



Perceptions of Adverse Work Conditions and Innovative Behavior: The Buffering Roles of Relational Resources

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This study investigates how employees' perceptions of adverse work conditions might discourage innovative behavior and the possible buffering roles of relational resources. Data from a Mexican-based organization reveal that perceptions of work overload negatively affect innovative behavior, but this effect gets attenuated with greater knowledge sharing and interpersonal harmony. Further, although perceived organizational politics lead to lower innovative behavior when relational resources are low, they increase this behavior when resources are high. Organizations which seek to adopt innovative ideas in the presence of adverse work conditions thus should create relational conduits that can mitigate the associated stress.

Introduction

Companies such as Google and 3M exemplify how corporate entrepreneurship can emerge from the innovative behaviors of employees (Kuratko, Hornsby, & Covin, 2014). Both companies share a relatively rare work design feature: They allow employees to spend 15–20% of their time “chasing rainbows” and working on their own ideas. Some of these ideas have become revolutionary or best-selling new products (e.g., Google Glass, Post-It Notes), yet most employees' fringe efforts likely never see the light of the day. In the absence of an explicit mandate, employees' innovative behavior can be explained by their perceptions of personal work conditions and the broader organizational environment (Hornsby, Kuratko, Holt, & Wales, 2013; Klein & Sorra, 1996; Kuratko, Ireland, Covin, & Hornsby, 2005; Scott & Bruce, 1994). To adapt Schelling's (1978) famous adage, the extent to which entrepreneurial behavior occurs at the macro, corporate level likely depends on the micro motives of employees.

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The innovative behaviors of individual employees that underlie firms' efforts to renew themselves include the generation, internal promotion, and implementation of new ideas, products, or processes (Janssen, 2000; Kanter, 1988; Van de Ven, 1986). Extant corporate entrepreneurship literature recognizes the central role of employees' bottom-up initiatives for improving the organizational situation and generating solutions (Burgelman, 1983; De Clercq, Castañer, & Belausteguigoitia, 2011; Douglas & Fitzsimmons, 2013; Monsen & Boss, 2009). Regardless of whether these initiatives ultimately lead to the creation of new entities within the organization (e.g., Block & MacMillan, 1993; Parker, 2011; Zajac, Golden, & Shorten, 1991) or to other forms of organizational renewal (Åmo & Kolvereid, 2005; Corbett, Covin, O'Connor, & Tucci, 2013; Shepherd, Haynie, & Patzelt, 2013), the innovative behaviors by a firm's rank and file constitute sufficient, even if not always necessary, building blocks for corporate entrepreneurship (Sharma & Chrisman, 1999).

Noting the discretionary nature of innovative behavior, previous research has sought to identify some of its antecedents, such as associated performance expectations (Yuan & Woodman, 2010) and a supportive organizational climate (Hornsby, Kuratko, & Zahra, 2002; Scott & Bruce, 1994). More broadly, the appeal of stepping off the beaten path relates to the nature and perceived value of the effort required to do so (Douglas & Shepherd, 2000; Monsen, Patzelt, & Saxton, 2010). Implicit in this determination is the sustainability of employees' energy reservoirs (Monsen & Boss, 2009; Quinn, Spreitzer, & Lam, 2012), particularly with regard to whether their work conditions allow them to allocate residual energy to innovative behavior. This presumption does not bear scrutiny, however, in light of research findings that adverse, stressful work conditions may hamper employees' propensity to allocate significant energy to behaviors that can benefit their organization (Bakker & Demerouti, 2007; Noblet, McWilliams, Teo, & Rodwell, 2006). For example, highly demanding work conditions—such as those that instill uncertainty about whether sufficient time is available to complete tasks successfully (Avery, Tonidandel, Volpone, & Raghuram, 2010) or about the fairness of decision-making processes (Greenberg, 2004)—may have detrimental effects on employees' engagement in behaviors that are not directly explicated in their formal job descriptions. Therefore, to enhance our understanding of innovative behaviors, it is of paramount importance to examine whether and how energy-depleting work conditions might lead to reluctance to undertake these behaviors, as well as how such harmful effects might be counteracted.

Accordingly, we investigate the relationship between employees' perceptions of adverse work conditions and their engagement in innovative behavior, as well as some contextual moderators of this relationship. We ground our arguments in the Job Demands-Resources (JD-R) model, according to which job demands tend to trigger significant stress in employees, which in turn can be offset by job resources (Bakker & Demerouti, 2007). We focus on adverse work conditions that pertain to both direct job requirements *and* the broader work environment (Quinn et al., 2012) as significant sources of stress, which may keep employees from engaging in innovative behavior. First, perceived work overload captures employees' beliefs that work expectations are unreasonable and excessive, due to impossible deadlines or time constraints (Jamal, 1990; Robinson & Griffiths, 2005). It can generate exhaustion and burnout (Bakker, Demerouti, & Verbeke, 2004; Demerouti, Bakker, & Bulters, 2004; Kalleberg, 2008), and it underlies the well-established importance of "time availability" as a critical condition for corporate entrepreneurship (Hornsby, Kuratko, & Montagno, 1999; Hornsby, Kuratko, Shepherd, & Bott, 2009; Hornsby et al., 2002, 2013). Second, perceived organizational politics refer to employees' beliefs about the prominence of self-serving behaviors in their organization (Hochwarter, Kacmar, Perrewé, & Johnson, 2003; Kacmar & Ferris, 1991; Vigoda, 2000). These beliefs may exacerbate the perceived risk associated with corporate entrepreneurial action

(Hornsby et al., 2002; Shimizu, 2012) and hence inhibit the perceived feasibility of such action (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Crawford, Lepine, & Rich, 2010).

We further argue that the relational resources at employees' disposal may function as buffers against the stress that arises from these adverse work conditions (Bakker, Demerouti, & Euwema, 2005; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). In line with previous research on the importance of knowledge (e.g., De Clercq, Dimov, & Thongpapanl, 2013; Floyd & Wooldridge, 1999) and emotions (e.g., Biniari, 2012; Shepherd et al., 2013) for shaping corporate entrepreneurship, we focus on two relational resources: knowledge sharing and interpersonal harmony. Knowledge sharing relates to content and captures the frequency and bidirectionality of knowledge flows among employees (Grant, 1996). Interpersonal harmony instead relates to emotion and reflects the absence of negative feelings, such as anxiety or anger, in employees' daily interactions with their organizational peers (Illies, Johnson, Judge, & Keeney, 2011). Together, these resources provide a parsimonious, comprehensive picture of how relationships with organizational peers might help employees cope with adverse work conditions.

With this study, we aim to make the following contributions to corporate entrepreneurship literature. First, we shine light on the role of the *individual* in fostering innovation and the challenge of balancing innovation with adverse work conditions. This approach makes those who espouse entrepreneurial thought and action central to our inquiry, with a particular focus on how employees' dissatisfaction with their work context (De Clercq et al., 2011; Yuan & Woodman, 2010) influences their propensity to engage in entrepreneurial action. In so doing, we respond to recent calls to unpack employees' perceptions of their surrounding work environment and their effects on fuelling engagement in entrepreneurial or innovative behavior (Corbett et al., 2013; Hornsby et al., 2013).¹ Second, we highlight that employees' engagement in innovative behavior should be viewed in conjunction with, rather than in isolation from, their perceptions of *stress*-inducing work conditions (Bakker & Demerouti, 2007). Previous corporate entrepreneurship research suggests that adverse organizational conditions (e.g., the lack of appropriate training and rewards, or an unsupportive organizational climate) may hamper employees' propensity to take on activities that entail change and innovation (Brown, Davidsson, & Wiklund, 2001; De Clercq et al.; Kuratko et al., 2005; Stevenson & Jarillo, 1990), yet this research has not explicitly examined how employees' concerns about work overload or perceptions of organizational politics may inform this propensity. Third, we complement previous corporate entrepreneurship research that has considered the direct impact of employees' resource access on their entrepreneurial actions (e.g., Hornsby et al.; Stopford & Baden-Fuller, 1994), by proposing that relational resources may play an indirect, buffering role in countering the negative effects of adverse work conditions, which makes them instrumental for maintaining innovative behavior in the face of challenges.

