goals is an important part of determining available merit bonuses provided for both the office manager and the technicians. Actual determination of merit is therefore a function of the performance of the unit and performance evaluations assigned by the office manager.

Field technicians are responsible for the service of products and equipment following technical installation and maintenance instructions, identifying and analyzing system installation and repair requirements, and recommending new systems when older systems are no longer repairable (actual sales activities are completed by a separate sales agent). These responsibilities require that each technician maintain proficiency with a wide range of products and services as well as work with building specifications, drawings and designs, and regional and corporate technical support staff.

Participants included 107 field technicians reporting to 19 different office managers. Data were collected from both groups over a period during their required attendance at a series of training sessions designed to educate them on new technology that was being introduced to

the field. During these sessions, researchers were given the opportunity to distribute surveys to participants, review procedures for survey completion, and answer individual questions. Confidentiality was maintained by assigning each participant a unique identification number known only to the researchers. Office manager surveys of their own monitoring behavior and of technicians' job performance were presented during the same time period but in a session conducted in a separate room.

In total there were 19 groups (organized by office manager) with 4 to 7 technicians in each group. Among the 107 field technicians, there were 83 men and 24 women. Their average age was 38 years old, with a range of 21 to 62 years. The average organizational tenure among field technicians was 8 years, and on average technicians had been supervised by their respective manager for 5.9 years. Using a cross-sectional design, all data were collected within a 1-week period of time.

Measures

The managerial monitoring behavior measure and the perceived accountability measures were developed using Sample 1 following methods proposed by Hinkin (1995, 1998) described below. The performance measures (reported in Table 1) were adapted from previous research.

The factor structure of the six measures were validated using Sample 2 data with common factor analysis (i.e., principle axis factoring). We used oblique rotation (oblimin) because our factors are theoretically correlated (as illustrated by our hypotheses). The factor analysis resulted in a six-factor solution based on an eigenvalue of 1 cutoff, scree-plot analysis, and interpretability, thereby providing strong evidence that the factor structure is as theoretically specified. All items loaded on the expected factor with all loadings greater than .70 and no cross-loadings greater than .30, thus indicating a well-defined structure (Hair, Black, Babin, & Anderson, 2010). The items and factor loadings are reported in Table 1.

Managerial monitoring behavior for task performance. Using a 24-item, 5-point Likert-type scale (1 = *never* to 5 = *all the time*), managers reported on their own monitoring behavior by specifying how often they engaged in behaviors expected to lead to employee perceptions of accountability. Items used to assess managers' monitoring behavior were based on the conceptual model of accountability introduced by Schlenker et al. (1994) focusing on the manager as an evaluative audience to whom an employee must account. That is, our measure considers the extent to which the manager's behavior reinforced in employees the need to account for task performance by means of requiring employees to answer for or give the reason behind task-related behaviors and results. Factor analysis with principal axis factoring and varimax rotation was used with Sample 1 to assess the factor structure of this multi-item measure. Two factors emerged, of which one more clearly represented the nature of the construct of accountability. The second factor more clearly represented responsibility, a related but, as described earlier, conceptually distinct construct. We retained the six items that cleanly loaded on the accountability factor as our measure (Sample 1 $\alpha = .93$). As shown in Table 1, Sample 2 data confirmed that the six items load cleanly on one factor and are distinct from our other measures (Sample 2 $\alpha = .96$).

Table 1
Construct Items and Factor Loadings on Sample 2

Variable	Managerial Monitoring Behavior	
	Rated from 1 (<i>rarely/never</i>) to 5 (<i>all the time</i>)	
	In the past year, how often have you . . .	
Accountability for task	Asked subordinates to explain their task activities	.94
	Questioned subordinates about their performance on work tasks	.89
	Discussed with subordinates the processes used to complete tasks	.97
	Reviewed subordinates performance on specific tasks with them	.89
	Asked subordinates to explain their approach to work tasks	.77
Accountability for interpersonal facilitation	Questioned subordinates about their progress on a task activity	.87
	Asked subordinates to explain their activities related to helping and cooperating with others at work	.92
	Questioned subordinates about their performance at helping and cooperating with others	.92
	Discussed with subordinates the processes used in activities related to helping and cooperating with others	.87
	Reviewed subordinates performance on helping and cooperating with others	.83
	Asked subordinates to explain their approach to helping and cooperating with others	.96
	Questioned subordinates about their progress at helping and cooperating with others	.82
Variable	Perceived Accountability	
	Rated from 1 (<i>strongly disagree</i>) to 5 (<i>strongly agree</i>)	
	Please select the number to the right that best indicates how strongly you agree with each of the statements below.	
Perceived accountability for task	Others in my organization can observe the outcome of my work performance in terms of achieving unit goals	.92
	In my organization achieving unit goals is directly attributed to an individual's personal actions	.83
Perceived accountability for interpersonal facilitation	I am required to justify or explain my performance in terms of achieving unit goals	.80
	Others in my organization can observe the outcome of my work performance in terms of helping and cooperating with colleagues	.92
	In my organization, helping and cooperating with colleagues is directly attributed to an individual's personal actions	.81
	I am required to justify or explain my performance in terms of helping and cooperating with colleagues	.71
Variable	Subjective Job Performance	
	Rated from 1 (<i>not effective</i>) to 5 (<i>extremely effective</i>)	
	Rate the effectiveness of each employee you supervise on every performance item listed below.	
Task	Performing technical aspects of the job	.88
	Performing job-related tasks	.89
	Performing complex tasks	.81
	Maintaining a proficiency in job-specific tasks	.92
	Keeping up with new work methods	.89
	Advising others on task procedures	.88
	Explaining job-related processes	.89
Interpersonal facilitation	Developing good working relationships	.95
	Maintaining good working relationships	.90
	Supporting a cooperative work environment	.94
	Cooperating with others	.87
	Helping coworkers with job-related matters	.87
	Displaying concern for others	.90
	Helping coworkers with personal problems	.91

