The purpose of this study is to broaden the scope of the Job Demands-Resources Model (JD-R) model by including power distance orientation to examine service employee's burnout due to supervisors and job engagement. The inclusion of power distance orientation enriches the JD-R model by providing a key piece of information that has been absent in prior JD-R models: employees' perceptions of the source of job demands (i.e., supervisors) or employees' views of power and hierarchy within the organization. Hypotheses are developed and tested across three separate studies regarding (a) how service employees' burnout due to supervisors is affected when employees are closely monitored by their supervisors at low versus high power distance orientation, (b) how service employees' job engagement is influenced by burnout due to supervisor at low versus high power distance orientation, and (c) the processes that explain why (a) and (b) occur. Study 1 used a survey-based field study with service employees from a national bank in Taiwan to show that employees with a high (compared to low) power distance orientation felt more burnout due to supervisors when they were closely monitored by their supervisors. Study 1 further supported the finding that employees with high (compared to low) power distance orientation felt less disengagement despite burnout due to supervisors. To unveil why these effects were observed, two lab experiments, Studies 2 and 3, were carried out. Study 2 revealed that the interactive effect of supervisor close monitoring and power distance on burnout due to supervisor is mediated via stress because supervisor close monitoring results in more stress but only when power distance is high. Study 3 showed that the interactive effect of burnout due to supervisor and power distance on engagement is mediated via job satisfaction because burnout due to supervisor results in less job satisfaction but only when power distance is low. The implications of how supervisor close monitoring needs to be implemented differently depending on the level of power distance orientation are discussed.
The Role of Power Distance in Broadening the Understanding of Service Employee Burnout and Job Engagement: Evidence from Field and Experimental Studies

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The Role of Power Distance in Broadening the Understanding of Service Employee Burnout and Job Engagement: Evidence from Field and Experimental Studies

Abstract

The purpose of this study is to broaden the scope of the Job Demands-Resources Model (JD-R) model by including power distance orientation to examine service employee’s burnout due to supervisors and job engagement. The inclusion of power distance orientation enriches the JD-R model by providing a key piece of information that has been absent in prior JD-R models: employees’ perceptions of the source of job demands (i.e., supervisors) or employees’ views of power and hierarchy within the organization. Hypotheses are developed and tested across three separate studies regarding (a) how service employees’ burnout due to supervisors is affected when employees are closely monitored by their supervisors at low versus high power distance orientation, (b) how service employees’ job engagement is influenced by burnout due to supervisor at low versus high power distance orientation, and (c) the processes that explain why (a) and (b) occur. Study 1 used a survey-based field study with service employees from a national bank in Taiwan to show that employees with a high (compared to low) power distance orientation felt more burnout due to supervisors when they were closely monitored by their supervisors. Study 1 further supported the finding that employees with high (compared to low) power distance orientation felt less disengagement despite burnout due to supervisors. To unveil why these effects were observed, two lab experiments, Studies 2 and 3, were carried out. Study 2 revealed that the interactive effect of supervisor close monitoring and power distance on burnout due to supervisor is mediated via stress because supervisor close monitoring results in more stress but only when power distance is high. Study 3 showed that the interactive effect of burnout due to supervisor and power distance on engagement is mediated via job satisfaction because burnout due to supervisor results in less job satisfaction but only when power distance is low. The implications of how supervisor close monitoring needs to be implemented differently depending on the level of power distance orientation are discussed.

Keywords: Job Demands-Resources Model, supervisor close monitoring, power distance orientation, burnout due to supervisor, job engagement, supervisor developmental service feedback
In service organizations, employees are regarded as brand builders or so-called brand ambassadors that deliver brand promise to customers (Miles and Mangold 2004). Employees are the face of many service companies and are among their greatest assets. Indisputable as this may sound, there is a caveat to this argument. It is only true to the extent that service employees are engaged. When a service organization has disengaged (emotionally checked out) employees who “turn off” customers at every possible interaction, service employees can work against the business and be a liability. Research by Accenture Consulting highlights that, from a strategic perspective, one of the most compelling reasons for having “devoted or plugged in” employees is because of the positive contagious effect (i.e., carryover effect) employee engagement has on customer engagement (Craig and DeSimone 2011).

According to the “HumanSigma” management approach (Fleming and Asplund 2008), companies that achieve employee and customer engagement above the median enjoy 3.4 times more financial effectiveness than firms that are below the median on both engagements. Practitioners and academics alike agree that firms with engaged employees enjoy performance-driven perks such as higher customer satisfaction, productivity, profitability, and earnings per share, and lower turnover, absenteeism, and service failure rates (e.g., Gallup 2013; Harter, Schmidt, and Hayes 2002; Salanova, Agut, and Peiro 2005). Given this, it is clear that employee engagement is critical to a firm’s formula for unleashing the power of company growth.

Notwithstanding the promising picture that employee engagement paints, the current reality is not very bright, especially for service firms with frontline employees. Recent statistics reveal that in the US from 2010 to 2012, service employees in general and frontline employees in particular were the only workers to experience a decline in engagement, while employees from every other sector in the economy realized an increase (Gallup 2013). Engaged frontline
employees have a significant impact on firm performance, but the grim reality is that these employees are among the most disengaged in the market; thus, a noticeable gap exists between where firms need to be versus where they are.

Research involving 25 million employees across 189 countries has revealed that the number one impediment to employee engagement is the quality of supervisor–employee interaction (Gallup 2013). For example, lack of supervisor coaching, effective leadership, and supervisor development feedback are prime causes of employee disengagement (e.g., Bakker and Demerouti 2007; Crawford, LePine, and Rich 2010). Given the mounting evidence regarding the importance of supervisor behavior on employee (dis)engagement, the service employee engagement literature stands to benefit from studies that address how supportive (and unsupportive) supervisor behaviors enhance (and cripple) employee engagement. Further, understanding how supportive supervisor behaviors can neutralize and buffer the negative impact of unsupportive supervisor behaviors on engagement will further expand knowledge in the burgeoning research into service employee engagement.

Despite awareness of the role of supervisor behavior on employee engagement, an assumption that academics and practitioners hold is that employees possess similar opinions towards authority and hierarchy within an organization. This presumption, though, does not seem to reflect contemporary organizational dynamics in that even within the same culture and organization, the degree to which individuals are likely to accept unequal distribution of power varies across individuals (Clugston, Howell, and Dorfman 2000; Kirkman, Lowe, and Gibson 2006). Some employees will be more tolerant towards and succumb to unsupportive supervisor behavior and will accordingly be more submissive than others; therefore, it is important to investigate the ways in which the employee engagement and burnout of employees with different
orientations towards power are affected by unsupportive supervisor behavior within the company.

Against the above backdrop, our study contributes to the literature by extending the Job Demands-Resources (JD-R) model, an overarching conceptual framework that explains employee well-being and productivity based on the demands and resources employees encounter in their jobs (Bakker and Demerouti 2007). Our refined model explores the role of power distance orientation at the individual level (explained subsequently) in illuminating service employee engagement and burnout when employees are confronted with demands and resources that originate from the same supervisor. Our study sheds new light and provides a more nuanced view of the JD-R model by addressing the following two research gaps.

First, job demand is a key element of the JD-R model as studies have demonstrated that job demands that originate from supervisors (e.g., supervisor close monitoring or burnout from supervisor) result in strain and disengagement. Despite the value of JD-R theory, it has been criticized for being overly simplistic (Crawford et al. 2010). We attempt to broaden the theory’s scope and refine the framework by drawing on the power distance orientation literature at the individual level. We define individual-level power distance orientation as “the extent to which an individual accepts the unequal distribution of power in institutions and organizations” (Clugston et al. 2000, p. 9, emphasis added). As one of the first and few studies to include individual-level power distance orientation\(^1\) (PDO henceforth) as a moderator in the JD-R model, we expand knowledge on how (a) supervisor close monitoring affects burnout from supervisors, (b) supervisor developmental service feedback influences burnout from supervisors, and (c) burnout from supervisors impacts employee engagement when employees have different levels (low vs. high).

\(^1\) We refer to PDO as individual-level power distance orientation for the remainder of the paper unless otherwise stated.
high) of PDO. When the origin of job demands is supervisor related, employees, depending on how they view power, status, and hierarchy within the organization, may be more or less receptive towards the demands. Accordingly, the same job demand can result in different levels of burnout and engagement contingent on the degree of PDO. Our study contributes to the extant literature, which has yet to address the JD-R model from this perspective.

Second, although current knowledge of the JD-R model indicates that demands such as supervisor close monitoring lead to increased burnout from supervisors, while burnout from supervisors results in less engaged employees, the underlying process of how this relationship unfolds is unclear and has not received much attention. In a recent meta-analysis on the JD-R model, Crawford et al. (2010) were not able to identify the underlying mechanism that links job resources and demands to burnout and engagement. In fact, they acknowledge that “[f]uture research could address this issue by considering the intervening theoretical processes” (p. 844). We respond to this call by testing and showing that stress mediates the relationship between supervisor close monitoring and burnout but only in high (and not low) power distance contexts. Our results indicate that individuals may appraise supervisor close monitoring as a hindrance job demand that leads to stress depending on the level of power distance (Crawford et al. 2010). Further, our results display job satisfaction as a mediator between burnout from supervisor and engagement but only in low (and not high) power distance contexts.

In expanding the boundaries of JD-R theory, an important strength of our paper lies in three separate studies we employ, wherein Studies 2 and 3 (lab experiments) not only produce remarkably similar results to Study 1 (field study using surveys) but also extend its limits. The research design of many studies that rely on the JD-R model is cross sectional in nature, which challenges the validity of the causal ordering of the constructs that make up the model. To this
end, Crawford et al. (2010, p. 844) maintain, “[s]trong inferences regarding causality require experimental research in which the theoretical antecedents—the resources and demands—can be manipulated.” Therefore, based on the converging results of our three studies, we are able to minimize the possibility of reverse causality, thereby lending greater confidence to our more nuanced theoretical framework.