Theoretical Background

Employees engage in innovative behavior through the generation, promotion, and implementation of new ideas in their organization (Janssen, 2000; Scott & Bruce, 1994).

1. Consistent with Sharma and Chrisman (1999), we conceive of innovative behavior as a subset of the entrepreneurial behavior in which employees may engage, so we use the two terms interchangeably.

They may recognize particular problems and generate novel solutions, then seek support for their novel ideas by lobbying colleagues in the organization. In turn, they may engage in actual idea implementation by converting ideas into concrete solutions. Notably, this process is characterized by overlapping rather than discrete, sequential stages (Kanter, 1988; Schroeder, Van de Ven, Scudder, & Polley, 1989), so employees tend to be involved to varying degrees in combinations of behaviors at any one time, rather than engaging in one at a time (Scott & Bruce).

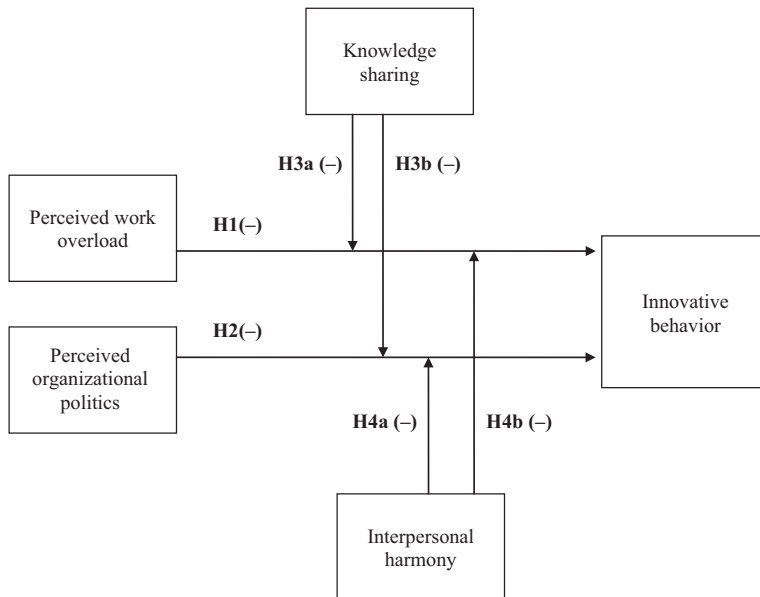
Prior research details various enablers of employees' innovative (or entrepreneurial) behavior, including individual factors, such as dissatisfaction with the status quo (De Clercq et al., 2011) and expected performance (Yuan & Woodman, 2010), and context-driven factors, such as performance-based rewards (Hornsby et al., 2002) and a supportive organizational climate (Scott & Bruce, 1994). To the extent that engaging in innovative behavior depletes employees' energy reservoirs, the endogenous character of their current work demands represents an overlooked angle in understanding innovative behavior (Monsen & Boss, 2009). Change-invoking activities (e.g., generating, selling, and applying new ideas) require not only significant energy from employees but also a perception that the associated effort is feasible (Douglas & Shepherd, 2000). This perception is less likely when employees experience adverse work conditions that impose excessive stress on their daily functioning (Bakker et al., 2004; Janssen, 2000). We consider two potent sources of workplace stress, namely perceptions of work overload and perceptions of organizational politics. The former captures employees' beliefs that insufficient time is available to execute their daily tasks (Boyd et al., 2011; Demerouti et al., 2004); the latter reflects their concerns that their successful task accomplishment will be threatened by others' self-serving behaviors (Hochwarter et al., 2003; Kacmar & Ferris, 1991).

The JD-R model offers a theoretical framework—popular in organizational behavior research but rarely applied in entrepreneurship studies—for understanding the impact of these adverse work conditions on innovative behavior. According to this model, the stress that employees' work conditions impose significantly reduces the energy they have available for discretionary behaviors that benefit their organization (Demerouti et al., 2004; Schaufeli & Bakker, 2004). For example, the presence of excessive workloads may put so much pressure on employees that they turn away from “positive” behaviors that might not be directly rewarded but that aid the organization overall (LePine, Erez, & Johnson, 2002; Noblet et al., 2006). Similarly, if they perceive their work environment as highly political, employees may become so preoccupied about how others' self-serving behaviors will interfere with their own actions that they have no energy left to devote to change-invoking activities (Crawford et al., 2010).

The JD-R model also suggests that adverse work conditions are particularly harmful in the absence of relevant job resources (Xanthopoulou et al., 2007), including resources embedded in relationships with organizational peers (Schaufeli & Bakker, 2004). In the presence of job resources, the energy depletion effect of adverse work conditions may be less pronounced, because the support that employees receive functions as a “buffer” against negative impacts on their work outcomes (Bakker & Demerouti, 2007). We focus on the buffering effect of two critical resources, embedded in employees' relationships with organizational peers, namely knowledge and harmony. On the one hand, the extent to which employees maintain strong knowledge-sharing routines with peers reflects their access to relevant *content* to which they may not previously have been exposed (Floyd & Wooldridge, 1999; Grant, 1996), such that it can generate new insights into ways to cope with the stress that results from adverse work conditions. On the other hand, interpersonal harmony represents an *emotion*-related resource (Schaufeli & Bakker), involving the

Figure 1

Conceptual Model



suppression of negative feelings (e.g., anger, destructive conflict) in daily interactions with organizational peers (Illies et al., 2011).

In summary, we investigate the relationships between employees’ perceptions of two sources of workplace stress (work overload and organizational politics) and their innovative behavior, as well as how these relationships may be moderated by knowledge sharing and interpersonal harmony. Following the JD-R model, we argue that whereas perceived work overload and organizational politics reduce innovative behaviors, these effects get attenuated when levels of knowledge sharing and interpersonal harmony are higher. We summarize our conceptual framework and its constitutive hypotheses in Figure 1.

Hypotheses

Adverse Work Conditions and Innovative Behavior

Although adverse work conditions may not always have detrimental outcomes (Bouckennooghe, 2012; Van den Broeck, De Cuyper, De Witte, & Vansteenkiste, 2010), stress-inducing circumstances that instill great uncertainty in daily functioning tend to hamper activities that require significant efforts (Noblet et al., 2006; Paillé, 2011). According to the JD-R model, severe job demands lead to exhaustion and burnout, because they deplete employees’ energy (Bakker et al., 2004; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Hakanen, Bakker, & Demerouti, 2005). In particular, employees who face adverse work situations tend to respond to the associated stress with a process of intense cognitive coping that depletes their reservoir of available energy (Lazarus & Folkman, 1984). Thus because workplace stress requires employees to engage in coping efforts that consume substantial energy, they become constrained in the activities to which they can allocate their work efforts (Schaufeli & Bakker, 2004).

