The influence of individual regulatory focus and accountability form in a high performance work system

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ABSTRACT

Our mixed-methods study considers how alignment of HR practices contributes to success in a high performing manufacturing firm with a contingent reward system. Results showed greater task and challenge performance for promotion focused individuals and lower challenge performance for prevention focused individuals. Accountability also predicted higher levels of task and challenge performance. Finally, accountability moderated the regulatory focus-performance relationship such that both forms of performance were higher for individuals higher in promotion focus who perceived themselves accountable for the corresponding outcome, task or innovation. Prevention focused individuals had higher challenge performance the greater their perception of accountability for innovation.

1. Introduction

High performance work systems (HPWSs) are “coordinated bundles” of work practices that include human resource (HR) practices such as employee recruitment and selection, training, appraisal, and reward systems (Posthuma et al., 2013). When aligned with an organization’s strategy, these practices have a significant impact on performance (Beltrán-Martín, Roca-Puig, Escrig-Tena, & Bou-Llusar, 2008; Subramony, 2009).

Critical to alignment is parallelism, a state that can exist among elements of the HR architecture including its principles, policies, practices, and products (Posthuma et al., 2013). Optimally, parallelism occurs when an organization uses its HR practices to develop employee skills and motivations aligned with outcomes of strategic importance to the organization.

In a comprehensive review of HPWS research, Posthuma et al. (2013) developed a taxonomy of nine work practices. Among these, they found that studies often focused on practices related to compensation and benefits and on job and work design, while few considered communication or performance management and appraisal.

Based on their review, the authors called on research to consider the legion of practices used by HPWS beyond simply monetary rewards. What is needed is more research that considers the degree to which different practices are aligned and mutually supportive of organizational strategies. To this end, scholars were urged to examine the types of alignment that could create a synergistic effect that would enhance the potency of individual HR practices. This advice is consistent with both universalism, a perspective suggesting that HR practices such as employee participation are beneficial to all organizations, and the contingency perspective, which suggests that organizational performance is contingent on internal and external factors that influence performance (Zhang & Li, 2009).

The notion of parallelism that evolved from the contingent perspective is critical to the current study that considers the effectiveness of work practices employed by one high performance organization that, when used within a highly incentivized system, is presumed to contribute to the synergy that created that high performance. In particular, our primary interest was to better understand the effects of two specific and underexplored contingent factors—employee characteristics and performance management practices—on individual performance within a HPWS.

Our exploratory study takes a mixed method approach (Creswell, 2013); combining qualitative and quantitative research elements. In keeping with grounded theory, we used a systematic process of data collection that relied on both inductive and deductive reasoning to develop theory.
We focused on a single high performance manufacturing firm with a pre-existing system of incentives contingent on performance. This organization competes in the primary metals manufacturing industry and has operations in a number of locations in the United States. We conducted our study in plants located closest to corporate headquarters.

Acclaimed for its innovation and its productivity, we interviewed company founders, top managers, and plant managers to identify those factors thought to be critical to firm success. We then analyzed interview transcripts to highlight employee characteristics and performance management practices important to this success. This was followed by a review of extant literature to identify theoretical frameworks that appeared consistent with why those factors were likely critical to performance. These frameworks provided the lens through which hypotheses were developed for our quantitative study.

2. Qualitative assessment

We conducted our interviews in two phases. The first focused on executive leadership. These individuals were interviewed via a conference call with the researchers six weeks prior to the on-site visit. From these interviews we learned about the strategic priorities of the organization, its incentive and monitoring systems, and characteristics of its HR system. During the same time period we also received documents on the organization’s incentive systems. Together, this information guided us in crafting a semi-structured template of questions for the second phase—the on-site interviews. These interviews included follow-up discussions with executive leadership and interviews with senior and mid-level plant managers.

We conducted 10 interviews with 12 different individuals. The question template referenced earlier was used for all interviews while allowing for additional questions to explore emergent themes within a single interview. Interview transcripts were combined with the researchers’ notes to form the qualitative data analyzed in our study. Together, these interactions provided greater understanding and helped us generalize our findings across prior research on HPWSs.

Three compelling themes connected to a HPWS emerged. First was the importance of the incentive-based compensation system. Over 50% of total pay was contingent on production, quality control, and cost management. Accentuating the risk–reward relationship was the sanctions tied to poor quality manufacturing. When products were returned due to manufacturing quality the organization recouped the incentive pay tied to its production a rate twice the amount of the original award. This practice reinforced the idea that the quantity produced was not the organization’s primary strategic goal.