In the sections to follow, we first explain JD-R theory and discuss how our study is able to contribute to the theory’s extension. We then derive and test hypotheses across three studies. Study 1 measures job demands and resources, along with PDO, from service employees working in 58 bank branches. Studies 2 and 3 use a controlled lab experiment to manipulate job demands, resources, burnout, and power distance and, using MBA students, attempt to measure the intervening mediators in the retailing industry to unpack the relationships observed in Study 1. We conclude with discussions on the theoretical and practical implications of our study.

Theoretical Background

The theoretical framework we draw on to develop our model and test our hypotheses is the Job Demands-Resources (JD-R) model (Bakker and Demerouti 2007; Demerouti et al. 2001). The central tenant of this model posits that the extent to which an employee experiences burnout and engagement is driven by a dual processing mechanism outlined as health impairing and motivational. The health impairment process is characterized by job demands that are defined as “those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Bakker and Demerouti 2007, p. 312). Examples of job demands are role conflict, role ambiguity, role overload (e.g., Hartline and Ferrell 1996; Singh, Goolsby, and Rhoads 1994), and the emotional labor felt as a result of
dealing with customer complaints (Chan and Wan 2012; Grandey 2003). Job demands can lead to strain and disengagement because employees have finite resources that can be used to cope with increasing demands, and unless resources are replenished, employees will experience burnout. The job demand we investigate in our study is supervisor close monitoring (close monitoring henceforth), which we define as the degree to which supervisors keep a close tab on employees to ensure that employees do exactly what they are told, carry out tasks in expected ways, and refrain from doing things that cause supervisor disapproval (Zhou 2003).

In contrast, the motivational process is explicated by job resources, which are defined as “those physical, psychological, social, or organizational aspects of the job that help to either achieve work goals, reduce job demand and the associated physiological and psychological cost or stimulate personal growth and development” (Bakker and Demerouti 2007, p. 312). Job resources range from organizational and social to task oriented, and include examples such as career opportunities, supervisor and coworker support, autonomy, feedback, and role clarity (Chan and Wan 2012; Demerouti et al. 2001). Job resources boost engagement by elevating motivation through the conservation and replenishment of resources (Hobfoll 2001). The job resource we examine in our study is supervisor developmental service feedback (developmental service feedback henceforth), which we define as the degree to which supervisors provide employees with valuable information that facilitates employee growth, learning, and development of better customer service skills (Jaworski and Kohli 1991; Zhou 2003).

The JD-R model has been applied in various marketing contexts such as sales control (Miao and Evans 2013), salespeople’s management of customer and organizational complexity (Schmitz and Ganesan 2014), frontline employee performance in services (e.g., Singh 2000), and handling customer service under stress (e.g., Chan and Wan 2012). While the theory has served
its purpose effectively, studies in marketing have mainly focused on simply applying the model, which has often been criticized for its overly parsimonious framework (e.g., demand promotes burnout and disengagement while resource promotes engagement), to different marketing contexts. Put differently, little emphasis has been put on expanding the boundaries of the JD-R model, a deficiency this study attempts to address.

To date, the scope of the JD-R model has been broadened in the following two ways in the literature. First, contrary to the mixed and conflicting findings in the literature about the relationship between job demands and engagement, research has found that job demands can have differential effects on engagement depending on whether the demands are challenging (i.e., demands that are appraised as promoting personal growth, mastery, and future gains) or a hindrance (i.e., demands that are appraised as hindering learning, personal development and growth, and goal achievement) (Crawford et al. 2010).

A key finding of Crawford et al.’s (2010) meta-analysis is that while job hindrance demands (e.g., role ambiguity, role conflict) thwart employee engagement, job challenge demands (e.g., high workload, high job responsibility) enhance job engagement. By using what they labeled as the differentiated JD-R model, the authors were able to discern a more precise relationship between job demands and engagement that had been masked in prior research that did not differentiate between challenging and hindering job demands. The study also sheds light on a more complex and refined JD-R model because although job challenging demands may increase burnout, this effect may be offset by the greater positive effect on engagement, which emphasizes how the total effect of challenging demands needs to be reconsidered. As we explain subsequently, we argue that the extent to which employees appraise close monitoring as a job hindrance demand may vary at different levels of power distance, thereby resulting in different
mediating processes between close monitoring and employee burnout from supervisors.

The second stream of studies extends the JD-R model by including personal resources, which are defined as “positive self-evaluations that are linked to resiliency and refer to individuals’ sense of their ability to control and impact their environments successfully” (Hobfoll et al. 2003). The core of this argument is that individuals’ positive self-evaluation leads to increased performance through goal self-concordance and intrinsic motivation (Judge et al. 2005). The key difference between personal resources and job resources lies in the origin of the resources. Whereas job resources emanate from the organization or supervisors, personal resources are assets that employees bring to the table. Some personal resources that have been widely examined in the literature are self-efficacy, organizational based self-esteem, and optimism (Xanthopoulou et al. 2007).

With the inclusion of personal resources, research has focused on modeling these resources as moderators, similar to the role of job resources, to show that personal resources can alleviate the strain that job demands exert on employees. Despite these efforts, results have been inconsistent and conflicting, with some studies supporting a diminished negative effect of job demands on the well-being of employees with high personal resources (e.g., Pierce and Gardner 2004; Van Yperen and Snijders 2000) and others showing no moderating effect at all (e.g., Xanthopoulou et al. 2007). We posit that one of the main reasons for observing mixed effects has to do with the lack of specificity associated with the type of personal resources investigated in the literature. The personal resources such as self-efficacy, organizational based self-esteem, and optimism that have been employed in prior studies may not be specific enough to mitigate the effect of job demands.

Our study attempts to resolve this need for specificity by aligning the source of the job
demand (i.e., supervisor) with the target of PDO (i.e., supervisor) and, therefore, is able to capture a more nuanced relationship between close monitoring and employee burnout at different levels of PDO. Further, the focus of this study’s moderator shifts from personal resources that have been limited to the characteristics of the employee (e.g., Big Five personality traits) to employee attitudes toward the source of the job demand. To this end, we attempt to expand the scope of the JD-R model by developing hypotheses that include PDO as a moderator. Our conceptual model is illustrated in Figure 1.

[Insert Figure 1 here]

Hypotheses Development

Moderating Role of Developmental Service Feedback

We conceptualize developmental service feedback as a resource and a type of supervisor support (Babin and Boles 1996). When employees receive sufficient developmental service feedback, they have accurate guidance on how to serve customers more effectively (Jaworski and Kohli 1991). Developmental service feedback is expected to boost intrinsic motivation because employees sense that supervisors care about ways in which they can help employees provide higher quality service to customers. In contrast, when supervisors closely monitor employees, employees feel being watched, controlled, and pressured to conform to prescribed behaviors. Close monitoring has been shown to stifle creativity by suppressing intrinsic motivation (George and Zhou 2001; Zhou 2003).

Building on the early work of Freudenberger (1974) who first coined the term burnout, we define burnout due to supervisors as a state of mental and physical exhaustion characterized by emotional exhaustion and depersonalization resulting from supervisor behavior or treatment.

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2 We do not hypothesize the direct effects of job demands (e.g., close monitoring) and job resources (e.g., developmental service feedback) as these main effects based on the JD-R model have already been extensively examined in the literature. Instead, we focus on the various interaction hypotheses.
Although Maslach and Jackson (1981) constructed a three dimensional definition of burnout using emotional exhaustion, depersonalization, and reduced personal accomplishment, marketing studies (Singh 2000) with frontline employees have shown that reduced personal accomplishment correlates poorly with the other two dimensions, which leads us to focus on the emotional exhaustion and depersonalization dimensions of burnout.

The JD-R model advances that burnout occurs when employees experience stressors (i.e., job demands) that exceed their available resources for coping (Bakker and Demerouti 2007; Singh et al. 1994). In line with conservation of resources theory (Hobfoll 2001), employees desire to preserve resources for psychological and productivity reasons but unless job resources are replenished, employees will feel the strain of being emotionally exhausted. Consistent with the JD-R model, we predict an interaction between demands and resources wherein resources play a “buffering role” by dampening the burnout resulting from excessive job demands (e.g., Bakker and Demerouti 2007). We maintain that when employees receive developmental service feedback, they will feel less burnout despite being closely monitored by supervisors because employees can use the feedback as a motivation to develop, learn, and grow.

In this light, we propose a close monitoring x developmental service feedback interaction effect in line with the prediction of the JD-R model except that our situation involves demand and resource originating from the same source, namely, supervisors. In this respect, our demand x resource interaction is unique because our hypothesis focuses on how burnout due to supervisors is affected when the source of the strain and the resource for dealing with that strain are the same. Based on the prior reasoning, we propose the following:

**H1:** Developmental service feedback weakens the positive effect of close monitoring on burnout due to supervisor such that close monitoring results in less burnout from supervisor at high compared to low levels of developmental service feedback.

Moderating Role of Power Distance Orientation

As one of four Hofstede’s (1980) cultural value dimensions, power distance has garnered significant interest across a wide spectrum of disciplines from numerous scholars in advancing our understanding of how cultural values differ across societies and countries at the macro level. However, one of the key shortcomings of this view towards power distance has been its tendency to neglect cultural and organizational heterogeneity at the micro-individual level (Sivakumar and Nakata 2001). To this end, Kirkman, Lowe, and Gibson (2006) have advocated that more studies should use PDO at the individual level as a moderator. We define individual-level PDO as the degree to which individuals differ in their view of unequal power distribution reflected in their perceptions of authority, leaders, status, and hierarchy within organizations.