For this study, this argument suggests that employees who confront severe time constraints in their jobs may not possess the time or energy to undertake discretionary activities, such as innovative behavior (Monsen et al., 2010). Hockey (1997) argues that employees often respond to excessive work demands by anticipating and accepting reduced performance, such that they adjust their performance targets downward. All else being equal, employees with excessive workloads will devote less energy to activities that could improve their organization, and their propensity to develop, promote, and implement new ideas therefore diminishes. Similarly, Hornsby et al. (2002, 2009, 2013) identify employees' perceptions of "time availability" as a critical condition for their propensity to engage in entrepreneurial behaviors. High levels of work overload reduce the propensity to engage in innovative behavior, because employees' cognitive ability to do so is hampered.

Hypothesis 1: There is a negative relationship between employees' perceptions of work overload and their engagement in innovative behavior.

We also anticipate a negative relationship between employees' perceptions of organizational politics and their innovative behavior. To the extent that employees believe that self-serving behaviors define organizational decisions, they experience high levels of stress, related to their fear that such behaviors will undermine their ability to undertake their daily activities successfully (Cavanaugh et al., 2000; Chang, Rosen, & Levy, 2009; Crawford et al., 2010). This energy-draining effect of perceived organizational politics is particularly potent when it emerges in relation to activities that infuse novelty or change in the organization (Parker, Dipboye, & Jackson, 1995). Organizational change research shows that perceptions of political behavior steer employees away from change-related activities, because they anticipate strong resistance to potential adjustments to the current organizational situation (Bouckennooghe, 2012). Thus, if organizational decision making appears guided by organizational politics, employees likely question whether their innovative behaviors will earn appropriate evaluations or have any chance of being funded, because such behaviors may challenge others' privileges or personal turf (Buchanan & Badham, 1999). This anticipated resistance to their innovative behaviors, due to perceived organizational politics, likely discourages employees from allocating significant energy to the development, promotion, or implementation of novel ideas.

Hypothesis 2: There is a negative relationship between employees' perceptions of organizational politics and their engagement in innovative behavior.

According to the JD-R model, access to relevant resources enhances employees' ability to cope with stressful work conditions and suppresses the energy depletion effect associated with such conditions (Bakker & Demerouti, 2007). Similarly, we suggest a buffering effect of knowledge sharing and interpersonal harmony on the relationships between employees' perceptions of adverse work conditions and their engagement in innovative behavior.

Moderating Role of Knowledge Sharing

Intensive knowledge sharing enriches employees' knowledge bases, enabling them to find solutions to work-related challenges (Grant, 1996; Spender, 1996). In particular, knowledge sharing should reduce the stress that employees experience when facing adverse work conditions, because they can gain novel feedback and suggestions on how

to deal with these conditions from colleagues (Cohen & Levinthal, 1990; Floyd & Wooldridge, 1999). This knowledge sharing then enables useful “conceptual combinations” (Ward, 2004), whereby employees merge their own knowledge with that of organizational peers and increase their creativity in finding ways to deal with challenging work situations (Bakker & Demerouti, 2007). Because intensive knowledge sharing provides access to new knowledge (Yli-Renko, Autio, & Sapienza, 2001), employees should thus gain greater insights into how they can optimize their allocation of discretionary energy to innovative activities, even in demanding conditions (Monsen & Boss, 2009).

First, in the presence of strong knowledge-sharing routines, employees who are overburdened with work can obtain more input from colleagues regarding how to deal with time pressures (Bakker & Demerouti, 2007), so they are less likely to avoid energy-consuming activities that instill innovation. In these circumstances, their individual absorptive capacity and accumulated stocks of relevant knowledge increase (Lane, Koka, & Pathak, 2006; Matusik & Heeley, 2005), so it becomes less challenging to allocate significant energy to behaviors that require creativity and novelty (Douglas & Shepherd, 2000). In other words, the stress that arises from excessive workload pressures is less likely to persist in this situation (Demerouti et al., 2001), which attenuates the negative effect of perceived work overload on innovative behavior.

Hypothesis 3a: The negative relationship between employees’ perception of work overload and their engagement in innovative behavior is moderated by the level of knowledge sharing with organizational peers, such that this relationship is attenuated at higher levels of knowledge sharing.

Similarly, when employees are concerned about self-serving behaviors, access to shared knowledge can reduce the associated stress (Miller, Rutherford, & Kolodinsky, 2008) and mitigate the negative influence of perceived organizational politics on their innovative behavior. Knowledge-sharing routines create multiple pathways to the effective development and application of innovative ideas (De Clercq et al., 2013), which can help divert anticipated resistance to such ideas due to covert political forces. Thus, access to knowledge increases confidence that it is possible to protect oneself against self-serving behaviors (Bouckennooghe, 2012), so the likelihood to persevere when undertaking innovative activities should be greater, even if these self-serving behaviors threaten to undermine the activities (Parker et al., 1995). Ultimately, knowledge sharing should make employees more immune to the stifling impact of perceived organizational politics on their propensity to engage in innovative behavior.

Hypothesis 3b: The negative relationship between employees’ perceptions of organizational politics and their engagement in innovative behavior is moderated by the level of knowledge sharing with organizational peers, such that this relationship is attenuated at higher levels of knowledge sharing.

Moderating Role of Interpersonal Harmony

Interpersonal harmony with organizational peers also may suppress employees’ sensitivity to the stress that accompanies perceptions of adverse work conditions. High levels of interpersonal harmony reduce the emotional efforts that employees must invest in maintaining or restoring relationships with their organizational peers (Boyd et al., 2011), which can increase their ability to cope with the stress emanating from such conditions.

For example, Bakker et al. (2005) indicate that harmonious relationships help reduce the negative impact of job demands on burnout, because employees who enjoy such relationships feel emotionally supported.

In the context of this study, when employees experience high interpersonal harmony, their energy levels are invigorated, because of the “emotional embeddedness” they experience (Biniari, 2012), so they can devote more energy to finding ways to deal with the time pressures associated with excessive workloads, rather than focusing on less productive activities, such as restoring cohesion with their colleagues (Jehn & Mannix, 2001). Thus, the energy reservoirs of overburdened employees are less likely to be depleted than (Quinn et al., 2012), and they are better equipped to deal with time pressures, so they can continue to engage in innovative behaviors. When employees maintain harmonious relationships with organizational peers, they also are more likely to adopt their organizations’ values and practices (De Clercq et al., 2013; Tsai & Ghoshal, 1998), even those that threaten the availability of sufficient time to execute daily tasks. Excessive workloads thus may seem more acceptable than and are less likely to undermine behavior that could improve the organization, such as innovation-related activities (Monsen et al., 2010; Van de Ven, 1986). Ultimately, the negative effect of work overload on innovative behavior should be lessened in conditions of high interpersonal harmony.

Hypothesis 4a: The negative relationship between employees’ perceptions of work overload and their engagement in innovative behavior is moderated by the level of interpersonal harmony with organizational peers, such that this relationship is attenuated at higher levels of interpersonal harmony.