Note: Principal axis factoring with oblimin rotation; six-factor solution; all cross-loadings were less than .30.

Managerial monitoring behavior for interpersonal facilitation. This measure was not collected for Sample 1. For Sample 2, the six-item scale used to measure managerial monitoring behavior for task performance was adapted to focus instead on interpersonal helping and cooperation. As with monitoring for task performance, managers reported on their own monitoring behavior. As shown in Table 1, Sample 2 data confirmed that the items in this measure load cleanly on one factor and are distinct from our other measures (Sample 2 $\alpha = .95$).

Perceived accountability for task performance. Employees reported on the extent to which they perceived they were accountable for organizational outcomes. Prior research suggests that employees should perceive themselves as accountable when they believe that their performance (a) is observable by others, (b) is identifiable or attributable to their personal decisions and actions, and (c) requires justification (e.g., Mero et al., 2007; Schlenker, 1986). Based on this work, we created a three-item, 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*) to assess an employee's perception of accountability for task performance. In Sample 1 this was worded as achieving sales goals (Sample 1 $\alpha = .89$), and in Sample 2 this was worded as achieving unit goals (Sample 2 $\alpha = .91$). As shown in Table 1, Sample 2 data confirmed that the items in this measure load cleanly on one factor and are distinct from our other measures.

Perceived accountability for interpersonal facilitation. The three items used to measure perceived accountability for task performance were adapted to measure perceived accountability for interpersonal facilitation by focusing on helping and cooperating with colleagues rather than task performance. Using Sample 1, a principal axis factoring of these three items and the three items related to sales goals revealed a two-factor structure consistent with this being a distinct construct from perceived accountability for task performance (Sample 1 $\alpha = .70$). As shown in Table 1, Sample 2 data further confirmed that the items in this measure load cleanly on one factor and are distinct from our other measures (Sample 2 $\alpha = .93$).

Task performance. For Sample 1 we assessed task performance directly through individual sales productivity using objective information located in company archives. Annual sales represented the actual dollar value of all sales achieved by the salesperson over the course of one year. As noted earlier, data were collected six months after administering the surveys, and thus half of the sales data were based on performance six months prior to the survey being administered. For Sample 2, we asked managers to evaluate technicians task performance using a seven-item, 5-point Likert-type scale (1 = *not effective* to 5 = *extremely effective*) taken from Van Scotter and Motowidlo (1996). As shown in Table 1, Sample 2 data confirmed that the items in this measure load cleanly on one factor and are distinct from our other measures (Sample 2 $\alpha = .97$).

Interpersonal facilitation performance. Our study used a modified version of Van Scotter and Motowidlo's (1996) measure of interpersonal facilitation to assess an employee's helping and cooperative behavior. This dimension of contextual performance was assessed by the employee's respective manager using a seven-item, 5-point Likert-type scale (1 = *not effective* to 5 = *extremely effective*). We focused on interpersonal facilitation because this portion

of contextual performance (unlike job dedication) has been shown to be distinct from task performance and thus contributes in a different way to overall effectiveness in an organization (Van Scotter & Motowidlo, 1996). Sample 1 data using principal axis factoring confirmed our conceptualization, with all items loading on a single factor (Sample 1 $\alpha = .96$). As shown in Table 1, Sample 2 data confirmed that the items in this measure load cleanly on one factor and are distinct from our other measures (Sample 2 $\alpha = .97$).

Controls. Three control variables were included in each analysis—employees' age, gender (0 = *men* and 1 = *women*), and tenure with the organization. We controlled for these variables because they have been shown to affect contextual and task performance in some studies (Green, Jegadeesh, & Tang, 2009; Kidder, 2002; Ng & Feldman, 2010; Sturman, 2003).