Characteristics of High PDO. Studies have shown that employees who have higher PDO are less antagonistic and more receptive to top-down, one-way direction from their leaders than their lower PDO counterparts (e.g., Javidan et al. 2006). Further, employees with higher PDO accept a more role-constrained interaction with supervisors, and these social interactions reflect an employee–supervisor relationship that is more regimented. Accordingly, the effect of procedural justice on employee’s trust of a supervisor was found to be weaker for those with higher PDO (Lee, Pillutta, and Law 2000). Research has also shown that employees with higher PDO are more tolerant of supervisor abusive behavior and less sensitive to interpersonal injustice perceptions (Lian, Ferris, and Brown 2012). Further, employees with higher PDO are more affectively committed and perform better despite receiving less perceived organizational support (Farh, Hackett, and Liang 2007). Collectively, these results imply that the energy and resources of employees with higher PDO are less likely to be drained despite high job demands because in the eyes of high PDO employees, job demands will be perceived as less taxing. This suggests
that higher PDO enables employees to be more receptive towards unequal power distribution and to perceive less disagreement and conflict with management.

**Moderating Role of PDO on Close Monitoring–Burnout due to Supervisor**

**Relationship.** We posit that the reasoning behind the moderating effect of PDO on the relationship between close monitoring and burnout due to supervisor is consistent with the relational model of authority (Tyler and Lind 1992). This model informs us that the level of PDO affects employee evaluations of their supervisors differently based on how employees are treated by supervisors. More specifically, the model predicts and shows that low PDO employees are more sensitive to how they are treated by supervisors because they have a more personal and social connection with their boss, while those with a high PDO have a more role-constrained relationship that acts as a buffer in limiting any effects unfair or unreasonable treatment may have on the evaluation of supervisors (Tyler and Lind 1992). Previous research has also suggested that high PDO employees are more loyal and obedient, and that PDO mitigates any negative supervisor behavior effects on employee attitudes towards supervisors (Tyler, Lind, and Huo 2000).

The above results collectively guide our reasoning for positing a moderating role for PDO on the close monitoring–burnout due to supervisor relationship. We posit that employees will feel less burnout due to supervisors despite being closely monitored when employees have higher levels of PDO. High PDO employees may view close monitoring as less of a job hindrance and nuisance. Because they are comfortable with a band of acceptable supervisor behavior that is wider than those with a low PDO, even when supervisors closely monitor their activities, close supervision will be perceived as less annoying and irritating. Consequently, employees with high PDO will not have to expend as much resources to cope with such job
demands compared to those with low PDO, and thus will experience less burnout. More formally, we propose:

**H2**: Employees will feel less burnout due to supervisors despite being closely monitored by supervisors when employees have high (vs. low) levels of PDO.

**Moderating Role of PDO on Burnout due to Supervisor–Engagement Relationship.** We define engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al. 2002, p. 74). Vigor refers to a willingness and determination to exert energy and effort in work and resilience when confronted with obstacles. Dedication refers to finding meaning, purpose, enthusiasm, and inspiration in work. Absorption refers to being totally immersed and content with work such that time passes quickly and it is difficult to detach oneself from work (Salanova et al. 2005). Therefore, a service employee who is engaged can be characterized as enthusiastic, energetic, motivated, and passionate about work, whereas a disengaged worker is apathetic, robotic, depersonalized, estranged, and withdrawn from the job (Salanova et al. 2005).

Based on the above definition of engagement, although employees are expected to be less engaged when they feel burnout due to their supervisors, we predict that the extent to which they are disengaged will vary depending on their level of PDO. As outlined earlier, because employees with higher PDO will have a less negative opinion of supervisors despite being treated unfairly or harshly, these employees will be less adversely affected by burnout due to supervisor.

From a normative perspective, high PDO employees perceive negative supervisor behavior as less damaging and are more receptive to legitimizing this behavior (Lian et al. 2012). Tyler et al. (2000) have shown that low PDO employees are more likely to develop stronger social bonds with authority, and thus perceive less interpersonal justice despite experiencing
abusive supervisor behavior. Therefore, we conclude that high PDO will buffer and mitigate the negative influence burnout due to supervisors has on engagement because employees with high PDO will assume that the strain is a natural part of the work routine and it will not affect their work attitude and engagement. Based on the previous arguments, we propose:

**H3**: Employees will feel less disengaged as a result of burnout due to supervisor when employees have high (vs. low) levels of PDO.

**Moderating Role of PDO on Developmental Service Feedback–Burnout due to Supervisor Relationship.** Kirkman et al. (2009) have shown that transformational leadership (a resource from the recipient’s perspective) has a stronger positive impact on perceptions of procedural justice for low (vs. high) PDO employees. Employees with lower PDO indicated more commitment, higher job performance, and OCB as perceived organizational support increased (Farh et al. 2007).

Early research on supervisor feedback has indicated that supervisor feedback has a stronger positive impact on employee performance in low PDO (US) versus high PDO (UK) employees (Earley and Stubblebine 1989). Again, in line with the relational model of authority (Tyler and Lind 1992), when supervisors treat employees with dignity and fairness, this leads to more positive evaluations of the supervisor for low (vs. high) PDO employees because low PDO employees expect and appreciate a personalized and horizontal relationship where social bonding is important (de Luque and Sommer 2000).

Studies have shown that when frontline employees such as salespeople and customer service representatives receive social support from their supervisors, they feel less job burnout (e.g., Sand and Miyazaki 2000; Singh 2000). However, the boundary conditions of the supervisor social support–burnout relationship have received less attention. Therefore, drawing on the above arguments and in further accordance with social exchange theory (Blau 1964) and norms of
reciprocity (Rhoades and Eisenberger 2002), we maintain that developmental service feedback will be more effective in diminishing burnout due to supervisor for low (vs. high) PDO employees based on the reasoning that low PDO employees expect supervisors to reciprocate in kind through developmental service feedback in exchange for work fulfillment. Based on the prior arguments, we propose:

**H4:** Developmental service feedback will result in less burnout due to supervisor for low (vs. high) PDO employees.

### Engagement–Service Performance Relationship

Engaged employees are happy individuals who are full of energy. We posit engagement will have a positive carry-over effect on service performance. As employees become more engaged, they find their work more meaningful and self-fulfilling and, therefore, become more dedicated and immersed in their jobs. As a result, this positive and motivated state of mind can be expected to spill over into how employees interact with customers in terms of being friendly, attentive to customer problems, prompt in delivering service, and motivated to recommend appropriate products based on customer needs.

Further, engaged employees have a broad view of their job description and are eager to help customers. Engagement has been shown to influence not only in-role behaviors, but also proactive behaviors (Sonrentag 2003) and extra-role behaviors such as organizational citizenship behavior (Rich, LePine, and Crawford 2010). Consequently, we argue that engaged employees will exercise service-oriented behaviors and that such behaviors will be reflected in superior service performance (Yoon and Suh 2003; Young et al. 2009). Therefore, we propose the following:

**H5:** The more service employees are engaged, the higher their service performance.
Study 1

Research Methods

Sample and Data Collection. The data used in this study come from a large project conducted in 58 private banking branches of a bank in Taiwan. We targeted service employees who were offering banking, investment, and accounts management, and other financial services for both individual and business clients. We approached the bank through a contact person in order to receive permission to collect data. After permission was granted, we sent survey packages to this contact person who arranged the delivery of the surveys to the bank branches. Each package contained a survey, an introductory letter, a consent form, and a return envelope. For the purpose of data analysis, each survey was coded to identify the bank branch. The introductory letter explained the purpose of the study and informed respondents about the confidentiality of their responses and the voluntary nature of their participation in the survey. Service employees completed the survey during business hours and returned it to the contact person in a sealed envelope. We received 485 usable surveys (an overall response rate of 78.2%) from 58 branches. The number of responses from each branch ranged from 4 to 12, with a response rate ranging from 66.7% to 100%. Sample characteristics were as follows: female (66.4%), average age (36 years), university graduate (78.1%), average experience with the branch (5.3 years), average experience with the bank (12.6 years), and average experience with current supervisor (2.3 years).

Survey and Measures. We designed our survey in English by drawing on previously developed and well-established scales available in the marketing and management literatures. The English version of the survey was translated into Chinese using the translation/back translation technique (Brislin, Lonner, and Thorndike 1973). All measures except service
performance were measured with a five-point Likert scale (1-strongly disagree; 5-strongly agree).

*Burnout due to supervisor* was measured with a four-item scale (Singh et al. 1994) and *supervisor close monitoring* with a five-item scale (George and Zhou 2001). *Supervisor developmental service feedback* was measured with a three-item scale (Zhou 2003). We measured *job engagement* as a higher-order construct that captured three dimensions, namely vigor (six items), dedication (five items), and absorption (six items) (Salanova et al. 2005).

*Power distance orientation* was measured with a four-item scale (Chan, Yim, and Lam 2010) and *service performance* was measured with a seven-item, five-point Likert scale (1-needs improvement; 5-excellent) (Liao and Chuang 2007). We also included experience with supervisor (in years) in our model as a control variable\(^3\). The list of measures and their respective items are reported in the Appendix.

**Measure Validation and Common Method Bias Check**

*Measure Validation.* We checked the psychometric properties of this study’s measures by performing confirmatory factor analysis (CFA). The CFA revealed a good fit to the data ($\chi^2 = 1543.2$, $df = 751$, GFI = .89, TLI = .95, CFI = .95, RMSEA = .05). All factor loadings were statistically significant (Anderson and Gerbing 1988) and the average variance extracted (AVE) values were greater than .50 (Bagozzi and Yi 1988). These findings support the convergent validity of the scales. We also found statistical support for discriminant validity. First, no confidence intervals of the correlations between any of the constructs included 1.0 ($p < .05$).

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\(^3\)Control variables should be employed to rule out alternative explanations while testing a model under consideration; however, they must be carefully chosen based on their theoretical relevance and significant zero-order correlations with the main constructs of the model. Otherwise these variables might not only reduce the statistical power of the model but also cause a suppression effect (Carlson and Wu 2012; Spector and Brannick 2011). In our study, there was no other demographic variable which was theoretically relevant to and significantly correlated with the core constructs of our model.
Second, for all pairs of constructs, the AVE estimates were greater than the squared intercorrelations between these constructs (Fornell and Larcker 1981). Third, for every pair of constructs, there was a statistically significant chi-square difference between the constrained and unconstrained model ($\Delta \chi^2 > 3.84$; Anderson and Gerbing 1988).