Similarly, when they maintain harmonious relationships with peers, employees are more prone to share concerns about highly politicized decision-making processes (Bouckennooghe, 2012; Tsai & Ghoshal, 1998). Employees who believe they operate in strongly politicized environments then may feel less isolated and instead experience the sense that they “are in the same boat” with others, in terms of organizational decisions (Biniari, 2012; Payne, Moore, Griffis, & Autry, 2011), which in turn may mitigate the energy-depleting effect of perceived organizational politics (Crawford et al., 2010) and the associated fear that innovative behaviors are doomed to fail (Shepherd et al., 2013). In turn, it should be easier to divert the escalation of perceived organizational politics into negative emotions toward the organization (Chang et al., 2009; Miller et al., 2008), leaving employees less reluctant about contributing to their organization’s success through innovative behaviors. Thus, when employees maintain harmonious relationships with colleagues, these relationships can be leveraged to minimize their preoccupation with politics-driven decision making, such that they are better equipped to counter its energy-draining effect.

Hypothesis 4b: The negative relationship between employees’ perceptions of organizational politics and their engagement in innovative behavior is moderated by the level of interpersonal harmony with organizational peers, such that this relationship is attenuated at higher levels of interpersonal harmony.

Research Method

Sample and Data Collection

We collected data from employees and their supervisors working for a private, for-profit logistics organization located in Mexico. The organization, founded less than 10

years ago, distributes pharmaceutical products. It has enjoyed spectacular growth since its inception and employed more than 1,000 people in 2012. Our focus on a single organization matches previous corporate entrepreneurship research (e.g., Burgelman, 1983; De Clercq et al., 2011; Pappas & Wooldridge, 2007) and enables a more situated research design (Ocasio, 1997) by capturing specific aspects of the immediate suborganizational context in which an employee operates. This focus also avoids unobserved differences in organizations' external environments; different organizations cope with various external competitive pressures, which likely inform the propensity of their employees to engage in innovative behavior (Zahra & Garvis, 2000).

Our data collection relied on a survey instrument, distributed in two rounds. First, we asked 1,100 employees to assess their perceptions of work overload and organizational politics, as well as their level of knowledge sharing and interpersonal harmony with organizational peers. We received 746 responses, for a response rate of 68%, which reflects the strong support for this study by the organization's top management. The average respondent was 34 years of age and had worked for the organization for 3.5 years; 78% were men. Second, a month later, the immediate supervisors of the first-round respondents assessed the level of employees' innovative behavior. We obtained the names of these supervisors from the organization's human resource department. The 707 responses we received from supervisors represented a response rate of 95%. Our analyses are based on the 707 matched pairs.

The surveys were originally prepared in English and then translated into Spanish. To avoid cultural bias and ensure validity, the Spanish versions also were back-translated into English (Brislin, Lonner, & Thorndike, 1973). In addition, we pretested a preliminary version of the two surveys with two different sets of employees who did not participate in the actual data collection. By incorporating the feedback from these employees into a revised version of the surveys, we increased the readability of the questions and the data quality. For both survey rounds, to minimize the possibility that their responses would be subject to social desirability or acquiescence biases, we guaranteed the participants complete confidentiality, emphasizing that only the researchers had access to their individual responses, asked them to answer the questions as honestly as possible, and repeatedly assured them that there were no right or wrong answers and that it was normal for employees to score the questions differently (Spector, 2006).

Measures

The survey questions for the multi-item constructs used 7-point Likert scales, ranging from 1 = strongly disagree to 7 = strongly agree. Different respondents assessed the dependent versus independent, moderator, and control variables. We provide the individual items for the multi-item constructs, along with the values of the construct reliabilities and average variances extracted, in the Appendix.

Innovative Behavior. To measure employees' engagement in innovative behavior, we used a previously validated scale that includes the generation, promotion, and implementation of new ideas (Janssen, 2001; Kanter, 1988; Scott & Bruce, 1994). Sample items included, "this employee often generates original solutions to problems," "this employee often mobilizes support for innovative ideas," and "this employee often transforms innovative ideas into useful applications" (Cronbach's $\alpha = 0.97$). Unlike "objective" proxies from company records, which are not only difficult to obtain but also limited to tangible outcomes, this measure reflects the underlying components and processual nature of idea generation, promotion, and implementation (Van de Ven, 1986). We conducted a

second-order confirmatory factor analysis (CFA) to check whether the three dimensions loaded well onto a single latent factor. The second-order factor model achieved excellent fit: $\chi^2(27) = 44.45$; Tucker-Lewis index (TLI) = 0.99, confirmatory fit index (CFI) = 0.99, and root mean squared error of approximation (RMSEA) = 0.05.

Perceived Work Overload. We used four items from previous research on job demands (Janssen, 2001; Van Veldhoven & Meijman, 1994) to measure employees' perceived work overload. The respondents indicated, for example, whether they "often worked under time pressure" or "often had problems with the pace of work" (Cronbach's alpha = 0.80).

Perceived Organizational Politics. We used four items drawn from Hochwarter et al. (2003) to assess employees' perceptions of organizational politics. Using one organization to assess employees' perceptions of self-serving behaviors in their organizational environment is consistent with previous studies (e.g., Lee & Peccei, 2011; Parker et al., 1995). Sample items were "people spend too much time sucking up to those who can help them" or "people are working behind the scenes to ensure that they get their piece of the pie" (Cronbach's alpha = 0.84).

Knowledge Sharing. We used four items from previous corporate entrepreneurship and innovation research (De Clercq et al., 2013; Song, Montoya-Weiss, & Schmidt, 1997) to assess the extent to which employees shared knowledge. For example, the respondents indicated whether they and their colleagues "regularly communicated with each other" and "provided each other with a lot of feedback" (Cronbach's alpha = 0.92).

Interpersonal Harmony. To measure the extent to which employees experienced interpersonal harmony, we turned to previous research on interpersonal conflict (Jehn & Mannix, 2001). The reverse-coded items assessed the presence of emotional, person-related tensions in employees' interactions with colleagues in the firm. Example items included, "my colleagues and I often get angry while working together" and "there often are tensions in the relationship between my colleagues and myself" (Cronbach's alpha = 0.80).

Control Variables. We included several control variables to account for alternative explanations for innovative behavior. First, we controlled for three demographic characteristics: *gender*, *age*, and *organizational tenure* (Janssen, 2001). Second, we considered two variables that may inform employees' intrinsic motivation to engage in innovative behavior, namely their *intrinsic interest in entrepreneurship* (Cronbach's alpha = 0.90) and their *dissatisfaction with the status quo* (Cronbach's alpha = 0.84) (Yuan & Woodman, 2010). Third, we controlled for employees' perceptions of the *fairness* of the rewards they received from their employer (Cronbach's alpha = 0.95) (Janssen).

Measure Assessment

Following Anderson and Gerbing (1988), we estimated a nine-factor measurement model that included the five focal constructs and the four multi-item control variables listed in the Appendix. The CFA revealed significant factor loadings, normalized residuals less than 2.58, and modification indices less than 3.84 for all scale items (Anderson & Gerbing). The fit of the measurement model was good: $\chi^2(784) = 2,702.68$, TLI = 0.91, CFI = 0.92, and RMSEA = 0.06.