Analyses

Because our data are multilevel (employees nested within supervisors) and theory suggests that there will be a group effect, multilevel analysis is necessary (Nezlek, 2011; Snijders & Bosker, 1999). Using hierarchical linear modeling (HLM), we followed the convention of looking at the ratio of between-group variance to total variance (between- and within-group variance), known as the intraclass correlation coefficient (ICC), to test for overall group effects. When ICC is significant (as shown with a χ^2 test), use of HLM is necessary because use of ordinary least squares violates assumptions of independence.

Although ICC is commonly checked to determine the appropriateness of using HLM (McCoach, 2010), it is necessary only when there is no theoretical basis for group effects since nonsignificant ICC results do not necessarily mean HLM is inappropriate (Aguinis, Gottfredson, & Culpepper, 2011; LaHuis & Ferguson, 2009). More specifically, HLM is still appropriate with theory-supported, multilevel data even with nonsignificant ICCs because the ICC test (a) does not take into account the possible effects of a covariate (Snijders & Bosker, 1999), (b) does not take into account the possible effects when including interaction effects, and (c) generally has low power (LaHuis & Ferguson, 2009). We found significant between-group variance in at least one of the samples for perceived accountability for interpersonal facilitation (Sample 1 ICC = .19, $\chi^2 = 65.0$, $df = 27$, $p < .01$; Sample 2 ICC = .01, $\chi^2 = 19.3$, $df = 18$, $p = ns$), in both samples for interpersonal facilitation performance (Sample 1 ICC = .07, $\chi^2 = 39.9$, $df = 27$, $p < .05$; Sample 2 ICC = .09, $\chi^2 = 27.4$, $df = 18$, $p < .10$), and in one sample for task performance (Sample 1 ICC = .09, $\chi^2 = 43.85$, $df = 27$, $p < .05$; Sample 2 ICC = .07, $\chi^2 = 25.4$, $df = 18$, $p = ns$). Between-group variance for perceived accountability for task performance was not significant in either sample.

There is considerable debate in the literature on the proper tests for mediation. However, when using HLM to test mediation, Zhang, Zyphur, and Preacher (2009) argue that the centering within context with subtracted means (CWC[M]) procedure is the most appropriate given a model such as ours. This 2-1-1 mediation model (with a Level 2 independent variable, a Level 1 mediator, and a Level 1 dependent variable) calls for the creation of a new variable to capture the group effects of the Level 1 mediator variable. Specifically, this step requires centering the Level 1 mediator (e.g., perceived accountability for task performance)

Table 2
Sample Statistics and Correlations among the Variables of Interest

	Sample 1		Sample 2									
Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	2	3	4	5	6	7	8	9
Group (Level 2 variables)												
1. MMB-IF			3.14	0.80	.06	.10	.11	.12	.16	.02	−.16	−.17
2. MMB-Task	3.14	0.56	3.75	0.76		−.02	.26**	.18	.24*	.07	−.06	−.09
Individual (Level 1 variables)												
3. PA-IF	2.66	0.54	3.37	0.89	.33**		.32**	.36**	.41**	−.15	−.17	−.13
4. PA-Task	3.66	0.86	3.62	0.84	.28**	−.10		.06	.66**	.07	−.11	−.18
5. IF performance	3.20	0.87	3.59	0.92	.11	.23**	−.10		.20*	−.24*	.01	.04
6. Task performance ^a	296.7	78.3	3.62	0.85	.19*	−.04	.47**	−.25**		−.01	−.11	−.09
Control variables												
7. Gender	0.38	0.49	0.23	0.42	−.04	−.16*	.19*	.13	.02		−.17	−.14
8. Age	37.8	6.8	38.3	10.4	−.00	.04	−.04	−.03	−.08	−.09		.77**
9. Tenure	6.6	3.6	8.4	6.1	−.08	−.04	−.07	−.05	−.10	−.11	.53**	

Note: IF = interpersonal facilitation; MMB = managerial monitoring behavior; PA = perceived accountability. Sample 1 $n = 164$, correlations below diagonal; Sample 2 $n = 111$, correlations above diagonal.

a. For Sample 1, sales in \$000s; for Sample 2, supervisor's rating.

* $p < .05$. ** $p < .01$.

by the group mean and then reintroducing the new variable at Level 2 to correct for confounded estimates of the mediation effect. We used the CWC(M) method to test Hypotheses 3a and 3b.