Since we conceptualized job engagement as a second-order construct of vigor, dedication, and absorption (e.g., Salanova et al. 2005), we checked whether it was statistically appropriate to combine the three first-order dimensions to form a second-order construct. First, the three first-order dimensions were highly correlated with one another ($r_{\text{vigor-dedication}} = .72; r_{\text{vigor-absorption}} = .72; r_{\text{dedication-absorption}} = .76$). Second, a second-order CFA indicated a good fit to the data ($\chi^2 = 207.9, df = 116, \text{GFI} = .91, \text{TLI} = .96, \text{CFI} = .97, \text{RMSEA} = .05$). The second-order construct of job engagement had high reliability and validity (Cronbach’s alpha = .87; composite reliability = .88; AVE = .58).

**Common Method Bias.** Using cross-sectional, single respondent data may cause common method bias (CMB), which can inflate direct effects. We assessed the extent of common method bias in our model and its hypothesized direct effects by using the marker variable (MV) technique (Lindell and Whitney 2001). We employed political ties of top managers as an MV. We selected the lowest positive correlation ($r = .007$) between the MV and one of the variables for correlation adjustment (Lindell and Whitney 2001). As Table 1 reports, all correlations remained significant after the MV adjustment.

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4 Siemsen, Roth, and Oliveira (2010, p. 456) conclude that common method bias suppresses significant interaction effects and, therefore, significant interaction effects may not be an artifact of common method bias.

5 Political ties of top managers was measured with a three-item, five-point Likert scale (1 = strongly disagree, 5 = strongly agree): (1) Top managers of this bank ensure good relationships with influential government officials; (2) Top managers of this bank have invested a lot of resources in building relationships with government officials; (3) Top managers of this bank value their personal relationships with government officials (Sheng, Zhou, and Li 2011). This particular scale satisfies the two criteria of an MV (Lindell and Whitney 2001). First, it is not theoretically related to the study’s core variables. Second, the scale has good reliability (mean = 3.29, standard deviation = 1.02, Cronbach’s alpha = .70).
Malhotra, Kim, and Patil (2006, p. 1874) suggest that “$r_M$ is expected to be approximately .10 or less, and thus in practical application, its value is unlikely to be as much as .20, let alone .30.” A sensitivity analysis that repeated the same correlation adjustment procedure for ($r = .10$) revealed that none of the significant correlations became insignificant (Table 1). As Malhotra et al. (2006, p. 1873) point out, “these results should be regarded as conservative because by not accounting for measurement errors, method biases are likely to be overestimated.” Although our findings reveal that CMB is negligible, we control for MV in our model so that we may partial out its unique variance (e.g., Ye, Marinova, and Singh 2007).

**Hypotheses Testing**

**Analytical Approach.** Although our proposed model depicts relationships hypothesized at the individual level, the data used in this study are nested (i.e., service employees are nested in branches) and, accordingly, service employee responses are not independent. This means that the conventional assumption of ordinary least-based techniques yield biased estimations (e.g., Raudenbush et al. 2011). Therefore, a random coefficients procedure is necessary to control for variation at the branch level and to estimate individual-level relationships and their respective standard errors more precisely (e.g., Raudenbush et al. 2011). As a result, we employ multilevel path analysis in Mplus 7.0 (Muthén and Muthén 1998–2010) to estimate the hypothesized relationships simultaneously.

We centered all variables on their grand mean as a conventional procedure in multilevel analyses (Hofmann and Gavin 1998). We also used the grand mean centered values of close monitoring, developmental service feedback, burnout due to supervisor, and PDO in creating the four interaction terms. We took a hierarchical approach in testing our model (e.g., Preacher,
Zhang, and Zyphur 2011; Preacher, Zyphur, and Zhang 2010). First, we estimated the direct-effects only model. Second, we added the interaction effects to the direct-effects only model to estimate the hypothesized model. A comparison of Akaike’s information criterion (AIC) and the Bayesian information criterion (BIC) confirm that the hypothesized model is a better fit than the direct-effects only model (lower AIC and BIC values). The hypothesized model explains 50%, 13%, and 37% of the variance in burnout due to supervisor, engagement, and service performance, respectively. Table 2 reports the results of the multilevel path analysis.

[Insert Table 2 here]

**Direct Effects.** We found that close monitoring is positively \(\gamma = .603, p < .01\), while developmental service feedback is negatively \(\gamma = -.406, p < .01\) related to burnout due to supervisor. Further, burnout due to supervisor is related negatively to job engagement \(\gamma = -.242, p < .01\). These findings collectively support the basic tenant of the JD-R model. In support of Hypothesis 5, we found job engagement to be positively related to service performance \(\gamma = .537, p < .01\).

**Interaction Effects.** The interaction effect of close monitoring and developmental service feedback is related negatively and significantly to burnout due to supervisor \(\gamma = -.165, p < .01\). Simple slope tests show that the close monitoring–burnout due to supervisor relationship is more positive at low levels of developmental service feedback \(\gamma = .722, p < .01\) than at high levels of developmental service feedback \(\gamma = .484, p < .01\). This relationship is statistically different between high and low levels of developmental service feedback \(t = 2.777, p < .01\). Hence, Hypothesis 1 is supported. Figure 2 shows the moderating role of developmental service feedback on the close monitoring–burnout due to supervisor relationship.

[Insert Figure 2 here]
Next, we found that the interaction effect between close monitoring and PDO is related positively and significantly to burnout due to supervisor ($\gamma = .159, p < .01$). Simple slope tests (Aiken and West 1991) show that the close monitoring–burnout due to supervisor relationship is more positive at high levels of PDO ($\gamma = .734, p < .01$) than at low levels of PDO ($\gamma = .472, p < .01$). We also found that this relationship is statistically different between high and low levels of PDO ($t = 3.335, p < .01$). These findings are opposite to what we predicted and, therefore, Hypothesis 2 is not supported. Figure 3 shows the moderating role of PDO on the close monitoring–burnout due to supervisor relationship.

[Insert Figure 3 here]

Further, the interaction effect between burnout due to supervisor and PDO is related positively and significantly to engagement ($\gamma = .122, p < .01$). Simple slope tests show that the burnout due to supervisor–engagement relationship is more negative at low levels of PDO ($\gamma = -.342, p < .01$) than at high levels of PDO ($\gamma = -.141, p < .01$). This relationship is statistically different between high and low levels of PDO ($t = 3.413, p < .01$). These findings support Hypothesis 3. Figure 4 shows the moderating role of PDO on the burnout due to supervisor–engagement relationship.

[Insert Figure 4 here]

Finally, the interaction effect between developmental service feedback and PDO is not related to burnout from supervisor ($\gamma = .002, ns$). Therefore, Hypothesis 4 is not supported.

**Post-hoc Analysis (Mediation Effects).** Although it was not part of the formal hypotheses, we employed MacKinnon, Lockwood, and Williams’s (2004) bootstrapping-based
test to explore mediation following Zhao, Lynch, and Chen’s (2010) recommendations. We computed the estimate and confidence interval (CI) for the indirect effects of close monitoring and developmental service feedback on job engagement through burnout due to supervisor (close monitoring: $\gamma = -.146$, $p < .05$, 95% bootstrap CI [-.193, -.102]; developmental service feedback $\gamma = .098$, $p < .05$, 95% bootstrap CI [.066, .135]). We also tested the direct effects of close monitoring ($\gamma = .015$, ns) and developmental service feedback ($\gamma = .307$, $p < .01$) on job engagement. These findings together provide statistical evidence for an indirect-only mediation for the relationship between close monitoring and engagement, and a complementary mediation for the relationship between developmental service feedback and engagement (Zhao et al. 2010). Overall, we can conclude that burnout due to supervisor mediates the (indirect) relationship between close monitoring, developmental service feedback, and job engagement.

**Summary**

We subjected our expanded JD-R model to empirical testing using service employees from 58 bank branches. While we did find general support for our conceptual model, not all hypotheses received support. Although not hypothesized, the direct effects of close monitoring and developmental service feedback on burnout due to supervisor were significant and in the

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6 Zhao et al. (2010, p. 205) suggest the following: First, there is no need for the relationship between an independent variable and a dependent variable to be statistically significant for a mediation test. The only requirement for mediation is that the indirect effect be significant. Second, because the indirect effect is the product of two parameters (from independent variable to the mediator and from the mediator to the dependent variable), the sampling distribution of the indirect effect is not normal. Since Sobel’s test assumes normal distribution, it produces a biased estimate of the indirect effect; therefore, the indirect effect must be computed using a more rigorous and powerful bootstrap test.

7 Zhao et al. (2010, p. 200) identify three patterns for mediation and two patterns for non-mediation. 1. **Complementary mediation**: Mediated effect and direct effect both exist and point in the same direction. 2. **Competitive mediation**: Mediated effect and direct effect both exist but point in opposite directions. 3. **Indirect-only mediation**: Mediated effect exists, but no direct effect. 4. **Direct-only non-mediation**: Direct effect exists, but no indirect effect. 5. **No-effect non-mediation**: Neither direct nor indirect effects exist. [These don’t appear to be direct quotes in the footnotes so it isn’t necessary to include the ellipses. If they are direct quotes, there should be quotation marks around the quoted material.]
expected direction, which supports the fundamental premise of the JD-R model. We also observed that when employees were engaged in their jobs, they showed higher service performance, which lends credibility to the return on engagement movement that is prevalent in academia and industry (e.g., Gallup 2013; Harter et al. 2002). In the post-hoc analyses, we found support for an indirect-only mediation model between close monitoring and engagement and a complementary mediation model between developmental service feedback and engagement (Zhao et al. 2010).

However, the focal interest in our extended JD-R model rested on the interaction hypotheses involving the moderating role of PDO. Of the four interaction hypotheses that were tested, two received support while two did not. Consistent with expectations from the JD-R model, close monitoring had a weaker positive impact on burnout due to supervisor when developmental service feedback was high (vs. low). Further, service employees were less disengaged despite burnout due to supervisor when employees had high (vs. low) PDO.