The importance of financial incentives was underscored during one interview discussing negotiations on the incentive system with a unionized subsidiary (secured through an acquisition). While their non-union subsidiaries embraced the contingent pay system, the unionized subsidiary was risk averse to the variance that accompanies this form of compensation.

“The trade-off in this situation was that employees would earn $600 in guaranteed hourly wage in lieu of the opportunity to earn pay contingent on performance worth from $0 to as much as $6000 to $8,000.”

A second interview theme was the importance placed on the organization’s monitoring system. Managements’ style of supervision and communication were considered interdependent mechanisms for establishing accountability. When exploring the role of direct supervision across different operations, one plant manager described “the culture of accountability” that results from having engaged individuals who are willing to ask questions and challenge work practices.

“It is common in our organization to ask or be asked ‘why are you doing that or why aren’t you doing that’. This accountability to each other explains both our industry-leading safety and the innovation seen in our processes.”

This notion of accountability and its relationship to individual risk and benefits of a contingent incentive system was a common theme throughout the interviews.

“You’re accountable to everybody in that mill—supervisor all the way down. You are answerable to all of these people and again, that’s based on how the pay structure works. If you got one weak link in the chain then there’s going to be a problem. You have to make some changes, some corrections to get on board and do things the way that they need to be done.”

A third interview theme had synergistic ties with the other two themes—characteristics of front-line employees and their immediate supervisors. Across interviews, leaders and managers commonly referred to the “Midwest values” of their employees. These values were also often discussed in terms of accountability and accompanying attributions of responsibility.

“So when you don’t have a work force that wants responsibility, and the accountability that goes with it, your culture just flounders and we flounder, literally.”

Building on this synergistic theme, one manager discussed his belief that the system employed by the organization is not for everyone.

“A lot of our production employees have become very wealthy people because of our pay structure. It takes a certain kind of person willing to accept the risks associated with earning that higher pay. While the system reinforces the link between each employee and group actions and performance, there are also factors out of their control that can influence their bonuses...Our experience in acquiring production facilities in other regions that use different methods for selecting employees shows you have to have the right people.”

The qualitative portion of our study led to several conclusions. First, incentives alone were not viewed as sufficient to align employee behavior with organizational goals. This seems especially relevant for organizations whose success is based on cost savings from lean manufacturing and technological innovations derived from bottom-up processes initiated by managers and employees responsible for production. Consistent with parallelism, success was a function of incentive system alignment with at least two other factors: accountability-inducing monitoring mechanisms and individual characteristics including a willingness to assume risks inherent in a contingent pay system. Monitoring was essential to reinforcing organizational priorities and facilitating the communication needed to establish accountability for goals and for innovation-related activities. Effective employees were those who valued financial rewards, were willing to take risks to pursue challenging goals, challenged existing practices, and participated in the change required in a dynamic environment.

These conclusions form the basis of the research questions pursued in the quantitative study. Specifically, what features facilitate behavior and outcomes hallmark of a HPWS? Can we draw from existing theory and research to understand the mix of factors that drive individual performance in such a system?

3. Quantitative assessment

The study’s quantitative phase used two theoretical lenses to better understand how, why, and to what extent characteristics of employees
are vital to achieving important outcomes in a high performance organization with a heavily incentivized compensation system. One is regulatory focus theory (Higgins, 1997, 1998); a perspective that considers the process by which individuals align themselves with organizational goals and standards. This under-examined individual difference is increasingly fruitful in management research (Johnson, Smith, Wallace, Hill, & Baron, 2015) because this characteristic has clear implications for contexts with a high-powered incentive system. Our second lens is accountability theory (Mero, Guidice, & Werner, 2014; Mero & Motowidlo, 1995), which we use to examine the performance implications of a system that emphasizes being answerable for actions and outcomes.

3.1. Regulatory focus

Regulatory focus theory proposes two distinct foci—promotion and prevention—that regulate individuals' attitudes, perceptions, and behaviors (Higgins, 1997, 1998). Driven by the desire to fulfill growth and self-actualization needs, promotion focused individuals adopt behavioral strategies thought to achieve a positive outcome (Higgins, Roney, Crowe, & Hymes, 1994). These individuals feel emotions such as happiness or cheerfulness when they succeed in achieving a goal and feel disappointment and unhappiness when unsuccessful (Shah & Higgins, 2001). What matters most is success; failure is irrelevant (Johnson et al., 2015).