We also found evidence of the convergent validity of the constructs in the significant loadings of their respective items in the measurement model ($t > 2.0$; Gerbing & Anderson, 1988) and the magnitude of their average variance extracted (AVE) values, which exceeded the 0.50 threshold (Bagozzi & Yi, 1988). In support of the discriminant validity of the nine constructs, the confidence intervals for their correlations did not include 1.0 ($p < .05$) (Anderson & Gerbing); their AVE values were greater than the squared correlations between the corresponding pairs of constructs (Fornell & Larcker, 1981), and for all 36 pairs of constructs, we found significant differences between the unconstrained and constrained models (Anderson & Gerbing), such as between knowledge sharing and interpersonal harmony ($\chi^2_{(1)} = 431.1, p < .001$).

Results

We provide the correlations and descriptive statistics in Table 1. The results of the hypotheses tests with moderated regression analysis appear in Table 2. Model 1 contains the control variables; model 2 adds the direct effect of perceived work overload and perceived organizational politics, as well as knowledge sharing and interpersonal harmony. Models 3–6 add the four mean-centered interaction terms, one at a time, to avoid multicollinearity problems or masking of true interaction effects, as well as to enhance the interpretability of the regression coefficients (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003), as exemplified in prior corporate entrepreneurship studies that test multiple interactions (e.g., De Clercq, Dimov, & Thongpapanl, 2010; Zahra & Hayton, 2008).² Model 7 includes the four interaction terms simultaneously. After mean centering, the variance inflation factor (VIF) values were less than 10 for each variable in all models, and the highest VIF value was 1.778 for interpersonal harmony in model 6.

Hypotheses 1 and 2 suggest that employees who experience adverse work conditions are less likely to engage in innovative behavior. We find support for the negative relationship between perceived work overload and innovative behavior ($\beta = -0.097; p < .01$, model 2), but the relationship between perceived organizational politics and innovative behavior is not significant ($\beta = 0.024; ns$, model 2). Thus, we affirm hypothesis 1 but not hypothesis 2. We also observe that while the relationship between knowledge sharing and innovative behavior is not significant ($\beta = 0.16; ns$, model 2), employees are more likely to engage in innovative behavior to the extent that they enjoy higher levels of interpersonal harmony with organizational peers ($\beta = 0.133; p < .01$, model 2).

In model 3, the positive perceived work overload \times knowledge-sharing interaction term ($\beta = 0.033; p < .05$) indicates that the negative relationship between work overload and innovative behavior becomes attenuated at higher levels of knowledge sharing. Similarly, model 4 shows a positive interaction between perceived organizational politics and knowledge sharing ($\beta = 0.050; p < .05$). To clarify the nature of these interaction effects, we plot the relationship between the two sources of adversity (work overload and organizational politics) and innovative behavior at high and low levels of knowledge sharing (Figure 2a and b, respectively), combined with a simple slope analysis for each (Aiken & West, 1991). Figure 2a shows that the negative relationship between perceived work overload and innovative behavior gets mitigated at high versus low levels of knowledge

2. By mean-centering the variables before calculating the interaction terms, the first-order regression coefficient of each predictor can be interpreted as its effect at the mean values of the other variables in the model, instead of its effect at their less meaningful zero values (Cohen et al., 2003).

Table 1
Correlations and Descriptive Statistics

	1	2	3	4	5	6	7	8	9	10	11
1. Innovative behavior	-0.150**										
2. Perceived work overload	-0.089*	0.359**									
3. Perceived organizational politics	0.080*	-0.217**									
4. Knowledge sharing	0.175**	-0.336**	-0.312**								
5. Interpersonal harmony	-0.007	-0.097**	-0.123**	0.321**							
6. Gender	-0.048	0.026	-0.083*	-0.029	0.030						
7. Age	0.057	-0.012	-0.041	0.003	-0.018	-0.194**					
8. Organizational tenure	0.077*	-0.165**	-0.263**	0.219**	0.080*	-0.083*	0.259**				
9. Intrinsic interest in entrepreneurship	-0.055	0.355**	0.312**	-0.234**	0.194**	0.060	0.028	0.070			
10. Dissatisfaction with the status quo	0.021	-0.188**	-0.206**	0.299**	-0.264**	-0.070	0.076*	0.095*	-0.116**		
11. Perceived fairness	5.055	4.091	2.852	5.667	5.819	0.101**	-0.067	-0.127**	0.244**	-0.275**	
Mean	1.237	1.381	1.417	1.382	1.263	0.411	33.730	3.469	6.069	4.956	5.122
SD							7.976	1.674	1.032	1.442	1.637

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

Notes: n = 707.

SD, standard deviation.

Table 2

Regression Results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Gender	-0.035	-0.047	-0.036	-0.050	-0.050	-0.049	-0.045
Age	-0.010 [†]	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009
Organizational tenure	0.050 [†]	0.035	0.032	0.036	0.036	0.040	0.038
Intrinsic interest in entrepreneurship	0.093 [†]	0.060	0.068	0.066	0.066	0.079	0.082 [†]
Dissatisfaction with the status quo	-0.044	0.010	0.011	0.010	0.006	0.005	0.006
Perceived fairness	-0.007	-0.021	-0.019	-0.020	-0.016	-0.010	-0.010
Perceived work overload		-0.097**	-0.099**	-0.099**	-0.107**	-0.097**	-0.102**
Perceived organizational politics		0.024	0.027	0.025	0.027	0.037	0.036
Knowledge sharing		0.016	0.005	-0.005	0.012	0.013	-0.001
Interpersonal harmony		0.133**	0.126**	0.126**	0.101*	0.071	0.069
Perceived work overload × knowledge sharing			0.033*				0.015
Perceived organizational politics × knowledge sharing				0.050*			0.022
Perceived work overload × interpersonal harmony					0.062*		0.021
Perceived organizational politics × interpersonal harmony						0.080***	0.061*
R ²	0.016	0.046	0.052	0.055	0.053	0.063	0.068
ΔR ²		0.030***	0.006*	0.009*	0.007*	0.017***	0.021**

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Notes: $n = 707$.

sharing ($\beta = -0.008$; *ns*, $\beta = -0.191$; $p < .01$, respectively), whereas Figure 2b reveals that the relationship between perceived organizational politics and innovative behavior becomes positive at high levels of knowledge sharing ($\beta = 0.163$; $p < .05$) but is negative at low levels ($\beta = -0.113$; $p < .05$).