Results

Means, standard deviations, and correlations among the study's variables are reported in Table 2. Bivariately, managerial monitoring for task performance is positively correlated with perceived accountability for task performance in Sample 1 ($r = .28, p < .01$) and Sample 2 ($r = .26, p < .01$). Similarly, managerial monitoring for task performance is positively correlated with task performance in Sample 1 ($r = .19, p < .05$) and Sample 2 ($r = .24, p < .05$). In Sample 1, managerial monitoring for task performance is also positively correlated with perceived accountability for interpersonal facilitation ($r = .33, p < .01$). Perceived accountability for task performance is highly correlated with task performance in Sample 1 ($r = .47, p < .01$) and Sample 2 ($r = .66, p < .01$). Similarly, perceived accountability for interpersonal facilitation is positively correlated with interpersonal facilitation performance in Sample 1 ($r = .23, p < .01$) and Sample 2 ($r = .36, p < .01$).

Table 3 reports the results of the HLM analyses on Sample 1. Table 4 reports the results of the same analyses for Sample 2 (the only difference being the addition of the managerial monitoring behavior for interpersonal facilitation). Hypothesis 1a predicted that managerial monitoring behavior for task performance was related to perceptions of accountability for task performance. We tested this hypothesis on both samples. However, findings from

Table 3
Hierarchical Linear Modeling Results Predicting Perceived
Accountability and Performance for Sample 1

Variable	DV = PA-Task			DV = Task Performance (Sales)			DV = PA-IF			DV = IF Performance		
	Model 1			Model 2			Model 3			Model 4		
	γ	SE		γ	SE		γ	SE		γ	SE	
Intercept	3.5	(0.08)**		300	(8.6)**		294	(7.5)**		298	(7.7)**	
Control variables												
Gender	0.34	(0.14)*		-9.9	(11.3)		4.1	(11.7)		-9.9	(11.3)	
Age	0.00	(0.01)		1.9	(1.0)*		1.7	(1.1)		1.9	(1.0)*	
Tenure	0.00	(0.02)		-3.1	(1.8)		-3.3	(1.7)		-3.1	(1.8)	
Independent variables												
MMB-Task ^a	0.19	(0.08)*					16.8	(7.8)*		8.9	(9.6)	
PA-Task ^b				41.1	(7.0)**					41.1	(7.0)**	
PA-IF ^b				-0.1	(12.3)					-0.1	(12.2)	
PA-Task ^c										61.0	(20.)*	
PA-IF ^c										-23.2	(25.6)	
R ²	.02			.21			.03			.21		
										.08		
										.02		
										0.20	(0.06)**	
										2.7	(0.06)**	
										3.1	(0.09)**	
										3.6	(0.09)**	
										0.21	(0.14)	
										-0.01	(0.01)	
										0.00	(0.02)	
										0.00	(0.02)	
										0.33	(0.14)*	
										-0.01	(0.02)	
										0.00	(0.02)	
										3.1	(0.09)**	
										0.00	(0.12)	
										-0.15	(0.09)	
										0.45	(0.15)**	
										0.28	(0.25)	
										0.21	(0.30)	
										.10		

Note: DV = dependent variable; IF = interpersonal facilitation; MMB = managerial monitoring behavior; PA = perceived accountability. Unstandardized coefficients reported with standard errors in parentheses.

a. Level 2 variable; $n = 28$.

b. Level 1 variable; $n = 164$.

c. Group effects of Level 1 variable, used to test mediation.

* $p < .05$. ** $p < .01$.

the first sample should be interpreted with caution because the monitoring measure was developed using this sample. As shown in Model 1 of Table 3, managerial monitoring behavior for task performance was positively related to perceived accountability for task performance (sales) in Sample 1 ($\gamma = .19, p < .05$). As shown in Model 1 of Table 4, managerial monitoring behavior for task performance was positively related to perceived accountability for task performance in Sample 2 ($\gamma = .27, p < .05$). These results therefore support Hypothesis 1a.

Hypothesis 1b predicted that managerial monitoring behavior for interpersonal facilitation would be related to perceptions of accountability for interpersonal facilitation. This hypothesis was tested only on Sample 2 because only Sample 2 included this monitoring measure. As shown in Model 5 of Table 4, managerial monitoring behavior for interpersonal facilitation was positively related to perceived accountability for interpersonal facilitation ($\gamma = .27, p < .05$). Thus, Hypothesis 1b was supported.

Hypothesis 2a predicted that perceived accountability for task performance would predict subsequent task performance, but not interpersonal facilitation performance. We tested this hypothesis on both samples. As shown in Models 2 and 6 of Table 3, perceived accountability for task performance was positively related to task performance (sales) ($\gamma = 41.1, p < .01$), but not interpersonal facilitation performance in Sample 1 ($\gamma = -.16, p = ns$). As shown in Models 2 and 6 of Table 4, perceived accountability for task performance was positively related to task performance ($\gamma = .54, p < .01$), but not interpersonal facilitation performance in Sample 2 ($\gamma = .39, p = ns$). These results therefore support Hypothesis 2a.