To fulfill their safety and security needs, prevention focused individuals notice and recall information related to the avoidance of failure (Higgins & Tykocinski, 1992). These individuals are more likely to adopt behavioral strategies that help prevent negative outcomes (Higgins et al., 1994). Because of this motivation, prevention focused individuals typically feel calm and relaxed when they achieve the goal of avoiding failure or loss, and experience feelings of anxiety or fear when unsuccessful (Shah & Higgins, 2001). Thus, it is the outcome of not failing that matters most; success is inconsequential (Johnson et al., 2015).

Regulatory focus theory has been used to explain several phenomena. Friedman and Förster (2001) found that subjects in a promotion focused condition outperformed those in a prevention focused condition on both creative insight and creative idea generation, an anticipated outcome given that promotion focused individuals have greater tolerance for risk-taking, creativity, and change (Liberman, Idson, Camacho, & Higgins, 1999). A study of leader–follower regulatory focus found that follower promotion focus was positively related to change OCB, and that a leaders' prevention focus strengthened the positive effect among prevention focused followers' maintenance OCB (Shin, Kim, Choi, Kim, & Oh, 2014).

3.2. Accountability

Accountability can be a powerful stimulus for managing individual and organizational performance (Mero et al., 2014) but it is difficult to effectively put into practice. Simply stating that accountability is part of organizational governance with limited understanding of its components and its interaction with other facets of organizational life does little to encourage a sense of accountability among organizational members.

Formally defined, accountability entails “being answerable to audiences for performing up to certain prescribed standards, thereby fulfilling obligations, duties, expectations, and other charges” (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994, p. 634). Consistent with prior research (Guidice, Mero, & Greene, 2013; Mero, Guidice, & Brownlee, 2007), we describe accountability using a conceptual framework whereby responsibility provides the psychological foundation for creating accountability (Schlenker, 1986).

Responsibility consists of three interconnections (Christopher & Schlenker, 2005). Personal obligation develops when an individual's identity at work is tied to organizational expectations of what and how tasks should be accomplished and the standards by which performance will be evaluated. Personal control grows stronger the more activities are tied to whom the person perceives herself to and her role in the organizational. Task clarity occurs the more clear-cut and applicable the expectations and standards are to the situation at hand. Accountability occurs with the addition of audience oversight and evaluative reckoning (Schlenker, 1986; Schlenker et al., 1994). Attributions of responsibility and perceptions of accountability are therefore a product of managerial monitoring behavior.

Managerial monitoring provides employees with valuable cues that clarify tasks and performance priorities and reinforces their personal obligation and control over important organizational behaviors and outcomes. Mero et al. (2014) found that through three techniques (observability, identity, and answerability), managers provided cues to employees about organizational priorities. Logically then, the greater managerial monitoring, the stronger the subsequent perception of accountability for those related priorities and the more directly connected an individual may feel to their work.

Magee, Kilduff, and Heath (2011) cautioned against an overreliance on financial incentives to govern employees while neglecting social and relational rewards. This system could also undermine employees' intrinsic motivation generated by individual-level autonomy, meaningfulness, and relational needs. Hence, in addition to reinforcing responsibility, accountability can make an individual more connected to the social/relational context and thus, enhance intrinsic motivation in situations where extrinsic motivations is also high due to a powerful incentive system.

Our study examines how accountability interacts with other characteristics of individuals within the context of a HPWS. This consideration is consistent with arguments for the importance of parallelism (Posthuma et al., 2013) in that the effectiveness of any one HR practice is dependent on its alignment with other factors within the system.

3.3. Hypotheses

Based on the qualitative phase of our study and subsequent literature review, we developed the conceptual model shown in Fig. 1. This model considers the effects of regulatory focus and engaged supervisory monitoring (as a mechanism that creates perceptions of accountability) on individual performance within the context of a high risk–high reward incentive system.

Consistent with our qualitative findings and prior research, we focus on two important forms of individual performance—task and challenge performance. Task performance considers an individual's performance on specific job related activities needed to support the firm's technical core (Motowidlo & VanScotter, 1994). Challenge performance is a form of OCB that considers actions taken to promote change and confront the status quo (VanDyne & LePine, 1998). This discretionary behavior is known to be an important means to innovation (MacKenzie, Podsakoff, & Podsakoff, 2011). Innovation often starts with identification of a creative problem solution or novel idea that challenges existing products and processes, past practices, or current standard operating procedures (LePine & VanDyne, 1998).

3.4. Regulatory focus and performance

In an organization with constant demand for high productivity, where compensation is contingent on production, quality control, and cost management, and where technological innovations are part of the organization’s “fabric”, we expect employees with a promotion regulatory focus to achieve greater job performance relative to prevention focused employees. Promotion focused individuals express their motivation through behavioral strategies of speed, eagerness, creativity, and risk-taking to address their interests in development, change, and ideals (VanDijk & Kluger, 2011). Consistent with goal setting theory,
where conscious goals affect action (Locke & Latham, 2002), these behav-
ioral strategies should also lead promotion focused individuals to be more accepting of challenges found in HPWSs where job require-
ments and prescriptions are changing and adapting.