Nonetheless, the interaction between close monitoring and PDO on burnout due to supervisor was opposite to what we expected. It turned out that close monitoring led to more employee burnout when PDO was high (vs. low). Further, the interaction between developmental service feedback and PDO on burnout due to supervisor was nonsignificant. In order to further understand the process (i.e., mediation) behind how close monitoring interacts with power distance to influence burnout due to supervisor, we decided to replicate our extended JD-R model from Study 1 in a controlled lab experiment. We accomplished this by manipulating the demand, resource, and moderator (power distance) to unpack the mediating mechanism underlying the effect close monitoring by power distance interaction has on burnout due to supervisor. This effort responds to calls asking for studies that test the JD-R model in ways that
(a) reveal the underlying process and (b) use experiments to draw stronger conclusions about causality (Crawford et al. 2010). These dual objectives are achieved in the following two studies (Study 2 and 3).

**Study 2**

**Purpose**

The purpose of Study 2 was to probe deeper into the unexpected finding regarding the moderating role of PDO on the close monitoring–burnout due to supervisor relationship (Hypothesis 2). We address this by examining the mediating process between the close monitoring by power distance interaction and burnout due to supervisor. A secondary objective of Study 2 was to explicate the mediating process between the close monitoring by developmental service feedback interaction and burnout due to supervisor by extending what we learned in Hypothesis 1.

A robust finding in the literature has shown that stressors (e.g., role ambiguity, role conflict, and role overload) are antecedents to employee burnout (Singh et al. 1994; Singh 2000). When one or more of these role stressors are present, employees expend resources to overcome the adversities. Unless resources are replenished to cope with stress, employees will feel emotionally exhausted. Our revised Hypothesis 2, which we now label Hypothesis 6, addresses the extent to which stress mediates the close monitoring by power distance interaction and burnout due to supervisor. We posit that stress will mediate the effect of close monitoring on burnout due to supervisor under high but not low power distance conditions. Our explanation asserts that employees in a high power distance condition will feel more stress than those in a low power distance condition and, therefore, will perceive more burnout due to supervisors. Recall that this argument is opposite to what we argued in Hypothesis 2 where we stated that
high PDO employees will be less stressed by close monitoring and accordingly feel less burnout. However, based on the findings in Study 1, we revise and update our line of thinking to propose that employees exposed to high power distance conditions will feel more stress than those working in low power distance conditions, which in turn will result in more burnout due to supervisors.

We base our prediction on the distinction between job hindrance and challenge demands (Crawford et al. 2010). According to Crawford et al. (2010), job hindrance demands are negatively associated with engagement. We further argue that individuals exposed to high (vs. low) power distance conditions will perceive close monitoring more as a job hindrance demand and feel more burnout due to supervisors because of the elevated stress that accompanies such job demands. Based on the above reasoning we formally propose:

**H6**: The interactive effect of close monitoring and power distance on burnout due to supervisor is mediated via stress only when power distance is high because close monitoring results in more stress only when power distance is high.

**Research Design and Procedure**

Seventy MBA students enrolled in a marketing class at a Southwestern University participated for class credit. Participants were told that they were taking part in a study on retail management’s efforts to understand retail employees’ attitudes better in various retail environments. Subjects were introduced to a scenario that described an employee, named Nancy, who was working at an apparel store. They were informed that the employee’s primary responsibility at this store is to answer any questions customers may have regarding the various lines of clothing, address any complaints or issues customers may have, and engage in merchandise stocking and display to better serve customers. To assess the level of burnout based
on the random assignment of subjects, subjects were told to imagine that they had decided to begin work at the same retail store.

We employed a 2 (close monitoring: low vs. high) x 2 (developmental service feedback: low vs. high) x 2 (power distance: low vs. high) between subjects ANCOVA with nationality (East vs. West) as a covariate. We included nationality as a covariate to control for any confounding effect culture may have on power distance. We manipulated close monitoring by varying the degree to which the supervisor (a) watches closely every step of how employees talk and interact with customers, (b) insists that there is an “exact way” to serve customers, and (c) keeps track of employees’ performance on a daily basis. Developmental service feedback was manipulated by varying the extent to which the supervisor (a) provides advice on how to become a more competent employee and (b) supports employees by offering tips on “what to do” and “what not to do” to improve customer satisfaction. We manipulated power distance by varying the degree to which employees can challenge the supervisor on operational and customer-related matters.

The average work experience of the respondents was 4.7 years, the average age was 27.4 years, and 73% were male. 51% of the subjects came from the West (e.g., US, Canada, and Western Europe) while 49% came from the East (e.g., China, Taiwan, India, Korea, and Japan).

**Manipulation Check**

We performed manipulation checks on close monitoring, developmental service feedback, and power distance. All measures used a five-point Likert scale (1-strongly disagree; 5-strongly agree). For the question “Employees at this store are monitored by the store manager,” subjects in the high close monitoring condition rated significantly more monitoring from the supervisor than those in the low close monitoring condition (M= 4.50 vs. M= 2.79, t(68)= 6.72,
Successful manipulation of developmental service feedback was also confirmed as subjects rated more agreement on the question “Employees are able to learn from the store manager on how to better serve customers” in the high developmental feedback condition than in the low developmental feedback condition (M = 3.82 vs. M = 1.78, t(68) = 8.66, p < .001). Finally, power distance was manipulated successfully by observing that subjects expressed more agreement on the question “Employees are expected to acknowledge that people in different organizational levels have different levels of authority” in the high power distance condition than in the low power distance condition (M = 4.46 vs. M = 2.76, t(68) = 7.37, p < .001). Therefore, we conclude that the manipulations were successful.

**Measures**

We used same four items to measure *burnout from supervisor* as we used in Study 1 (Singh et al. 1994). The Cronbach’s alpha was .75, which indicates adequate reliability of the measure. We measured *stress* using three items taken from House and Rizzo (1972): (1) “I would feel nervous before attending meetings at this store,” (2) “My job would directly affect my health,” and (3) “I would feel nervous because of my job.” The Cronbach’s alpha was .84, which suggests good reliability of the scale. Overall, we determined that the measures have sufficient reliability for subsequent analysis.

**Mediation Test**

We observed the same pattern of interaction effect between close monitoring and power distance on burnout due to supervisor as we did in Study 1. More specifically, we found a marginally significant close monitoring by power distance interaction effect (F(1,65) = 2.86, p < .10). We detected a simple effect (Figure 5a) of close monitoring on burnout due to supervisor at a high power distance (F(1,65) = 9.74, p < .01) but not at a low power distance (F(1,65) = .26, *ns*).
To further test the mediating process of the interaction effect between close monitoring and power distance on burnout due to supervisor via stress, we used the parametric bootstrapping method (Preacher and Hayes 2008, Zhao et al. 2010) (Table 3). To accomplish this, we tested the indirect effect of close monitoring on burnout due to supervisor via stress under high vs. low power distance. The results confirm that when power distance was high, close monitoring had a positive and significant indirect effect on burnout due to supervisor through stress (b = .32; 95% bias-corrected bootstrap (CI) [.057, .781]). Conversely, when power distance was low, the indirect effect was nonsignificant (b = .10; 95% bias-corrected bootstrap (CI) [-.069, .497]). Therefore, Hypothesis 6 was supported.

Further, the results also supported the secondary goal of Study 2. They closely mirrored the results of Study 1, thereby supporting a close monitoring x developmental service feedback interaction (F(1,65)=4.36, p<.05). In addition, we found a simple effect (Figure 5 b) for close monitoring at low developmental service feedback (F(1,65)=8.77, p<.01) but not at high developmental service feedback (F(1,65)=.54, ns). More importantly, stress mediated the interactive relationship between close monitoring and developmental service feedback on burnout due to supervisor. When developmental service feedback was low, the indirect effect of close monitoring on burnout due to supervisor via stress was positive and significant, with the confidence interval excluding zero (b = .34; 95% bias-corrected bootstrap (CI) [.064, .807]). However, when developmental feedback was high, the indirect effect of close monitoring on burnout due to supervisor via stress was nonsignificant, with the confidence interval including zero (b = .16; 95% bias-corrected bootstrap (CI) [-.053, .539]).
Summary

The findings from Study 2 confirm that stress mediates (a) the interactive effect between close monitoring and power distance on burnout due to supervisor but only for respondents in a high power distance environment and (b) the interactive relationship between close monitoring and developmental service feedback on burnout due to supervisor but only for respondents who received low developmental service feedback. This implies that individuals in a high (vs. low) power distance context perceive more stress from close monitoring and, therefore, stress functions as a mediator in the high but not low power distance condition. Similarly, when employees receive little developmental feedback, close monitoring results in greater burnout due to supervisors because of elevated stress.

Study 3

Purpose

The purpose of Study 3 was to improve our understanding of the underlying process of how burnout due to supervisor affects engagement at different levels of power distance. That is, our objective was to detail the mediating mechanism supported in H3 wherein we found that burnout due to supervisors led to less disengagement for employees with a high PDO compared to a low PDO.

Singh et al. (1994) have shown that burnout leads to diminished workplace attitudes such as job satisfaction, while Rich et al. (2010) have empirically validated that job engagement mediates the effect of perceived organizational support and job performance even when job satisfaction, job involvement, and intrinsic motivation are included as mediators. These authors acknowledge that there may be a causal order between engagement and job satisfaction as
mediators because job satisfaction may be a more distal predictor of performance while engagement is a more proximal antecedent. They also state that although both job satisfaction and engagement may be mediators, employees may be engaged due to job satisfaction, which suggests a serial mediation process with job satisfaction being followed by engagement.