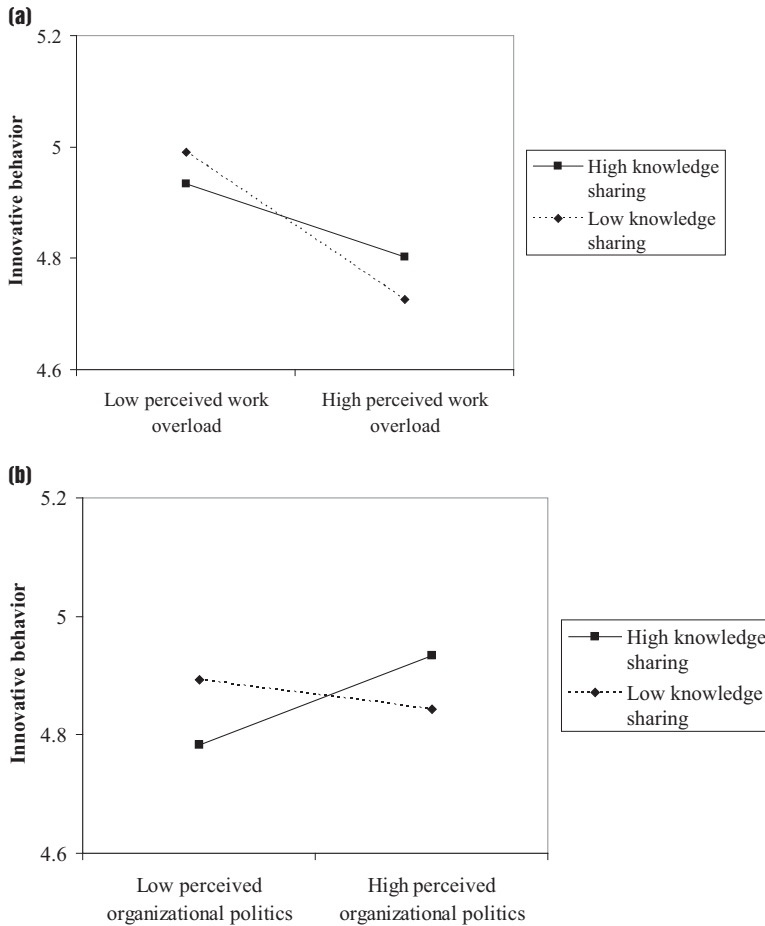
The results for the moderating effects of interpersonal harmony mirror those for knowledge sharing. Model 5 indicates that the negative relationship between perceived work overload and innovative behavior is attenuated at higher levels of interpersonal harmony ($\beta = 0.062$; $p < .05$), and model 6 features a positive interaction between perceived organizational politics and interpersonal harmony ($\beta = 0.080$; $p < .001$), as we show in Figure 3a and b. Figure 3a reveals that the negative relationship between perceived work overload and innovative behavior gets mitigated at high versus low levels of interpersonal harmony ($\beta = -0.049$; *ns*, $\beta = -0.263$; $p < .01$, respectively); Figure 3b shows that the relationship between perceived organizational politics and innovative behavior turns positive at high levels of interpersonal harmony ($\beta = 0.239$; $p < .05$) but is negative at low levels ($\beta = -0.165$; $p < .05$).

Post Hoc Analyses

To test the robustness of the results and explore alternative possibilities, we also undertook a series of *post hoc* analyses. First, when we included all four interaction terms simultaneously (model 7, Table 2), the interaction terms were positive, as expected, but only the perceived organizational politics × interpersonal harmony interaction was

Figure 2

Moderating Effect of Knowledge Sharing



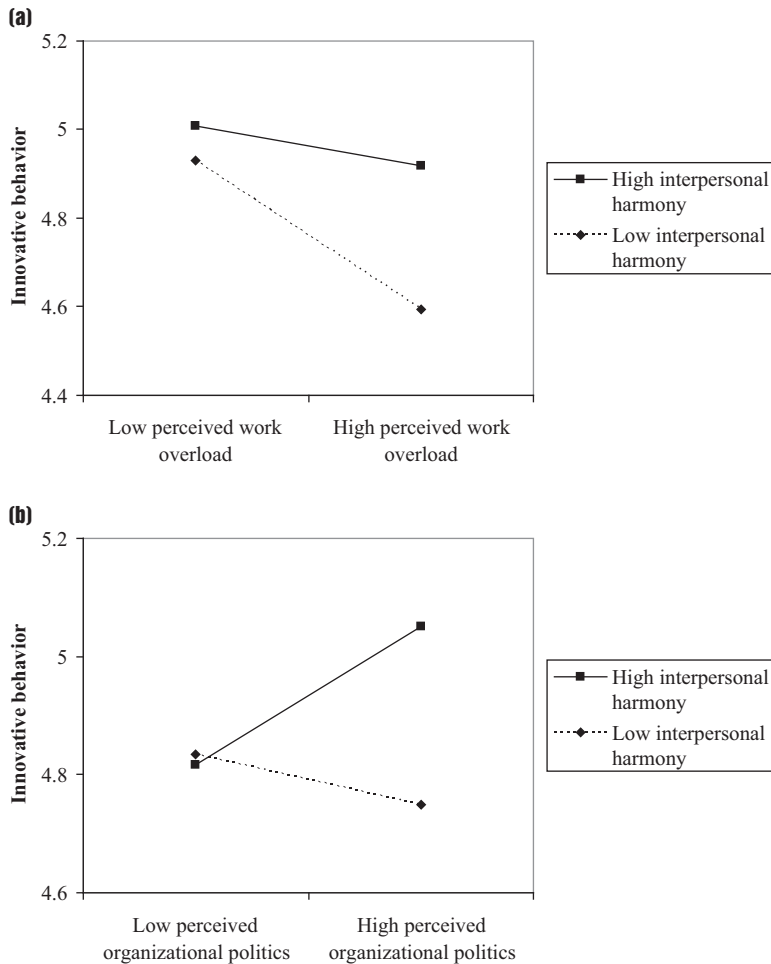
(a) Perceived Work Overload and Innovative Behavior
(b) Perceived Organizational Politics and Innovative Behavior

significant ($p < .05$). Previous research indicates that the simultaneous inclusion of multiple interaction terms that share common variables may prevent the detection of true moderating effects, due to multicollinearity and the complex constellation of factors by such simultaneity (De Clercq et al., 2010; Neter, Wasserman, & Kutner, 1985; Zahra & Hayton, 2008). However, the consistency of the signs of the interaction terms in both the comprehensive model and the models that include the interaction terms separately provides some indication of robustness (Arnold, 1982; Covin, Green, & Slevin, 2006).

Second, to test for the possibility of curvilinear effects of perceived work overload and perceived organizational politics—in line with arguments that time pressures (Janssen, 2001) and political skills (Ferris, Perrewé, Anthony, & Gilmore, 2000) might also have beneficial effects—we reran the regressions that included the corresponding quadratic terms together with the two-way interaction terms (MacCallum & Mar, 1995; Siemsen,

Figure 3

Moderating Effect of Interpersonal Harmony



(a) Perceived Work Overload and Innovative Behavior
(b) Perceived Organizational Politics and Innovative Behavior

Roth, & Oliveira, 2010). The curvilinear effects were nonsignificant, which adds confidence to our claim that the observed significant interaction effects truly reflect the proposed theoretical moderating effects.

Third, we tested whether the hypothesized relationships work differently across the three dimensions that constitute employees' innovative behavior (i.e., generation, promotion, and implementation of new ideas). Using multivariate regression (the *mvreg* routine in STATA; StataCorp LP, College Station, Texas, USA) to simultaneously estimate regression equations for these three strongly correlated outcome variables, we found results consistent with those in our focal analysis (Table 2), except that the perceived work overload \times knowledge sharing and perceived work overload \times interpersonal harmony interactions became insignificant when predicting the generation of new ideas. The strong correlations among the three dimensions of innovative behavior warrant caution in

interpreting these nonsignificant results, but they indicate that relational resources do not mitigate the stress caused by work overload for the actual *origination* of novel ideas, which may require significant focus and cognitive energy unavailable under conditions of excessive time constraints (Quinn et al., 2012). Further research could use qualitative approaches to differentiate the challenges employees confront during each stage of the innovation process, as well as how those challenges can be mitigated.

Fourth, supervisors rated multiple employees, so there is a possibility of correlated error terms in observations by the same supervisor. To check the robustness of the results, we conducted a *post hoc* analysis and reran the regressions using STATA's *cluster* option. With this approach, we calculated cluster-adjusted standard errors, with all observations by a particular supervisor treated as clusters (Baum, 2006). The nature and significance of the results for the hypothesized relationships were consistent with those reported in Table 2.