In contrast, we expect this dynamic environment to be relatively incompati-
ble with the behavioral strategies employed by prevention focused individuals since dynamic settings require flexibility and rapid response. Consistent with this argument, Sacramento, Fay, and West (2013) found that when job demands called for an adaptive response, promotion focused employees were more creative because they are more likely to consider riskier, unproven solutions. Johnson et al. (2015) review concluded that prevention focus individuals are less effective in executing promotion behavioral strategies. Instead, their strength lies in repetition, error avoidance, and stability; strategies that address prevention focused concerns of goal maintenance, conservation, and keeping the status quo (VanDijk & Kluger, 2011); behaviors less effective in a dynamic environment requiring flexible and swift reaction. We therefore expect these differences in regulatory foci to be evident in production focused measures of task performance and inno-
vation focused measures of challenge performance.

H1a. Promotion regulatory focus is positively related to ratings of task performance.

H1b. Prevention regulatory focus is negatively related to ratings of task performance.

H2a. Promotion regulatory focus is positively related to ratings of challenge performance.

H2b. Prevention regulatory focus is negatively related to ratings of challenge performance.

3.5. Accountability and performance

Holding individuals accountable for their actions and outcomes predicts performance quality (Mero et al., 2007; Roch & McNall, 2007). Consistent with accountability theory, monitoring mechanisms provide employees with salient cues about organizational priorities (Mero et al., 2014).

As discussed earlier, there is also the possibility that managers operating with significant use of incentive compensation may neglect social relational rewards that contribute to employees’ intrinsic motivation (Magee et al., 2011). We propose that accountability, with its emphasis on connecting individuals to social systems (Tetlock, 1985), is important within this context. In keeping with this, we expect greater employee perceptions of accountability for a behavior or outcome to predict higher performance on activities related to those behaviors or outcomes, be they task or challenge oriented.

H3. Perceived accountability for tasks is positively related to ratings of task performance.

H4. Perceived accountability for innovation is positively related to ratings of challenge performance.

3.6. Alignment and performance

A premise of our study is that alignment of individual characteristics and organizational context will increase motivation and consequently, performance. The opposite may then hold when there is misalignment. Thus, we consider whether accountability can enhance performance not only for employees with characteristics aligned to the work environment, but also for employees with characteristics less aligned with performance requirements of the context.

Prior research has identified supervisory behaviors associated with greater perceptions of accountability. For example, Mero et al. (2014) concluded that enhanced perceptions were the result of greater supervisory engagement with employees through activities including frequently assigning specific responsibilities to employees, engaging employees in conversations about how a task was performed, asking that results be explained, and requesting project status updates. This consideration is consistent with goal setting research indicating that feedback can augment the goal–performance relationship such that when goals are coupled with feedback, performance is greater than when only goals are considered (Erez, 1977; Locke & Latham, 2002).

This exploration of organizational synergies is also important since HPWSs arguably perform best when there is alignment and mutual support among HR practices. Similarly, the value these systems have on organizational performance and firm competitiveness is at least partially attributed to employee adaptability and the change-initiating roles of employees (Beltrán-Martín et al., 2008). When evident, this flexibility reflects the diverse and malleable skills and behaviors in the organization’s human capital and encouraged by its HR practices (Bhattacharya, Gibson, & Doty, 2005). In the context of our study, regulatory focus and perceived accountability represent added value in terms of the human capital that results when the HR practice of monitoring has an effect on work-related behaviors.
We first consider the potential of this added value for individuals high in promotion focus who have motivations aligned with achieving high levels of productivity and innovation (e.g., creativity, risk-taking, and speed). These goals are markedly compatible with other goals emphasized in a HPWS. We contend, however, that greater motivation alone is not completely responsible for their higher performance.

In complex task environments, goal-directed mechanisms alone may not be adequate to achieve high performance (Locke, 1996). In this context, the path to the goal may be less clear and may require more reliance on others, such as experienced supervisors, to reach the highest level of performance. This reasoning is in line with research demonstrating the benefits of monitoring on task clarity, personal obligation, and personal control. Hence, we suggest supervisory monitoring that encourages perceived accountability plays an essential role in achieving higher task and challenge performance. This role is important even when self-regulation is aligned with the context. This is because perceived accountability leads to a more efficient application of the inherent motivation resulting from the individual’s alignment within a complex context.