Hypothesis 2b predicted that perceived accountability for interpersonal facilitation would predict subsequent interpersonal facilitation performance, but not task performance. We tested this hypothesis on both samples. As shown in Models 2 and 6 of Table 3, perceived accountability for interpersonal facilitation was positively related to interpersonal facilitation performance in Sample 1 ($\gamma = .45, p < .01$), but not task performance (sales) ($\gamma = -.10, p = ns$). As shown in Models 2 and 6 of Table 4, perceived accountability for interpersonal facilitation was positively related to interpersonal facilitation performance in Sample 2 ($\gamma = .29, p < .05$) and task performance ($\gamma = .24, p < .01$). Thus, these results partially support Hypothesis 2a.

Hypothesis 3a proposed that perceived accountability for task performance mediates the relationship between managers' monitoring behavior for task performance and employee task performance. As discussed earlier, we used CWC(M) following Zhang et al. (2009) to test for mediation. We tested this hypothesis on both samples. Findings from Sample 1 should once again be interpreted with caution since the monitoring measure was developed using this sample.

As shown in Model 4 of Table 3, the variable created to test group effects of perceived accountability for task performance is significantly related to task performance (sales) in Sample 1 ($\gamma = 61.0, p < .01$). As shown in Model 4 of Table 4, the variable created to test group effects of perceived accountability for task performance is significantly related to task performance in Sample 2 ($\gamma = .99, p < .01$). This indicates that differences in perceived accountability for task performance significantly explain differences in task performance among groups in both samples. Note that for both Sample 1 and Sample 2, the effect of managers' monitoring behavior for task is no longer significant when perceived accountability for task at the individual and group levels is included in the model ($\gamma = 8.9, p = ns$ and $\gamma = -.02$,

Table 4
Hierarchical Linear Modeling Results Predicting Perceived
Accountability and Performance for Sample 2

Variable	DV = PA-Task						DV = Task Performance						DV = PA-IF						DV = IF Performance					
	Model 1			Model 2			Model 3			Model 4			Model 5			Model 6			Model 7			Model 8		
	γ	SE		γ	SE		γ	SE		γ	SE		γ	SE		γ	SE		γ	SE		γ	SE	
Intercept	3.6	(0.09)**		3.6	(0.10)**		3.6	(0.09)**		3.6	(0.09)**		3.4	(0.09)**		3.5	(0.09)**		3.6	(0.09)**		3.6	(0.08)**	
Control variables																								
Gender	0.08	(0.19)		-0.05	(0.15)		-0.07	(0.19)		-0.05	(0.15)		-0.57	(0.19)**		-0.29	(0.21)*		-0.49	(0.20)*		-0.27	(0.22)	
Age	0.01	(0.01)		0.00	(0.01)		0.00	(0.01)		0.00	(0.01)		-0.01	(0.01)		0.00	(0.01)		0.00	(0.01)		0.00	(0.02)	
Tenure	-0.04	(0.02)		0.02	(0.02)		-0.01	(0.02)		0.02	(0.02)		-0.01	(0.02)		-0.01	(0.02)		0.00	(0.02)		0.00	(0.03)	
Independent variables																								
MMB-Task ^a	0.27	(0.10)*					0.26	(0.10)*		-0.02	(0.11)		0.04	(0.10)					0.15	(0.11)		0.20	(0.10)	
MMB-IF ^a	0.10	(0.10)					0.16	(0.10)		0.07	(0.08)		0.27	(0.10)*					0.26	(0.10)*		0.19	(0.07)*	
PA-Task ^b				0.54	(0.08)**					0.54	(0.08)**					-0.10	(0.11)					-0.10	(0.11)	
PA-IF ^b				0.24	(0.08)**					0.24	(0.07)**					0.29	(0.11)*					0.29	(0.07)**	
PA-Task ^c										0.99	(0.25)**											-0.13	(0.26)	
PA-IF ^c										-0.09	(0.26)											0.69	(0.27)*	
R ²	.05			.42			.05			.44			.14			.09			.05			.11		

Note: DV = dependent variable; IF = interpersonal facilitation; MMB = managerial monitoring behavior; PA = perceived accountability. Unstandardized coefficients reported with standard errors in parentheses.
a. Level 2 variable; $n = 19$.
b. Level 1 variable; $n = 111$.
c. Group effects of Level 1 variable.
* $p < .05$. ** $p < .01$.

$p = ns$, respectively). Thus, this finding, along with the previous findings that managerial monitoring of task performance was significantly related to task performance and that perceived accountability for task performance was significantly related to task performance, indicates full mediation in both samples, thereby supporting Hypothesis 3a (Zhang et al., 2009).