Discussion

Research Implications

With this study, we sought to extend previous corporate entrepreneurship research by focusing on the roles of employees' perceptions of adverse work conditions in shaping their engagement in innovative behavior, as well as on situations in which these roles might become more or less pronounced. Previous research has examined various drivers of employees' entrepreneurial action, but with a general focus on "positive" factors (e.g., personal motivation, supportive rewards) rather than the impact that stressful, energy-depleting work conditions might have on such behaviors. Because engaging in innovative behaviors requires discretionary consideration and energy (Douglas & Shepherd, 2000; Monsen et al., 2010), it cannot be taken for granted. Drawing from the JD-R model (Bakker & Demerouti, 2007), we accounted for the consequences of employees' perceptions of work overload and organizational politics. The results related to perceived work overload were as we expected, but those for perceived organizational politics appeared more complex.

First, the findings indicated that when employees experience high levels of work overload, their efforts to cope with the resulting anxiety reduces their propensity to engage in innovative behavior (Bakker et al., 2004; Demerouti et al., 2004). Our theorizing centered mostly on the cognitive constraints experienced by overburdened employees (Lazarus & Folkman, 1984; Schaufeli & Bakker, 2004), but motivational reasons also could lead to diminished innovative behavior. For example, perceptions of insufficient time available to execute daily tasks might reduce the affective bond that employees feel with their organizations (Meyer, Bobocel, & Allen, 1991), leaving them less likely to engage in discretionary, innovative activities that could help the firm (Ahuja, Chudoba, Kacmar, McKnight, & George, 2007). Additional studies should disentangle these underlying mechanisms and explicitly assess how both ability- and motivation-related factors may connect work overload with reduced innovative behavior.

Second, we have shown how the negative effect of perceived work overload on innovative behavior might be overpowered by knowledge sharing and interpersonal harmony. The buffering roles of these relational resources aligns with the JD-R argument that the impact of stressful work conditions, in terms of reducing positive workplace outcomes, diminishes in the presence of relevant job resources (Bakker & Demerouti, 2007; Xanthopoulou et al., 2007). In particular, overburdened employees' reluctance to engage in innovative behavior gets subdued when they can leverage relevant resources

embedded in their relationships with other organizational members. Such resources might offer novel insights (through knowledge sharing) into how to cope with excessive workloads (De Clercq et al., 2013) or a sense of community (through interpersonal harmony) that provides emotional support for dealing with stressful work situations (Biniari, 2012). Conversely, when employees have limited access to such relational resources, stress due to high work overload likely gets activated (Bakker & Demerouti, 2007), and its negative effects on innovative behavior become more pronounced.

Third, the results related to perceived organizational politics were more nuanced; we found no support for a direct negative relationship with innovative behavior. To explain the lack of this predicted direct negative effect, we turn to the interaction plots in Figure 2b and Figure 3b which indicate that perceptions of a strongly political environment are harmful only when employees lack access to appropriate relational resources that help them leverage this environment for their own benefit. Previous research has suggested a possible beneficial role of organizational politics, particularly in terms of how the political *skills* of top managers can enhance acceptance of their personal agendas (e.g., Ferris et al., 2000; Perrewe, Ferris, Frink, & Anthony, 2000). Our findings complement such research, in the context of employees' efforts to develop, promote, and implement novel ideas (Van de Ven, 1986). That is, perceived organizational politics actually serves a positive function, to the extent that employees have access to content-related (knowledge) and emotion-related (harmony) relational resources. When employees believe they operate in a strongly politicized work environment, they might seek to navigate the opportunities it affords (Frost & Egri, 1991; Narayanan & Fahey, 1982) and allocate significant energy to innovative activities *if* they have access to relevant information (through knowledge sharing) and personal connections (through harmonious relationships). Thus, employees' access to relational resources may fuel their propensity to trade off between organizational rules and their personal agendas, such that their perception of organization politics becomes a valuable tool to develop, promote, and implement their innovative ideas.

Overall, we believe that this study has great relevance for research on entrepreneurship in established organizations. A recent review notes that the field offers a limited glimpse into the internal processes associated with entrepreneurial action, particularly with regard to the adversity that individual employees might experience (Corbett et al., 2013). Our research suggests that even when employees are well positioned to identify opportunities for improvement (Burgelman, 1983), their innovative behavior may be hampered by perceptions of excessive time pressures and politicizing, especially if they cannot rely on relevant resources embedded in their relationships with organizational peers. Thus, whether employees actually engage in innovative behavior must be considered in the context of their perceived work conditions, pertaining to the energy these conditions leave for activities beyond regular job tasks, in combination with their access to relevant resources.

Finally, our interest in understanding how employees' perceptions of adverse work conditions limit their engagement in innovative behavior prompted our theoretical focus on the indirect, *buffering* role of knowledge sharing in countering work stress, rather than its direct effect on innovate behavior. Yet it is interesting to note that our results did not indicate any evidence of the presence of such a direct effect. Previous studies that adopt the knowledge-based view suggest that intensive knowledge sharing should enrich employees' relevant knowledge, enabling them to match work-related problems with novel solutions (Grant, 1996; Zahra & George, 2002). However, frequent communication with a relatively narrow group of peers may create knowledge redundancy (Granovetter, 1973) and reduce the ability to generate and mobilize novel ideas (Obstfeld, 2005). We could not directly test or reconcile these two explanations because our knowledge sharing

measure did not capture with *whom* employees shared knowledge, but the lack of a direct effect of knowledge sharing might stem from the counterbalancing effects of these two mechanisms.³ Our work suggests a more indirect conduit through which knowledge sharing matters, namely by attenuating the energy depletion that can be caused by perceptions of work overload and organizational politics. Further empirical research might focus on and capture the differing roles of employees' knowledge sharing in the promotion of innovative behavior, depending on the specific characteristics of their internal exchange partners.

Practical Implications

For practitioners, this study shows that to counter the pitfalls that stress-inducing work situations might have for employees' propensity to engage in innovative behavior, the pressures should be considered in combination with the relational resources available within the firm. Employees who have a hard time keeping up with the pace of work may consider innovative behavior a distraction that keeps them from meeting job-related tasks (Monsen & Boss, 2009). Because they feel less compelled to engage in innovation activities that consume substantial energy, they might benefit the organization less (Covin & Slevin, 2002). This issue is particularly salient when employees suffer from ineffective relationships with organizational peers—namely limited access to peer knowledge and the presence of interpersonal fights—because the energy-draining effect of their work overload likely spurs their reluctance to generate, sell, or implement new ideas. In contrast, even if employees perceive that they have insufficient time to complete their daily tasks, the danger that the accompanying stress leads to a withdrawal from innovative behavior can be mitigated if they have sufficient access to peer knowledge and harmonious relationships.

Furthermore, the belief that organizational decision making is guided by self-serving behavior does not necessarily undermine employees' propensity to be innovative, as long as that belief is matched with relational resources that reduce the stress that typically emerges from strongly political work environments (Cavanaugh et al., 2000; Miller et al., 2008). As this study shows, perceived organizational politics is a double-edged sword. Employees who cannot rely on supportive peer relationships may become overburdened by the ambiguity and randomness associated with politically driven decision making, leading them to avoid any activities that might upset the current organizational situation. When relational support is available though, the opportunities afforded by the perceived salience of organizational politics can provide an impetus for pushing ideas and contributing to the organization's innovative profile. Ultimately, organizations should recognize that employees' perceived ability to maneuver decision-making processes can be instrumental for their propensity to introduce and advocate for their novel ideas, as long as these efforts can rely on support obtained from open, well-balanced intrafirm relationships.