**H5.** Accountability moderates the positive relationship between promotion focus and task performance such that the relationship is stronger (more positive) when accountability for task performance is higher.

**H6.** Accountability moderates the positive relationship between promotion focus and challenge performance such that the relationship is stronger (more positive) when accountability for innovation is higher.

For prevention oriented individuals, a logical extension is that accountability has synergistic effects even when behavioral outcomes are not aligned with the individual's regulatory focus. Indeed, accountability may have the greatest influence on performance when alignment between the employee and the organization is poorer, such as for prevention focused individuals in a HPWS.

When individuals perceive accountability for performance not aligned with self-regulatory preferences (e.g., error avoidance, cautiousness, and repetition), the evaluative reckoning associated with supervisor monitoring may create pressure to adapt to the organization’s performance requirements. Indeed, research has shown that accountability can focus individual attention on priorities important to the audience/supervisor (Mero et al., 2007, 2014). Likewise, scholars argue that “counter to preferences, prevention focused individuals seek risk when a situation takes them from the safety of status quo” (Johnson et al., 2015, p. 1505), such as likely to be the case when facing an impending call to account.

**H7.** Accountability moderates the negative relationship between prevention focus and challenge performance such that the relationship is weaker (less negative) when accountability for innovation is higher.

**H8.** Accountability moderates the negative relationship between prevention focus and task performance such that the relationship is weaker (less negative) when accountability for tasks is higher.

### 4. Methodology

Data was collected over two days through a written survey administered to employees as they completed their shift. We scheduled our data collection at the beginning of one of these rotations to minimize disruption within the manufacturing facility. Of the 1055 employees scheduled to work during the days that data was collected, 167 agreed to participate. After removing individuals that either did not fully complete the survey or did not qualify for inclusion (i.e., interns), participants included 151 employees from eight units for an effective response rate of 14%. We assessed nonresponse bias by comparing respondent characteristics with characteristics of the population on age, tenure, and gender. Our t-tests showed no significant difference in age (M = 41.84, SD = 9.26 vs. M = 42.95, SD = 9.59, t = 1.13) or tenure (M = 10.77, SD = 5.32 vs. M = 10.28, SD = 4.22, t = 1.09). The ratio of males to females also remained consistent between groups (2% female).

Among respondents, 147 were men and 4 were women; an anticipated finding given the industry is a male-dominated one. The majority of employees were Caucasian (94%), with the remaining being a mixture of African-American, Hispanic, and Asians. The average employee age was 42 years old. Employees on average were employed for 11 years and had been supervised by their respective manager for 4 years. All employees had at least a high school degree, with 27% also earning an undergraduate degree and 3% a master’s degree.

### 4.1. Measures

All variables, with the exception of one, were measured using previously published scales. We conducted appropriate tests to establish the validity of the new measure.

#### 4.1.1. Perception of accountability

Mero et al. (2014) developed a 3-item measure of perceived accountability that had as its focal point different areas of performance for which employees could be held to account. We adapted this measure to be consistent with the mission of the current organization—accountability for tasks/productivity and for innovation. Rated on a 5-point Likert scale, a sample question is, “in my organization, achieving unit goals is directly attributed to an individual’s personal actions”. Cronbach’s alpha was .73. A sample question for innovativeness asked, “I am required to justify or explain my performance in terms of challenging the status quo”. Cronbach’s alpha was .71.

#### 4.1.2. Regulatory focus

The traits of promotion and prevention regulatory focus were measured using Higgins et al.’s (2001) regulatory focus questionnaire. Sample questions from this 9-item, 5-point scale includes “how often have you accomplished things that got you ‘psyched’ to work even harder?” for promotion focus and “not being careful enough has gotten me into trouble at times” for prevention focus. Cronbach’s alpha was .72 for promotion focus and .72 for prevention focus.

#### 4.1.3. Job performance

We assessed task performance using a modified version of the 7-item measure developed by Ashford and Tsui (1991) and Mero et al. (2014). Using a 5-point effective/ineffective scale, employees were asked to select the rating they believed they would receive from their supervisor on a series of task-related roles. Two sample items considered the individual’s effectiveness in “performing job related tasks” and “maintaining proficiency on job specific tasks”. Cronbach’s alpha was .90.

For challenge performance we again asked respondents to select the rating that they believed their supervisor would give them on their role in facilitating innovation within the organization. Here we used a modified version of the 5-item measure of challenge OCB created by Ashford and Tsui (1991) and MacKenzie et al. (2011). Two sample items considered the individual’s effectiveness in “communicating opinions about work issues even if the opinions differ within the work group” and effectiveness to “challenge the opinions of others when others’ opinions move the organization in the wrong direction”. Cronbach’s alpha was .83.