Hypothesis 3b proposed that perceived accountability for interpersonal facilitation mediates the relationship between managers' monitoring behavior for interpersonal facilitation and employee interpersonal facilitation performance. This hypothesis, like Hypothesis 1b, was tested only on Sample 2. As shown in Model 8 of Table 4, the variable created to test group effects of perceived accountability for interpersonal facilitation is significantly related to interpersonal facilitation performance in Sample 2 ($\gamma = .69, p < .05$). This indicates that differences in perceived accountability for interpersonal facilitation significantly explain differences in interpersonal facilitation performance among groups in Sample 2. Note that the effect of managers' monitoring behaviors for interpersonal facilitation is reduced but still remains significant when perceived accountability for interpersonal facilitation at the individual and group levels is included in the model ($\gamma = .19, p < .05$). Thus, this finding, along with the previous findings that managerial monitoring of interpersonal facilitation was significantly related to interpersonal facilitation performance and that perceived accountability for interpersonal facilitation was significantly related to interpersonal facilitation performance, indicates partial mediation (Zhang et al., 2009). Thus, Hypothesis 3b is partially supported.

Discussion and Conclusions

This study contributes to a growing body of literature that demonstrates how viewing organizational relationships and control systems through the lens of accountability theory holds significant promise in improving our understanding of individual behavior and performance in the workplace. Schlenker and colleagues' accountability pyramid (Schlenker, 1986; Schlenker et al., 1994) provided an important framework for identifying and evaluating the influence of workplace monitoring on employees' perceptions of accountability for behaviors and outcomes as well as their performance on those behaviors and outcomes.

The study also contributes to the literature with its introduction of measures of managerial monitoring behavior and of perceived accountability for both task performance and interpersonal facilitation. These measures were developed from existing theory and appear psychometrically sound, and thus provide a way for scholars to assess accountability in field settings.

In its entirety, our study considers important elements of social information processing theory (Salancik & Pfeffer, 1978) and accountability theory (e.g., Mero et al., 2007; Schlenker, 1986; Schlenker et al., 1994) to better understand the dynamic process of how managers communicate organizational priorities through their monitoring behavior. Consistent with those theories, our results suggest that employees use managerial behavior as a cue to help them make sense of expectations in the workplace. Organizational contexts are "noisy" environments where individuals are subject to a whole host of expectations. Consistent with accountability theory, our study shows that an employee's immediate supervisor has the ability to clarify organizational priorities through his or her monitoring activities. It is important to note that monitoring as a method of governance goes beyond just providing formal

prescriptions of job duties but also includes monitoring behaviors that more frequently connect employees to job prescriptions and to performance events. Managers are the most proximal audience to complete the accountability pyramid by making salient to their employees through their monitoring that employees must account for decisions, behaviors, or performance. Consistent with existing accountability theory and prior laboratory-based findings, our results suggest that employees often cope with perceived accountability by behaving in a way that enhances their ability to justify their performance to a salient audience (e.g., managers).

Considering both task performance and social aspects of performance as measured by interpersonal facilitation, our study examined the possibility that managers, through their monitoring, signal the value of performance in each aforementioned area. In an organization such as that in Sample 1, sales would clearly be an organizational priority, and we would not expect a lack of cues on its importance from either the sales manager or other control mechanisms (e.g., incentive and recognition programs). However, perceived accountability for interpersonal facilitative behaviors could become easily minimized in a context where the value of task outcomes play a prominent role (such as that found in some sales organizations).

Interestingly, in the sales organization of Sample 1 we found that perceived accountability for task performance predicted sales performance but not interpersonal facilitation performance, while perceived accountability for helping and cooperating predicted interpersonal performance but not task performance, when controlling for the other type of accountability. We further explored this discriminant pattern in Sample 2 where we considered whether monitoring behavior focused on interpersonal facilitation predicted perceived accountability for and subsequent interpersonal facilitation performance and whether monitoring behavior focused on task outcomes predicted perceived accountability for and subsequent task performance. These predictions were supported, as was the compelling discriminant pattern that accountability for interpersonal facilitation performance did not predict task performance and similarly, that accountability for task performance did not predict interpersonal facilitation, when controlling for the other type of accountability.

Our findings also suggest that the extent to which managerial monitoring reinforces perceived accountability for a behavior that in some contexts may be less valued has important implications for increasing its occurrence. Indeed, existing research has found that even in a setting where task performance is a priority, contextual behaviors that are often not directly rewarded do matter. In a study of two sales organizations, MacKenzie, Podsakoff, and Paine (1999) reported that manager evaluations of sales performance were significantly influenced by organizational citizenship behaviors, including helping. Our study provides initial evidence as to how managers, through their monitoring behavior, provide cues to the behaviors and outcomes that are valued.

The results of our study have other implications for scholars and practitioners beyond those just described. Consistent with Kerr's (1975) discussion of misaligned organizational rewards, the tendency to expend energy toward that for which the individual feels accountable provides a sobering note about the possible "dark side" of accountability (Frink & Klimoski, 1998) that can occur if managers communicate, advertently or inadvertently, a priority of action not properly aligned with organizational interests. If, as argued here, managerial monitoring behavior provides vital cues to employees, managers whose behavior leads to

the perception of accountability for less valued priorities may cause energy to be inappropriately expended.