Drawing on the above literature, we posit that job satisfaction mediates the interactive effect between burnout due to supervisor and power distance on engagement differently because burnout due to supervisor affects job satisfaction to different degrees in low versus high power distance conditions (Singh et al. 1994). Based on the relational model of authority (Tyler and Lind 1992), we maintain that employees in a low power distance context will be more dissatisfied with their jobs as a result of burnout due to supervisor and accordingly be more disengaged. We reason that this is a result of these individuals preferring a personalized social bonding relationship with their boss and when they experience otherwise, they feel more job dissatisfaction. In contrast, individuals in a high power distance environment understand that it is not possible to challenge and change the views of authority and, therefore, they readily accept their jobs as given. Consequently, we argue that for individuals in a high power distance environment, job satisfaction will not be as affected by burnout due to supervisor as for individuals in a low power distance environment. In summary, we propose the following:

**H7**: The interactive effect of burnout due to supervisor and power distance on engagement is mediated via job satisfaction only when power distance is low because burnout due to supervisor results in less job satisfaction only when power distance is low.

**Research Design and Procedure**

In order to test Hypothesis 7, we collected data from thirty-two MBA students from the same school as in Study 2 and used the same cover story as in Study 2 with Nancy as an employee working at an apparel store. Burnout due to supervisor was manipulated by varying the
level of workload assigned to Nancy. In the high burnout condition, subjects were told that there is a shortage of employees and that rather than hiring new employees, the store manager is insisting that existing employees work extra shifts, typically 3 hours longer than normal work hours, to provide effective customer service. In the low burnout condition, subjects were told that due to the hiring of extra employees, the store manager was allowing employees to work reduced shifts and take days off according to their needs. Power distance was manipulated in the same manner as in Study 2 by varying the extent to which employees can challenge the supervisor on operational and customer-related matters. Therefore, we employed a 2 (burnout due to supervisor: low vs. high) x 2 (power distance: low vs. high) between subjects ANCOVA with nationality (West vs. East) as a covariate. For similar reasons to those mentioned in Study 2, we included nationality as a covariate to minimize the possibility of power distance being confounded by any cultural differences. In order to assess the subject’s level of engagement, subjects were told to imagine that they had decided to begin work at the retail store.

The mean work experience of the participants was 4.8 years, the mean age was 27.1 years, and 75% were male. 34% of the subjects came from the West (e.g., US, Canada, and Western Europe) while 66% came from the East (e.g., China, Taiwan, India, Korea, and Japan).

**Manipulation Check**

All measures used a five-point Likert scale (1-strongly disagree; 5-strongly agree). For burnout due to supervisor, subjects rated the question “Employees at this store are burned out” higher in the high burnout condition (M=4.41) than in the low burnout condition (M=4.67 vs. M= 1.47, t(30)= 13.42, p<.001). Regarding power distance, subjects in the high power distance condition agreed more on the question “Employees are expected to acknowledge that people in different organizational levels have different levels of authority” than in the low power distance
condition (M= 4.41 vs. M= 1.53, t(30)= 9.52, p<.001). Therefore, we confirmed that the manipulations were successful.

**Measures**

For *engagement*, we used the shortened 9-item Utrecht Work Engagement Scale (UWES-9) scale that has been successfully modified from the original 17-item Utrecht Work Engagement Scale (UWES) (Schaufeli, Bakker, and Salanova 2006). The UWES-9 scale measures each of the three dimensions (i.e., vigor, dedication, and absorption) of engagement with three items (1=strongly disagree to 5=strongly agree). Vigor was measured using the three items: “At work, I would feel full of energy;” “In my job, I would feel strong and vigorous;” “When I get up in the morning, I would feel like going to work” (Cronbach’s Alpha=.86). Dedication was measured with the three items: “I would be enthusiastic about my job;” “My job would inspire me;” “I would be proud of the work that I do” (Cronbach’s Alpha=.88). Absorption was measured according to the three items: “I would be immersed in my work;” “I would get carried away when I’m working;” “I would feel happy when I am working intensely” (Cronbach’s Alpha=.62). For our purpose, we averaged the nine-items to arrive at an overall engagement scale (Cronbach’s Alpha=.91). *Job satisfaction* was measured with the following three items borrowed from O’Reilly and Caldwell (1981): “All in all, I would like working on this job;” “Generally speaking, I would be very satisfied with this job;” “Overall, I think I would be as happy as I could be with this job” (Cronbach’s Alpha=.95). Based on these results, we conclude that the measures have adequate reliability and are appropriate to use for subsequent analysis.

**Mediation Test**

Consistent with the results found in Study 1, we found a significant interaction between burnout due to supervisor and power distance (F(1, 27)= 36.11, p<.001). Further, this interaction
was qualified by a simple effect (Figure 5c) of burnout due to supervisor on engagement at low power distance ($F_{(1, 27)} = 77.40, p < .001$) but not at high power distance ($F_{(1, 27)} = .04, p < .001$), which suggests that burnout due to supervisor results in less engagement but only when power distance is low.

[Insert Figure 5c here]

To further understand the nature of the underlying process behind the interaction between burnout due to supervisor and power distance on engagement, H7 advanced that burnout due to supervisor has an indirect effect on engagement via job satisfaction because job satisfaction is negatively affected only when power distance is low. We used the bootstrapping method to test this prediction (Preacher and Hayes 2008, Zhao et al. 2010) (Table 3). When power distance was low, burnout due to supervisor had an indirect effect on engagement via job satisfaction that was positive and significant ($b = -1.24; 95\%$ bias-corrected bootstrap (CI) [-2.414, -0.471]). In contrast, when power distance was high, the indirect effect of burnout due to supervisor on engagement via job satisfaction was nonsignificant ($b = -0.13; 95\%$ bias-corrected bootstrap (CI) [-0.501, -0.097]). Consequently, Hypothesis 7 was supported.

**Summary**

Study 3 discloses the mediating process by which the interaction between burnout due to supervisor and power distance affect engagement. Results show that the effect of burnout due to supervisor on engagement is transmitted through job satisfaction, albeit only when power distance is low. Findings indicate that burnout due to supervisor negatively affects engagement when power distance is low due to lower job satisfaction. Conversely, when power distance is high, burnout due to supervisor has no impact on job satisfaction, thereby disabling the mediating role of job satisfaction on the burnout due to supervisor–engagement relationship.
General Discussion

With service employees reporting the most dramatic decline in engagement among employees of all sectors, the goal of this study was to broaden the scope of the JD-R model in order to obtain a deeper understanding of service employee burnout and engagement. Across three separate studies, from surveys to experiments, we were able to provide a more nuanced look into the JD-R model by explaining when and how service employees feel more or less burnout due to supervisors and engagement. We now discuss how our results contribute to theory and practice.

Theoretical Implications

The contribution of our research from a theoretical perspective is threefold. The first is the inclusion of power distance in the JD-R model, an attempt that has been missing from the literature. The second is the identification of the mediating process by which the interactions involving power distance affect burnout due to supervisor and engagement. The third is the establishment of causality among the constructs and control of common method bias through the manipulation of demands and resources in the JD-R model.

Addition of PDO as a Value Orientation at the Individual Level. This is the first study, to the best of our knowledge, to include PDO in the JD-R model. The significance of studying PDO within the context of the JD-R model is that it captures the reality of the workplace where many demands and resources come from supervisors. Service employees have numerous interactions with supervisors and their workplace attitude is influenced, to a large extent, by the demands and resources that originate from supervisors. Given this, the focus and scope of the JD-R model has been overly restricted and narrow by not considering employee attitudes towards authority and hierarchy, both of which can shape how employees view demands and
resources originating from supervisors. Our refined and extended model fills this gap in the literature with the inclusion of PDO.

Because PDO reflects subordinates’ values and opinions about how they view authority, employees’ reactions to demand and resources from supervisors may not be identical. As a result, when the different responses employees have to demands and resources from supervisors are absent from the JD-R model, this renders the model incomplete. More specifically, in terms of the moderating role of PDO, we find that the effect of close monitoring on burnout from supervisor is mitigated when developmental service feedback is high. This result is consistent with the very core tenant of JD-R theory, which claims that resources function as a buffer by mitigating the effect of job demands on burnout. From a resource conservation theory perspective, this finding is in line with the view that employees expend emotional and psychological resources in trying to cope with demands such as close monitoring. However, when resources are replenished, employees become recharged and feel less burnout due to supervisor despite being closely monitored by their supervisors.

Contrary to our predictions, the positive effect of close monitoring on burnout due to supervisor was higher when PDO was high rather than low. Our results indicate that close monitoring can especially intensify the burnout due to supervisors for employees with high PDO or for employees that work in a high power distance environment. Although this was unexpected, a possible reason may rest with the dependent variable under examination. The bulk of the literature on PDO has focused on how low versus high PDO employees differ in their perceptions of the supervisor when the supervisor engages in deviant or unfair interpersonal treatment (e.g., Lee et al. 2000; Lian et al. 2012). However, in our study, the emphasis was on how an employee (as opposed to a supervisor) feels based on an experience with the supervisor.
That is, the key distinction lies in whether the focus is on how the employee feels about the supervisor or about his or herself after experiencing job demands. Herein lies why our study may have found the opposite effect than is typically seen in the literature. High PDO employees may be less critical of unsupportive supervisor behavior but instead may be more critical of their own feelings due to such supervisor behavior.

The different effect of close monitoring on burnout due to supervisor between low and high PDO employees suggests that supervisors need to have a segmented and targeted approach if and when they intend to closely monitor employees. By not considering PDO, supervisors risk jeopardizing supervisor–subordinate relationships, but this can be avoided if supervisors fully understand their subordinate’s take on hierarchy and authority. Our findings also have significant implications for extending LMX (leader–member exchange) theory by considering PDO when attempting to redefine the boundary conditions of the relationship between leaders and subordinates (Graen and Uhl-Bien 1995).

PDO as a moderator in broadening and enriching the JD-R model is meaningful and relevant not because past studies have neglected to include personal resources as moderators in the JD-R model but because the personal resources used in previous studies have been overly broad and general. Lacking specificity, prior moderators such as self-efficacy, organizational based self-esteem, and optimism (Xanthopoulou et al. 2007) were not able to produce consistent results. Further, these moderators are individual feelings rather than perceptions directed towards the source of job demands (e.g., supervisor), which may limit the transferability of an employee’s generic views to the specific task, supervisor, or organizational demands. Instead, in our study, PDO is a moderator when the source of the demand and the opinion of the target are aligned at the supervisor.
**Mediating Process.** The second contribution of our study comes from illuminating the underlying process of how the interaction effects work in our model. To this end, in Study 2 we examined the mediating process of how the interactions between (a) close monitoring and developmental service feedback and (b) close monitoring and power distance influenced burnout due to supervisor. What we observed was a mediated moderation effect where the two interactions affected burnout due to supervisor through stress, an important link missing from the current body of studies in the JD-R literature.