#### 4.1.4. Controls

Three control variables were included in each analysis—employees’ age (in years), tenure (in years), and gender (0 = man and 1 = woman). These controls were included since each could influence job performance (Kidder, 2002; Ng & Feldman, 2010).
Table 1
Correlations and descriptive statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
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<th>5</th>
<th>6</th>
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<th>8</th>
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<tbody>
<tr>
<td>1. Gender</td>
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<td></td>
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<tr>
<td>2. Age</td>
<td>41.82</td>
<td>9.26</td>
<td>−.00</td>
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<td></td>
<td></td>
<td></td>
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<td>3. Tenure</td>
<td>10.77</td>
<td>5.32</td>
<td>−.08</td>
<td>.58**</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4. Task performance</td>
<td>4.01</td>
<td>.57</td>
<td>.06</td>
<td>−.02</td>
<td>−.01</td>
<td></td>
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<tr>
<td>5. Challenge performance</td>
<td>3.82</td>
<td>.68</td>
<td>.11</td>
<td>−.01</td>
<td>.03</td>
<td>.57**</td>
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<tr>
<td>6. Promotion regulatory focus</td>
<td>3.96</td>
<td>.55</td>
<td>.01</td>
<td>−.23**</td>
<td>−.13</td>
<td>.34**</td>
<td>.32**</td>
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<tr>
<td>7. Prevention regulatory focus</td>
<td>3.38</td>
<td>.55</td>
<td>.11</td>
<td>−.01</td>
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<td>−.03</td>
<td>−.18**</td>
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<tr>
<td>8. Accountability for tasks</td>
<td>3.76</td>
<td>.63</td>
<td>−.00</td>
<td>.07</td>
<td>−.02</td>
<td>.33**</td>
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<td>.22**</td>
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<tr>
<td>9. Accountability for innovation</td>
<td>3.52</td>
<td>.62</td>
<td>.04</td>
<td>.02</td>
<td>−.04</td>
<td>.22**</td>
<td>.20</td>
<td>.14</td>
<td>−.04</td>
<td>.43**</td>
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n = 151.
* p < .05.
** p < .01.

4.2. Accountability pilot study

To test Hypotheses 4, 6, and 7 a new measure of accountability for innovation was created that extends the measure created by Mero et al. (2014) by considering a different target for accountability. To assess the validity of this revised measure we administered a survey to a sample population of 60 staff members performing administrative duties in the organization. In addition to accountability perceptions, data was gathered on task and challenge performance as well other variables unrelated to this study.

The demographics of this group of employees included the following: among the 26 men and 34 women the average age was 44 years and average tenure was 9 years. The vast majority were Caucasian (97%) and all had at least a high school degree, with 48% also earning an undergraduate degree and 8% a master’s degree.

Given the analytical restrictions that accompany a small sample size, we assessed the validity of our new measure of accountability using exploratory factor analysis with varimax rotation. Results revealed two components with eigenvalues above 1, with loadings of greater than .40 on a single factor (cf. Gorsuch, 1983), no cross loadings greater than .50 (Hair, Black, Babin, & Anderson, 2010), and that together explained 74.6% of the variance. These components were consistent with the two forms of accountability considered—accountability for task and accountability for innovation.

To determine the predictive validity of each measure, we regressed accountability for tasks and accountability for innovation on task and challenge performance respectively. As expected, accountability for task performance was a predictor of task performance (b = .38, p < .05) while accountability for tasks did not predict challenge performance (b = .24, p = ns). These results support the appropriateness of using our new accountability measure along with the previously validated measures.

5. Results

Means, standard deviations, and correlations among the study’s variables are reported in Table 1. Statistical remedies proposed by Podsakoff et al. (2012) were used to address concerns for common method bias and to establish measure validity. We first conducted Harman’s one factor test. The exploratory factor analysis for our measures of regulatory focus and accountability exhibited more than one factor with eigenvalues greater than 1 with the largest factor accounting for 25.01% of the variance. This suggests that the variance between our independent variables cannot be accounted for by one general factor. To establish discriminant validity and confirm the reliability of our predictor variables we conducted confirmatory factor analysis using AMOS version 22. The CFA results showed good model fit (CFI = 0.968; RMSEA = 0.035; Δχ²(1) = 98.16, p = ns). The scale demonstrated appropriate reliabilities ranging from 0.72 to 0.74.