Limitations and Future Research

This study has a few limitations whose consideration offers opportunities for research. First, some caution is needed before we draw causal inferences. For example,

3. We also undertook a *post hoc* analysis to test for the presence of a curvilinear effect of knowledge sharing (as well as interpersonal harmony), but we did not find empirical support for such an effect.

employees who engage in innovative behavior may perceive less time pressure, because their behavior enables them to find creative ways to decrease workload stress (Burgelman, 1983; Ward, 2004). Although we grounded our hypotheses in extant theory and imposed a 1-month time gap between our assessment of adverse work conditions and innovative behavior, further research using longitudinal designs that span longer periods could better investigate the causal processes that link perceived work conditions and innovative behavior, as well as the boundary conditions that might influence the process. In a similar vein, our study did not explicate possible *intermediate* mechanisms connecting adverse work conditions with innovative behavior, such as the actual stress that employees experience or the negative attitudes they develop toward their employer. For example, employees who feel excessively pressured by their workloads or by the politics of their work environment could lose the motivation to come up with and implement novel ideas that might help their organization *because* the associated stress alienates them and reduces their emotional attachment to the firm (Beer, Eisenstat, & Spector, 1985; Meyer et al., 1991).

Second, we focused on two contingency factors, knowledge sharing and interpersonal harmony, that capture employees' access to resources embedded in their relationships with organizational peers in general. Additional research could investigate if the degree to which these resources serve as buffers depends on differences between employees and organizational peers, such as their hierarchical level (Hornsby et al., 2009) or functional background (Cargo & Tunstall, 2011). In discussing our finding of no direct effect of knowledge sharing on engagement in innovative behavior, we implied that the usefulness of knowledge sharing may be stronger when employees interact with different colleagues, who likely provide more novel insights into how employees can cope with stressful work conditions (Ward, 2004). However, the personal comfort afforded by interactions with similar others also might improve people's abilities to deal effectively with stressful work situations (Lane & Lubatkin, 1998). Therefore, further research could investigate the roles that various relational resources play in influencing the relationship between perceptions of adverse work conditions and innovative behavior, depending on the specific profiles of relevant organizational peers.

Third, research could investigate how other sources of workplace stress, such as role conflict and role ambiguity (Peterson et al., 1995), may drain employees' energy levels and prevent them from engaging in innovative behavior. Studies might consider the buffering effects of other resources too, such as the presence or nature of employee reward systems (Collins & Clark, 2003), internal competition for company resources (Luo, Slotegraaf, & Pan, 2006), or employees' own psychological resources (Tumasjan & Braun, 2012). For example, using regulatory focus theory (Higgins, 1998), researchers might examine if employees' promotion focus (emphasizing personal growth) buffers the harmful effects of adverse work conditions on innovative behavior, or if a prevention focus (emphasizing personal security) exacerbates this effect (Brockner, Higgins, & Low, 2004). Another option would be to investigate the moderating roles of employees' perceptions of feasibility and desirability in relation to the development and application of novel ideas (Fitzsimmons & Douglas, 2011).

Fourth, our results are based on a specific industry (logistics) in one country (Mexico). Although our theoretical arguments were general and not industry or country specific, industry or cultural factors could interfere with our empirical results. For example, industries differ in the extent to which strong rivalries occur among competitors (Porter, 1996). Such external rivalry may make employees more willing to accept the stress that their organization imposes on them (Lahiri, Pérez-Nordtvedt, & Renn, 2008), which in turn could mitigate the harmful effect of adverse work conditions on

innovative behavior. The country context also could define the interplay of highly demanding work conditions, access to relational resources, and employees' propensity to engage in innovative behavior (Hornsby et al., 1999). For example, in high uncertainty avoidance countries such as Mexico, people may be more sensitive to work circumstances that create uncertainty and stress (Hofstede, 2001), such that the potency with which relational resources buffer the negative effects of adverse work conditions on innovative behavior may be stronger than it would be in more risk-prone countries. Cross-country studies could provide insights into the relative importance of relational resources for preventing adverse work conditions from hindering innovative behavior across different cultural contexts.

Conclusion

We extended previous research by examining the effect of employees' perceptions of adverse work conditions on their propensity to engage in innovative behavior and the role of relational resources in this process. The effects of perceived work overload and organizational politics on innovative behavior depend on the internal relational context in which employees operate, especially in terms of their access to peer knowledge and the presence of harmonious relationships. These relational resources help employees cope with stress due to excessive workloads and politics, and thus act as buffers against employees' withdrawal from energy-consuming innovative behaviors. We hope then that this study prompts even further investigations of the processes by which organizations can instill innovation among their employees.

Appendix: Scale Items

Innovative behavior (composite reliability [CR] = 0.97; average variance extracted [AVE] = 0.78)

- This employee often creates new ideas for improvement.
- This employee often searches out new working methods, techniques, or instruments.
- This employee often generates original solutions to problems.
- This employee often mobilizes support for innovative ideas.
- This employee often acquires approval for innovative ideas.
- This employee often makes important organizational members enthusiastic about innovative ideas.
- This employee often transforms innovative ideas into useful applications.
- This employee often introduces innovative ideas into the work environment in a systematic way.
- This employee often evaluates the utility of innovative ideas.

Perceived work overload (CR = 0.80; AVE = 0.51)

- I often have to work too fast.
- I often work under time pressure.
- I often have to deal with a backlog at work.
- I often have problems with the pace of work.

Perceived organizational politics (CR = 0.84; AVE = 0.58)

- People spend too much time sucking up to those who can help them.
- People are working behind the scenes to ensure that they get their piece of the pie.
- There is a lot of self-serving behavior going on in the company.
- People do what's best for them, not what's best for the company.

Knowledge sharing (CR = 0.92; AVE = 0.74)

- There is a high level of knowledge sharing between my colleagues and myself.
- My colleagues and I regularly communicate with each other.
- My colleagues and I provide each other with a lot of feedback.
- There is a lot of two-way communication between my colleagues and myself.

Interpersonal harmony (CR = 0.80; AVE = 0.53)

- My colleagues and I often get angry while working together (reverse coded).
- There often are tensions in the relationship between my colleagues and myself (reverse coded).
- My colleagues and I do not get along well with each another (reverse coded).
- My colleagues and I generally dislike interacting with each other (reverse coded).

Intrinsic interest in entrepreneurship (CR = 0.90; AVE = 0.63)

- I enjoy finding solutions to complex problems.
- I enjoy coming up with new ideas for products.
- I enjoy engaging in analytical thinking.
- I enjoy creating new procedures for work tasks.
- I enjoy improving existing processes or products.

Dissatisfaction with the status quo (CR = 0.85; AVE = 0.65)

- Many things in my company need improvement.
- The performance of my company needs to be improved.
- The performance of my work unit needs to be improved.

Perceived fairness (CR = 0.95; AVE = 0.78)

- I am fairly rewarded, considering the responsibilities I have.
- I am fairly rewarded for the stresses and strains of my job.
- I am fairly rewarded, taking into account the amount of education and training I have had.
- I am fairly rewarded for the amount of effort I put forth.
- I am fairly rewarded for the work that I do well.

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