Given that managerial monitoring behavior occurs at the group level, also of interest was the effect of managerial monitoring between groups. Our results suggest that a group of employees working with a manager who uses more monitoring behavior perceive greater personal accountability for that outcome and subsequently receive higher managerial ratings of performance on that outcome. When considered from the group level, perceived accountability also led to greater individual performance. The implication is that monitoring matters—its effect does not just appear at the individual level; it also appears at the group level as individual-level performance was higher in groups where perceived accountability was higher relative to that in groups with lower perceived accountability. This suggests that there is value in training managers to incorporate monitoring behavior for all important outcomes into their repertoire of managerial practices.

In summary, practicing managers may draw a number of related conclusions from the above discussion. First, the results of this study suggest that group-level monitoring may have a normative effect on the work group. In other words, it appears that there is a group-level influence on individual job performance that results from manager monitoring behavior. Second, individuals appear to respond to cues emanating from monitoring as a means to prioritize their job performance. Third, monitoring can be an important way to communicate organizational priorities, as indicated by the relationship between managerial monitoring for task performance and individuals' task performance ratings in Sample 2. Finally, the findings for both task and interpersonal facilitation performance suggest that designing an organization's control system should consider the effects of both monitoring and incentives in assessing influences on performance. Managers who monitored a particular behavior or outcome more had employees who received higher performance ratings for that specific behavior or outcome. This suggests the possibility that managerial monitoring behavior can have an impact on perceived accountability at the group level (normative or otherwise) that may improve individual performance beyond that found in studies of individual accountability.

Limitations and Future Research

While field studies provide important opportunities to study organizational behavior in an actual work context, limitations of this method must be considered. One possible limitation stems from the missions of the organizations we studied and the structure of the incentive system each utilized (e.g., a significant portion of compensation in Sample 1 is based on overall sales success). As one of our dependent variables in Sample 1 was a direct measure of sales productivity, it may be difficult to disentangle the effects of existing incentive systems from those of managerial monitoring on perceived accountability. Generalizability could also be restricted in Sample 1 because those employees may have had limited ability to control an objectively assessed outcome like sales. In some cases, sales performance is affected by factors in the general environment, such as an economic recession or a demographic shift. Thus, there is likely to be a boundary to the extent to which acts of accountability influence sales performance. Nonetheless, while an incentive-based structure is common for many sales

organizations, context does matter. This limitation is somewhat mitigated by the fact that results from Sample 1 were consistent with findings from Sample 2, a nonsales context, thereby suggesting robustness of these relationships. Even so, we recognize that our findings may not be generalizable to all types of organizations.

The limited number of groups considered in both samples also provides a potential limitation. Although we found no relationships between perceived accountability and the other type of performance (as hypothesized in Hypotheses 2a and 2b), our small number of groups (19 and 28) limits our statistical power to detect smaller effect sizes. Thus, future research with greater statistical power is needed to provide stronger evidence of a noneffect.

While not directly related to the research question of interest in the current study, we also note that the relationship between contextual performance and task performance was negative ($r = -.24$) in the sales organization for Sample 1, whereas it was positive ($r = .23$) in the service organization for Sample 2. This contrast in correlations is not unlike the mixed findings found across existing studies of different dimensions and measures of job performance (e.g., Motowidlo & Van Scotter, 1994; Podsakoff, Ahearne, & MacKenzie, 1997; Podsakoff & MacKenzie, 1994; Walz & Niehoff, 2000). This contrast also provides a thought-provoking conversation on the relationship between contextual and task performance in different organizational and performance evaluation contexts. Future research should explore boundary conditions that could help explain these findings. For example, in the context of sales organizations as considered in Sample 1, where task performance is typically a function of individual effort and often objectively measured, it is possible that the sales–interpersonal facilitation relationship will be negative because good salespeople will be more task focused and competitive and thus not as helpful and cooperative with each other. It may also be, drawing from resource allocation theory (Bergeron, 2007; Guidice & Mero, in press), that in certain contexts helping behavior detracts from the time and effort needed for an autonomous, non-altruistic activity like sales. Similarly, in a competitive sales environment there may be inherent tension between individual and team performance, and if the latter is not an explicit part of the reward structure, then it is less likely that salespeople will be as eager to cooperate and help each other.

Related to this, future research might consider performance measures that focus on other behaviors that provide social support and that are clearly differentiated from task performance, such as civic virtue and sportsmanship. While it would seem that a manager's monitoring behavior should reinforce perceived accountability for a variety of behaviors and, as a result, corresponding evaluations of performance, specific study of other forms of discretionary behavior is needed to confirm the generalizability of this assertion.