We used hierarchical regression to test our hypotheses. The first two sets of hypotheses considered the relationship between regulatory focus and both task and challenge performance. As shown in Table 2, Model 2 and in support of Hypothesis 1a, promotion focus was positively related to task performance (b = .37, p < .01). For Hypothesis 1b, while the coefficient was in the proposed negative direction, prevention focus was not significantly related to task performance (b = −.06, p = ns). Hypothesis 1b was therefore not...
supported. Hypothesis 2a predicted that promotion focus would be positively related to innovation performance. As shown in Table 3, Model 2, this hypothesis was supported ($b = .44, p < .01$). Consistent with Hypothesis 2b, prevention focus was negatively related to innovation performance ($b = -.26, p < .01$).

Hypotheses 3 proposed that perceived accountability for tasks would be positively associated with assessments of task performance. As shown in Table 2, Model 3 and in support of this hypothesis, accountability for task performance was related to task performance ($b = .24, p < .01$). Hypothesis 4 predicted that perceived accountability for innovation would be positively related to challenge performance. This hypothesis was also supported as shown in Table 3, Model 3 ($b = .16, p < .05$).

We proposed in Hypothesis 5 that the positive relationship between promotion regulatory focus and task performance would be stronger for individuals reporting higher accountability for task performance ($b = .24, p < .01$). Hypothesis 6 predicted that perception accountability for innovation would be positively related to challenge performance ($b = .31, p < .05$). The nature of this interaction is presented in Fig. 3.

For Hypothesis 7, we expected the negative relationship between prevention focus and challenge performance to be weaker for individuals reporting higher accountability for innovation. As seen in Table 3, Model 4, the interaction did predict ratings of challenge performance ($b = .24, p < .05$), thereby supporting this hypothesis (see Fig. 4). Contrary to Hypothesis 8 and as seen in Table 3, Model 4, accountability for tasks did not moderate the relationship between prevention focus and task performance ($b = .07, p = ns$).

6. Discussion & conclusion

Context matters in organizational behavior, with studies often incomplete if they do not take into account situational opportunities and constraints that can affect functional relationships (Johns, 2006). HPWSs are coordinated bundles of work practices that, when synergistically aligned with an organization’s strategy, can significantly impact performance (Beltrán-Martín et al., 2008; Subramony, 2009). Considering this, our mixed-methods study explored the parallelism among a bundle of practices in one high performing, competitive organization.

Interviews and subsequent survey data identified two important themes for the company’s strong performance that also complemented its ambitious incentive system. One was the distinctive characteristics of the employees critical to strategy execution. The other theme was the role of supervisors in establishing employee accountability.

Our study makes a number of meaningful contribution. Our research advances scholarly consideration of the importance of parallelism between organizational strategy and HR policies and practices. Methodologically, we focused on a single high performance work organization that was among the most competitive in its industry and known for its innovative technology as well as motivating incentive program that encouraged impressive levels of productivity without sacrificing quality.

We examined whether two popular practices contributed to employee success and implicitly, the company’s success. Quantitative and qualitative analyses show that both performance management in the form of accountability and employee characteristic of regulatory focus were useful for developing higher levels of individual performance. Theoretically, the findings also support goal setting research on the importance of feedback, particularly in complex task environments (Locke, 1996; Locke & Latham, 2002).

![Fig. 2. Task performance as a function of promotion focus and accountability.](image1)

![Fig. 3. Challenge performance as a function of promotion focus and accountability.](image2)
Building on the tenants of regulatory focus theory, we found promotion-focused employees expected greater ratings of performance on measures of both task and challenge performance, while those with a prevention focus believe they would be rated more poorly in challenge performance. This is an important advancement in considering regulatory focus in a field setting and suggests that regulatory focus may not only be a powerful predictor of job performance, but also individuals’ alignment with the organization’s strategy and related governance.

Our results contribute to accountability research by showing the powerful effect of perceived accountability on performance. In an organization well-respected for its attention to quality production and innovation, we found evidence to indicate that supervisory monitoring had a beneficial effect on performance. Notably, we found this effect across two groups within the organization—administrative staff in our pilot study and production workers in the main study. The finding that accountability enhanced challenge performance is of particular interest because it extends previous research that considered a different OCB (Mero et al., 2014).

Finally, our mixed methods design provides a unique lens for in-depth studies of HPWS. The exploratory element provided us with management’s theory on why this company, with the hallmarks of a HPWS, is so successful. This approach was consistent with established rationale for using mixed methods—to draw inductive conclusions about research questions to ask and the appropriate constructs to consider (Creswell & Plano-Clark, 2011). Our findings from the qualitative analysis were integrated with existing theory to develop hypotheses that would provide greater generalizability than that provided in a pure qualitative study. Use of this format has great potential for scholars’ interested developing theory grounded in the observations of highly efficient and effective companies.