The interactive combination between close monitoring and power distance impacted burnout due to supervisor through stress but only in the case of high power distance. The results suggest that in the high power distance condition, close monitoring increases burnout due to supervisor because of the greater stress associated with this condition. Conversely, this was not the case under the low power distance condition where stress did not function as a mediator between close monitoring and burnout due to supervisor. In fact, our data confirmed that while close monitoring had a positive and significant effect on stress in the high power distance condition, there was no observable effect in the low power distance condition.

We also found that close monitoring resulted in greater burnout due to supervisors when developmental service feedback was low because of the increased stress of this condition. That is, when close monitoring increases without commensurate developmental service feedback, stress increases as well, which in turn results in more burnout due to supervisor. Similarly, we demonstrated that when developmental service feedback was low, close monitoring had a positive and significant effect on stress, while such an effect was absent when developmental service feedback was high. It is noteworthy to understand that in our model, both close monitoring and developmental service feedback came from supervisors. That is, supervisors
created the demand but at the same time provided resources. Our results underscore the importance of supervisors providing resources such as developmental service feedback if supervisors intend to engage in close monitoring because without sufficient resources, stress will increase and lead to greater burnout due to supervisors.

To corroborate the above results, our correlation matrix (Table 1) shows that close monitoring and engagement are indeed negatively and significantly related (-.105), which supports our argument of close monitoring as a job hindrance demand. Our research shows that close monitoring as a job hindrance demand leads to more burnout due to supervisor when power distance is high and developmental feedback is low as a result of the increased stress.

In Study 3, we found that burnout due to supervisor had an indirect effect on engagement through job satisfaction but only in the low power distance context. Again the results show that burnout due to supervisor diminishes job satisfaction but only for those in the low power distance condition. Job satisfaction was not affected by burnout due to supervisor in the high power distance condition. These findings collectively suggest that when an employee cannot challenge the supervisor on contentious issues (i.e., high power distance), job satisfaction is minimally affected despite close employee monitoring by the supervisor. In contrast, when employees can challenge the supervisor’s views (i.e., low power distance), job satisfaction becomes sensitive to how closely supervisors monitor employees because employees may believe that job satisfaction can be influenced by the extent to which different views between the two parties can be resolved.

**Improving Causality through Manipulation of Demands and Resources.** The last contribution and strength of our study comes from the consistent results across studies that not only measured but also manipulated job demands (i.e., close monitoring) and job resources (i.e.,
developmental service feedback and PDO). Study 1 used a survey with service employees in 58 bank branches within a single country and still found enough variance in PDO within individuals, while Studies 2 and 3 used MBA students from different countries and manipulated demands and resources including power distance. We were able to replicate exactly the findings we observed in Study 1 using lab experiments after controlling for nationalities to ensure that power distance was not confounded by different cultural views towards authority and hierarchy.

By manipulating demands and resources, we are able to (a) strengthen the causal ordering of the constructs in the JD-R model, (b) rule out alternative explanations including the possibility of reverse causality, and (c) minimize the possibility of common method bias. By manipulating demands and resources, our study produces results that show that close monitoring and developmental service feedback lead to burnout due to supervisors and not the other way around. Further, our approach is consistent with what Crawford et al. (2010, p. 844) posited, namely that “strong inferences regarding causality require experimental research in which the theoretical antecedents—the resources and demands—can be manipulated.”

Managerial Implications

Our study sheds light for managers in service firms who are committed to keeping employees engaged. In order to reverse the trend of declining employee engagement, our study informs managers what they can do under which conditions to reduce the likelihood of burnout from supervisors and disengagement.

Our findings suggest that close monitoring needs to be used carefully as this type of job demand increases burnout due to supervisor, while developmental service feedback should be encouraged because this resource reduces burnout due to supervisor. However, our data tell us that when both are used and originate from the same source (i.e., supervisors), the total effect of
close monitoring on engagement is -.138 ($p < .01$), while the total effect of developmental service feedback on engagement is .096 ($p < .01$). Therefore, the total net effect is a decrease in engagement, which suggests that although developmental service feedback boosts engagement, the deleterious impact of close monitoring on engagement still dominates.

Based on our study, we caution supervisors that a micro-management approach such as close monitoring can be more detrimental and lead to feelings of emotional exhaustion and depersonalization for employees with high PDO or employees working in a high power distance environment. This is because high PDO employees and those in a high power distance context perceive more stress when exposed to close monitoring. Therefore, unless stress coping mechanisms such as social support, retraining, or feedback are offered, high PDO employees or those who work in a high power distance environment will feel more burnout due to supervisor when being closely monitored. Our results do, however, provide an avenue through which the effect of close monitoring on burnout due to supervisor can be mitigated. When employees receive much-needed developmental service feedback, burnout due to supervisor is diminished despite close monitoring as employees have the necessary resources to cope with and manage stress.

Last but not least, employees who have high PDO are less disengaged despite burnout due to supervisor because as our data reveal, job satisfaction does not seem to be affected as much by burnout due to supervisor. This implies that the finding that high PDO employees sense less disengagement despite more burnout due to supervisor may offset the results that employees with high PDO feel more burnout from supervisors with close monitoring. Indeed we found this to be the case as for high PDO employees, the effect of close monitoring on burnout from supervisor was .754 ($p < .01$), while the same effect for low PDO employees was .472 ($p < .01$).
However, for high PDO employees, the effect of burnout due to supervisor on engagement was less negative at -0.141 ($p < 0.01$), while the identical effect for low PDO employees was -0.342 ($p < 0.01$). Collectively, this implies that the total effect of close monitoring on engagement for high PDO employees is -0.106 ($p < 0.01$), whereas that for low PDO employees is -0.161 ($p < 0.01$). These results inform managers that although close monitoring has a negative effect on engagement (which confirms close monitoring as a job hindrance demand), close monitoring is less detrimental to high PDO than to low PDO employees.

In short, our data reveal the following recommendation to managers. If a supervisor plans to use close monitoring, we advise that they first provide sufficient developmental service feedback to attenuate the deleterious effect close monitoring has on burnout. Second, they should determine the total effect of close monitoring on engagement for employees who hold different views on power distance and use close monitoring on employees for whom the total effect is less negative. For example, although close monitoring may lead to more burnout for high PDO employees, this may be offset by less disengagement from burnout due to supervisors.

**Limitations and Future Research Direction**

This study is not without limitations, which provide avenues for future research. The number of job demands and resources was limited in our JD-R model. We included only one supervisor-related demand (close monitoring) and resource (developmental service feedback) along with one moderator (PDO). As Crawford et al. (2010) state, both job hindrance and job challenge demands are necessary to provide a more complete assessment of the JD-R model. Our mediators, stress and job satisfaction, were focused on employees’ feelings of treatment and interaction with supervisors. However, because close monitoring and burnout are supervisor-related, employees are also likely to develop attitudes regarding supervisors, such as relationship
quality with supervisors (i.e., leader-member exchange). Future studies can include both types of mediators to examine if dual routes are at work and, if so, under which condition one route is likely to be more pronounced than the other.

Across Studies 2 and 3, we found that individuals in the high power distance context differentiated between stress from close monitoring and job satisfaction from burnout due to supervisor. That is, in Study 2, we observed that respondents in the high power distance environment felt more stress and, therefore, more burnout due to the supervisor. However, in Study 3, a different pool of subjects in the high power distance condition did not necessarily feel more job dissatisfaction from burnout due to the supervisor. Although one would expect subjects in the high power distance context in Study 3 to feel more job dissatisfaction as did the subjects in Study 2 who perceived more stress, our experiment may not have been able to capture how subjects in the high power distance context viewed job satisfaction in terms of burnout due to supervisor. In other words, in a high power distance environment, job satisfaction may be affected by many reasons besides burnout due to supervisor, such as lack of autonomy, psychological empowerment, social resources, and monetary rewards. Future studies should explore how close monitoring affects stress and job satisfaction for high PDO employees in a more naturalistic field setting to improve the ecological validity of our findings.

References


Xanthopoulou, Despoina, Arnold B. Bakker, Evangelia Demerouti, and Wilmar B. Schaufeli


Table 1-Intercorrelations and Descriptive Statistics (Study 1)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Experience with supervisor</td>
<td>.064</td>
<td>-.008</td>
<td>.107*</td>
<td>-.015</td>
<td>.032</td>
<td>-.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-.030)</td>
<td>(-.109)*</td>
<td>(.018)</td>
<td>(-.117)*</td>
<td>(.064)</td>
<td>(-.109)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Supervisor close monitoring</td>
<td>.073</td>
<td>-.140**</td>
<td>.564**</td>
<td>-.117**</td>
<td>.342**</td>
<td>-.045</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-.254)**</td>
<td>(.520)**</td>
<td>(-.229)**</td>
<td>(.277)**</td>
<td>(-.150)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Developmental service feedback</td>
<td>.002</td>
<td>-.129**</td>
<td>-.425**</td>
<td>.410**</td>
<td>-.241**</td>
<td>.326**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.568)**</td>
<td>(.351)**</td>
<td>(-.366)**</td>
<td>(.259)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Burnout due supervisor</td>
<td>.116*</td>
<td>.568**</td>
<td>-.411**</td>
<td>-.308**</td>
<td>.407**</td>
<td>-.203**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-.439)**</td>
<td>(.348)**</td>
<td>(-.323)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Job engagement</td>
<td>-.005</td>
<td>-.106*</td>
<td>.416**</td>
<td>-.295**</td>
<td>-.110**</td>
<td>.599**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-.221)**</td>
<td>(.559)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Power distance orientation</td>
<td>.042</td>
<td>.349**</td>
<td>-.229**</td>
<td>.413**</td>
<td>-.099*</td>
<td>-.042</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-.147)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Service performance</td>
<td>.002</td>
<td>-.035</td>
<td>.333**</td>
<td>-.191**</td>
<td>.603**</td>
<td>-.032</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Common method (marker) variable</td>
<td>-0.001</td>
<td>.114*</td>
<td>.007</td>
<td>.047</td>
<td>.107*</td>
<td>.124**</td>
<td>.153**</td>
<td></td>
</tr>
</tbody>
</table>