While our study focused on the effects of managerial monitoring behavior (a group-level variable) on perceptions of accountability and subsequent performance, future research should consider individual-level variables, such as individual differences, that may strengthen or weaken the accountability–perception relationship. For example, Mero, Guidice, and Anna (2006) found that the traits of conscientiousness and public self-consciousness interacted with being held accountable for a performance rating such that raters higher in those traits reported greater pressure to justify their decisions compared to those lower in those traits. These findings suggest that employees high on either conscientiousness or public

self-consciousness may perceive greater accountability from a managerial practice such as monitoring than those low on these traits.

Other individual differences may moderate the perceived accountability–performance relationship. For example, Royle, Hall, Hochwarter, Perrewé, and Ferris (2005) found that self-efficacy interacted with accountability to explain the self-assessed occurrence of organizational citizenship behavior and political behavior at work. This finding suggests that within the context of a typical task environment, there may be boundary conditions for the influence of monitoring-induced perceptions of accountability on behavior and performance. In combination, previous research suggests that individual differences, such as conscientiousness and public self-consciousness, may explain the extent to which individuals feel accountable due to monitoring, while others, such as self-efficacy, may increase the level of performance resulting from the perceived monitoring. These and other individual difference variables therefore should be explored as possible moderators of the relationship between managerial monitoring behavior and perceived accountability as well as the relationship between perceived accountability and performance.

The existence of extrinsic rewards is yet another contextual factor that may influence the impact of monitoring behavior on perceptions of accountability. Extrinsic rewards such as gain sharing or piece rates can also motivate employees to achieve goals. It is therefore possible that the effect of accountability may be reduced under conditions of strong extrinsic rewards. We note, however, that even in a commission-based sales organization, such as that in Sample 1, we were able to detect a significant relationship. Thus, there is evidence that the accountability effect is substantial. This notion is further supported by the greater effect sizes we found in Sample 2, a sample where employees were not commissioned sales people.

Future research would also benefit from considering the complementary and competing implications of incentive and monitoring systems as viewed through the lens of accountability. While extensive research has found that properly aligned incentives influence performance, less is known about the influence of accountability systems and their relative weight in influencing employees' perception of "for what" they are accountable, especially in a context with other extrinsic incentives. Our study highlights a clear need to better understand the role of accountability in influencing individual and organization performance within a context of competing priorities.

Another possible limitation and area of future research stems from how monitoring is defined and measured in our study. We focus on the frequency of various types of monitoring behaviors. It would be interesting to consider not only the effectiveness of the different types of monitoring behaviors but also the quality of those monitoring behaviors. This may also be an important factor leading to differences in perceived accountability among employees.

Related to our measure of monitoring, our study may be limited by the extent to which additional monitoring behavior effects perceptions of accountability and performance. It is possible that the influence of monitoring on performance is curvilinear with the effect diminishing or becoming negative at the highest levels of monitoring. While this consideration was outside of the scope of our research, future research should consider this possibility by using a measure of monitoring that better identifies different levels of monitoring than that provided by the scale used in this study. Intuitively, it seems reasonable to expect that excessive

monitoring could result in inefficient and ineffective micromanagement or otherwise undermine linkages summarized in the accountability pyramid.

Another methodological issue is whether monitoring behavior is measured at the individual or group level. Our measure considers the construct to be a managerial characteristic at the group level; however, it is possible that managers vary their monitoring behavior for each employee. Future researchers should consider measuring this construct at the individual level to more accurately reflect the variance that may exist within groups.

Future research might also consider personal responsibility as a separate contextual factor that may influence the relationship between accountability and ensuing perceptions and performance. As noted in Schlenker and colleague's (1994) accountability pyramid, personal responsibility is a necessary but not sufficient condition of accountability. Responsibility, if measured separately from accountability, may actually moderate the relationship between managerial monitoring behavior and perceived accountability.

It is also important that future research continue to consider methods for assessing accountability in the workplace. Our study relied on unique and theoretically grounded measures of both the manager's monitoring behavior as well as employees' subsequent perceptions of accountability. These or similar measures should be replicated and expanded to provide further indication of their construct validity for both field studies and practitioners.

Finally, future research should build on the conclusions drawn from our study by measuring monitoring behavior, perceived accountability, and performance on a number of occasions over an extended period of time. It is likely that priorities change with major organizational events, such as a large deviation in firm performance or a change in leadership. Under such circumstances one would expect a corresponding change in monitoring behaviors used to evoke perceptions of accountability for evolving organizational priorities. This type of research would also allow for a better understanding of the manager's role in affecting successful organizational change. Likewise, this research would allow researchers to consider the feasibility of a reciprocal relationship between variables. In this sense employee performance would indicate for what employees feel accountable and thus signal situations where supervisory monitoring behavior may be misaligned with desired performance.

In conclusion, organizations are asking more from their members and are using a mix of incentive and monitoring systems to control their performance. Drawing from existing theories of accountability and social information processing provides a promising perspective from which to better understand factors that influence individual and organizational performance.

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