6.1. Implications

Our study provides an important step in scholarly research by answering Posthuma et al.’s (2013) call for scholars to go beyond a focus on monetary rewards to consider other tools and techniques used by HPWS to create the synergy needed to achieve enhanced results. Supporting the contingency perspective of HR practices (Zhang & Li, 2009), our study found that important work force characteristics (self-regulatory focus) and perceptions of accountability interacted to effect two dimensions of job performance critical to this company’s success. Our results should not be viewed as suggesting that individual’s high in promotion focus are inherently better performers. The nature of this high risk, high rewards system and the need for continuous innovation made regulatory focus an important contingency variable. In other contexts, perhaps accounting or medicine, prevention focused behaviors, including attention to detail, repetition, and avoidance of errors, may be important characteristics of the work force and its HPWS.

For practitioners, regulatory focus could be an important trait to consider in the HR selection process. While firms use personality constructs for selection, our findings suggest that in the context of a high performing work system that values productivity and innovation, and that uses a contingent pay system to encourage this effort, organizations may benefit from hiring individuals with a chronic promotion focus. These individuals might better align with the organization’s strategy in contrast to individuals high in prevention focus.

6.2. Limitations and future research

As with all studies, ours has limitations that must be considered. For one, the study may be limited by the composition of the sample and the test of our conceptual model in the same setting where the model was developed. It is our recommendation that future research replicate the current study with a set of organizations across a range of industries and countries to confirm generalizability of our findings. Nonetheless, given our focus was on the parallelism of strategy and HR practices not previously considered, it was appropriate to study a single organization.

A second limitation is the study’s response rate. While the rate is less than might be expected given the relationship developed with upper management, we had prepared for this possibility by collecting data across plants and crew rotations while minimizing (as promised) disrupting worker productivity during data collection. This meant we needed to administer surveys after a crew’s long 12-h work shift. Since we did not find significant differences between respondents and non-respondents we do not believe the low response rate invalidates our findings or adversely effected the power needed to test our hypotheses.

A third limitation concerns common source bias with the independent and dependent variables. In creating the survey, steps were taken to minimize bias where possible, including use of different scale properties (Podsakoff, MacKenzie, & Podsakoff, 2012). Further, with the one-factor test, a single factor solution generated only 25% of variance is explained; well below the 50% threshold (Harman, 1976). Finally, while the main effects of accountability and regulatory focus could be artifacts of this limitation, interactions are not affected by method bias. Hence, we do not believe that this issue is a meaningful concern in our study.

Lastly, the results of our study should be viewed with caution given the cross-sectional design. The implicit assumption is that regulatory focus and accountability precede performance. Yet it may be that individual characteristics are the results of attraction-selection-attrition (Schneider, 1987) such that some poor performers left the organization due to poor fit with the company’s strategy and corresponding governance and incentive systems. It will be important for future research to use a longitudinal design; one capturing the fluid nature of organizations and the people within as it is likely that performance outcomes and the resulting pool of human resources influence subsequent calls to account.

In addition to the research that stems from study limitations, future research should also consider the relationship between improved individual performance and subsequent unit and firm performance. While our research supports the theory that there are some individuals who have greater fit with the demands of the organizational context, we are not able to show that individual performance was largely responsible for organization success; although management certainly believe this is the case. We encourage future multi-level research to examine...
this anecdotal finding. Relatedly, researchers are beginning to recognize that regulatory focus is not just an individual-level phenomenon. There may also be organizational climates for promotion or for prevention, which could impact various strategic phenomena (Johnson et al., 2015). It may even be that accountability is the mechanism that facilitates this climate.

Future research might also look at these relationships from the vantage point of an ambidextrous organization and contexts that encourages individuals to contribute to this ambidexterity. While there is a degree of contradiction in designing a work system that promotes both efficient production and innovation, research suggests that HPWSs are in a good position to refine their HR practices to create a context that achieves this objective through employee motivations, capabilities, and subsequent behavior (Patel, Messersmith, & Lepak, 2013).

6.3. Conclusion

While some scholars have proposed that HR practices such as contingent rewards are universally applicable, it is likely that there are a myriad of other HR practices that cannot be replicated from organization to organization with equal success. The two factors consider here, however, hold great promise for practitioners and scholars to consider when designing HR systems that facilitate the high productivity/high innovation demands faced by contemporary organizations.

References


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