Correlations after common method adjustment are reported above the diagonal. First entries are for the adjustment with \( r = .007 \) and the entries in parenthesis are for the adjustment with \( r = .10 \)

*\( p < .05 \); **\( p < .01 \) (two-tailed test)
Table 2-Results (Study 1)

<table>
<thead>
<tr>
<th>Direct Effects</th>
<th>Hypothesized Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor close monitoring $\rightarrow$ Burnout due to supervisor</td>
<td>.639**</td>
</tr>
<tr>
<td>Developmental service feedback $\rightarrow$ Burnout due to supervisor</td>
<td>-.448**</td>
</tr>
<tr>
<td>Burnout due to supervisor $\rightarrow$ Job engagement</td>
<td>-.216**</td>
</tr>
<tr>
<td>Job engagement $\rightarrow$ Service performance</td>
<td>.537**</td>
</tr>
<tr>
<td>Power distance orientation $\rightarrow$ Burnout due to supervisor</td>
<td>-</td>
</tr>
<tr>
<td>Power distance orientation $\rightarrow$ Job engagement</td>
<td>-</td>
</tr>
</tbody>
</table>

Interaction Effects

| Close Monitoring x Power distance $\rightarrow$ Burnout due to supervisor | - | .159** |
| Feedback x Power distance $\rightarrow$ Burnout due to supervisor | - | .002 |
| Close Monitoring x Feedback $\rightarrow$ Burnout due to supervisor | - | -.165** |
| Burnout due to supervisor x Power distance $\rightarrow$ Job engagement | - | -.122** |

Controls

| Experience with supervisor $\rightarrow$ Burnout due to supervisor | .076* | .057 |
| Experience with supervisor $\rightarrow$ Job engagement | .021 | .014 |
| Experience with supervisor $\rightarrow$ Service performance | .003 | .003 |
| Common method variable $\rightarrow$ Burnout due to supervisor | -.008 | -.014 |
| Common method variable $\rightarrow$ Job engagement | .079** | .077** |
| Common method variable $\rightarrow$ Service performance | .053* | .053* |

Deviance: 7207.9 6578.4
AIC: 7335.9 6624.4
BIC: 7603.7 6720.6
Pseudo $R^2$-Burnout due to supervisor: .445 .502
Pseudo $R^2$-Job engagement: .102 .134
Pseudo $R^2$-Service performance: .371 .372

*p < .05; **p < .01 (two-tailed test)

Table 3-Bootstrapping Results for Mediation Testa (Study 2 and Study 3)

<table>
<thead>
<tr>
<th>Low supervisor feedback</th>
<th>High supervisor feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>[.064, .807]</td>
<td>[-.053, .539]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low power distance</th>
<th>High power distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-.069, .497]</td>
<td>[.057, .781]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect effect of supervisor close monitoring on burnout due to supervisor via stress</th>
<th>Low power distance</th>
<th>High power distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect effect of burnout due to supervisor on job engagement via job satisfaction</td>
<td>Low power distance</td>
<td>High power distance</td>
</tr>
<tr>
<td>[-2.414, -.471]</td>
<td>[.501, .097]</td>
<td></td>
</tr>
</tbody>
</table>

*95% bootstrapped confidence intervals for indirect effects (Hypotheses 6 and 7)
Figure 1 - Model

Power Distance Orientation

Supervisor
Close Monitoring

Burnout due to Supervisor

Job Engagement

Service Performance

Control
- Experience with Supervisor

Supervisor
Developmental Service Feedback
Figure 2- The Moderating Role of Developmental Service Feedback on the Supervisor Close Monitoring and Burnout due to Supervisor Relationship (Study 1)

Figure 3- The Moderating Role of Power Distance Orientation on the Supervisor Close Monitoring and Burnout due to Supervisor Relationship (Study 1)

Figure 4- The Moderating Role of Power Distance Orientation on the Burnout due to Supervisor and Job Engagement Relationship (Study 1)
Figure 5a - The Moderating Role of Power Distance on the Supervisor Close Monitoring and Burnout due to Supervisor Relationship (Study 2)

Figure 5b - The Moderating Role of Developmental Feedback on the Close Monitoring and Burnout due to Supervisor Relationship (Study 2)

Figure 5c - The Moderating Role of Power Distance Orientation on the Burnout from Supervisor and Job Engagement Relationship (Study 3)
### Appendix—Measures and CFA Results (Study 1)

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>Job Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vigor (α = .87; CR = .88; AVE = .56)</td>
</tr>
<tr>
<td></td>
<td>At work, I feel full of energy .861</td>
</tr>
<tr>
<td></td>
<td>In my job, I feel strong and vigorous .853</td>
</tr>
<tr>
<td></td>
<td>When I get up in the morning, I feel like going to work .718</td>
</tr>
<tr>
<td></td>
<td>I can continue working for very long periods at a time .789</td>
</tr>
<tr>
<td></td>
<td>In my job, I am mentally very resilient .610</td>
</tr>
<tr>
<td></td>
<td>At work, I always persevere, even when things do not go well .632</td>
</tr>
<tr>
<td></td>
<td>Dedication (α = .91; CR = .91; AVE = .67)</td>
</tr>
<tr>
<td></td>
<td>I find the work that I do full of meaning and purpose .855</td>
</tr>
<tr>
<td></td>
<td>I am enthusiastic about my job .881</td>
</tr>
<tr>
<td></td>
<td>My job inspires me .852</td>
</tr>
<tr>
<td></td>
<td>I am proud of the work I do .837</td>
</tr>
<tr>
<td></td>
<td>I find my job challenging .644</td>
</tr>
<tr>
<td></td>
<td>Absorption (α = .85; CR = .85; AVE = .50)</td>
</tr>
<tr>
<td></td>
<td>Time flies when I am working .580</td>
</tr>
<tr>
<td></td>
<td>When I am working, I forget everything else around me .682</td>
</tr>
<tr>
<td></td>
<td>I feel happy when I am working intensely .811</td>
</tr>
<tr>
<td></td>
<td>I am immersed in my work .836</td>
</tr>
<tr>
<td></td>
<td>I get carried away when I am working .697</td>
</tr>
<tr>
<td></td>
<td>It is difficult to detach myself from my job .594</td>
</tr>
<tr>
<td></td>
<td>Power Distance Orientation (α = .78; CR = .81; AVE = .51)</td>
</tr>
<tr>
<td></td>
<td>People in higher positions should make most decisions without consulting people in lower positions .751</td>
</tr>
<tr>
<td></td>
<td>People in higher positions should not ask the opinions of people in lower positions too frequently .653</td>
</tr>
<tr>
<td></td>
<td>People in higher positions should avoid social interaction with people in lower positions .727</td>
</tr>
<tr>
<td></td>
<td>People in lower positions should not disagree with decisions by people in higher positions .732</td>
</tr>
<tr>
<td></td>
<td>Supervisor Close Monitoring (α = .87; CR = .88; AVE = .54)</td>
</tr>
<tr>
<td></td>
<td>It sometimes feels like my manager is always looking over my shoulder .847</td>
</tr>
<tr>
<td></td>
<td>I am careful not to do things that my manager might disapprove of .572</td>
</tr>
<tr>
<td></td>
<td>My manager keeps pretty close tabs on me .819</td>
</tr>
<tr>
<td></td>
<td>It is clear to me that to get ahead in this bank I need to do exactly what I am told by my manager .589</td>
</tr>
<tr>
<td></td>
<td>My manager likes to see things done in a certain way .770</td>
</tr>
<tr>
<td></td>
<td>My work is constantly being evaluated .778</td>
</tr>
<tr>
<td></td>
<td>Burnout due to Supervisor (α = .89; CR = .90; AVE = .68)</td>
</tr>
<tr>
<td></td>
<td>I feel a lack of personal concern for my manager .725</td>
</tr>
<tr>
<td></td>
<td>I feel I’m becoming more hardened toward my manager .784</td>
</tr>
<tr>
<td></td>
<td>Working with my manager directly puts too much stress on me .866</td>
</tr>
<tr>
<td></td>
<td>I feel emotionally drained by the pressure my manager puts on me .918</td>
</tr>
<tr>
<td></td>
<td>Supervisor Developmental Service Feedback (α = .78; CR = .79; AVE = .57)</td>
</tr>
<tr>
<td></td>
<td>While giving me feedback, my manager focuses on helping me to learn and improve customer service .852</td>
</tr>
<tr>
<td></td>
<td>My manager never gives me developmental feedback on my service to customers .529</td>
</tr>
<tr>
<td></td>
<td>My manager provides me with useful information on how to improve my customer service .843</td>
</tr>
<tr>
<td></td>
<td>Service Performance (α = .91; CR = .92; AVE = .61)</td>
</tr>
<tr>
<td></td>
<td>Being friendly and helpful to customers .593</td>
</tr>
<tr>
<td></td>
<td>Approaching customers quickly .784</td>
</tr>
<tr>
<td></td>
<td>Asking good questions and listening to find out what a customer wants .753</td>
</tr>
<tr>
<td></td>
<td>Being able to help customers when needed .815</td>
</tr>
<tr>
<td></td>
<td>Pointing out and relating item features to a customer’s needs .843</td>
</tr>
<tr>
<td></td>
<td>Suggesting items customers might like but did not think of .799</td>
</tr>
<tr>
<td></td>
<td>Explaining an item’s features and benefits to overcome a customer’s objections .840</td>
</tr>
</tbody>
</table>