

Power distance orientation alleviates the beneficial effects of empowering leadership on actors' work engagement via negative affect and sleep quality

Ho Kwong Kwan¹ · Yang Chen² · Guiyao Tang³ · Xiaomeng Zhang⁴ · Jiaqi Le⁵

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Abstract

Although many studies have explored the benefits of empowering leadership for followers, the beneficial effect of such behavior for actors who demonstrate empowering leadership has been overlooked. Applying conservation of resources theory, we propose and test a model that determines why and when empowering leadership benefits actors. We use an experience sampling survey to examine the effect of empowering leadership on actors' daily work engagement. In particular, we focus on the moderating role of power distance orientation and the mediating roles of negative affect and sleep quality, which operate sequentially. The results based on responses from 160 supervisors in two Chinese organizations indicated that empowering leadership in the morning was negatively related to negative affect in the afternoon and positively related to sleep quality at night and next-day work engagement. The strength of this beneficial effect was moderated by power distance orientation, such that supervisors with a high degree of power distance orientation obtained fewer benefits from empowering leadership than those with a low degree of power distance orientation. The theoretical and practical implications of these findings for the leadership, affect, sleep, power distance, and conservation of resources literatures are discussed.

Keywords Empowering leadership \cdot Negative affect \cdot Sleep quality \cdot Work engagement \cdot Power distance

Extended author information available on the last page of the article

Introduction

The past two decades have witnessed increasing research interest in empowering leadership behaviors among supervisors (Zhang & Kwan, 2019), which refers to "the process of implementing conditions that enable sharing power with an employee by delineating the significance of the employee's job, providing greater decision-making autonomy, expressing confidence in the employee's capabilities, and removing hindrances to performance" (Zhang & Bartol, 2010: 109). A recent meta-analytic study showed that empowering leadership has a variety of positive outcomes for followers, such as psychological empowerment, task performance, organizational citizenship behavior, and creativity (Lee et al., 2018). More recently, drawing on the work–home resources model, a survey study evidenced that empowering leadership benefits followers' work–family interfaces (Kwan et al., 2022). Thus, empowering leadership is beneficial for followers who perceive themselves as empowered.

However, little is known about how such behavior influences actors who demonstrate empowering leadership. While studies on leadership have focused on the influence of leadership behavior on followers, results from recent studies have indicated that it is also meaningful and practical to investigate the effect of leadership behavior on actors (Foulk et al., 2018; Khan et al., 2023; Lanaj et al., 2016; Liao et al., 2021; Qin et al., 2018). Yet, to our knowledge, there has been no research on whether empowering leadership benefits actors. Knowledge of the potential benefits may encourage supervisors to engage in empowering leadership behaviors and to participate in training for enhancing such behaviors, thereby spurring the development of empowering leadership. Thus, it is important to examine whether empowering leadership behaviors influence leaders, and if so, why and when the influence is positive.

To answer these questions, we apply an actor-centric approach to investigate the potential effects and short-term consequences of the exhibition of empowering leadership behaviors by leaders on a day-to-day basis. We focus on the short-term outcomes of empowering leadership because research has shown that leadership behaviors and their benefits fluctuate daily (Lanaj et al., 2016; Schilpzand et al., 2018).

To explore these fluctuations and unveil the positive effects of empowering leadership on actors, we apply conservation of resources (COR) theory (Hobfoll, 1989, 2001), which provides a theoretical explanation for whether and how retained resources enhance actors' next-day work engagement. A recent review paper of COR theory acknowledges the importance of work engagement in developing COR theory and concludes that enhancing resource accumulation increases work engagement (Hobfoll et al., 2018), which refers to "a positive, fulfilling, and work-related state of mind that consists of vigor, dedication, and absorption" (Bakker & Xanthopoulou, 2009: 1562). Highly engaged employees are likely to invest physical, emotional, and cognitive effort in their work roles, whereas disengaged employees are inclined to withdraw from work (Chen et al., 2013; Kwan et al., 2018; Rich et al., 2010; Song et al., 2022; Xu et al., 2020). Within the COR context, we argue that empowering leadership directs leaders to make decisions together with their followers and share their daily workload with their followers, thus enabling leaders to consume less energy and conserve resources for daily life.

Applying COR theory (Hobfoll, 1989, 2001), we also propose that negative affect at work in the afternoon and sleep quality at night are the two key mediating mechanisms operating sequentially through which empowering leadership behaviors in the morning indirectly influence the next-day work engagement of leaders. Studies have applied COR theory to conceptualize negative affect as a low degree of affective resources (Montani et al., 2018) and sleep as a process of resource gain/recovery (Crain et al., 2014).

COR theory also posits that culture influences the processes of resource gain and loss (Hobfoll, 2001; Hobfoll et al., 2018). Studies have long suggested that cultural value orientations play an important role in shaping beliefs about what behaviors characterize effective leadership (Kirkman et al., 2009) and that empowerment and empowering leadership should be investigated in a cultural context associated with power distance (Cheong et al., 2019; Eylon & Au, 1999). Accordingly, we consider power distance orientation at the individual level as a moderator of the beneficial effects of empowering leadership behaviors. Power distance orientation is a cultural concept embedded in an individual that represents the level of power that leaders have over their subordinates (Hofstede, 1980). A person who has a high degree of power distance orientation expects and accepts the notion that power between leaders and subordinates is distributed unequally. This cultural variable causes individuals to feel less comfortable exhibiting behaviors that regard followers as equal partners in the context of empowerment (Sharma & Kirkman, 2015). Therefore, leaders' power distance orientation potentially mitigates the positive impact of the demonstration of leadership behaviors by leaders (Chen & Aryee, 2007).

Our theoretical model contributes to the literature on leadership, affect, sleep, power distance, and COR theory. First, we extend the literature by focusing on the benefits of empowering leadership for leaders (actors) rather than for followers and by suggesting that an effective way for leaders to retain their affective resources (i.e., low levels of negative affect) may be to exhibit empowering leadership, so that they can sleep well and fully engage in work the next day. Although studies have shown the benefits of positive leadership behaviors (Lanaj et al., 2016) and called for further research on the effects of empowering leadership on leaders (Sharma & Kirkman, 2015), to the best of our knowledge, our study is one of the first to focus on the benefits of exhibiting empowering leadership for leaders. Second, by applying an actor-centric perspective and by responding to the call to investigate the relationship between leadership behaviors and well-being (Inceoglu et al., 2018), we explore the mediating mechanism of the effects of empowering leadership on leaders' work engagement. In particular, we examine the mediating roles of reduced negative affect and enhanced sleep quality for leaders, which helps explain the beneficial effects of exhibiting empowering leadership on leaders' work engagement. Third, this study contributes to the literature on empowering leadership by considering a cultural moderator and by exploring the boundary condition of the benefits of empowering leadership. We determine who benefits the most from empowering leadership and provide practical implications by identifying leverage points that strengthen the benefits of empowering leadership. Finally, this research gives back to COR theory by identifying empowering leadership as an important behavior involving resource conservation and generation processes. Figure 1 shows the conceptual model of this study.



Fig. 1 Hypothesized model

Theory and hypotheses

Applying COR theory (Hobfoll, 1989, 2001), we examine the potential benefits of empowering leadership for actors. COR theory is a useful lens through which studies have investigated why actors benefit from daily behaviors such as abusive supervision (Qin et al., 2018) and organizational citizenship behavior (Koopman et al., 2016). The key notion of COR theory is that individuals need resources to handle daily life and are therefore motivated to acquire new resources and protect existing resources (Hobfoll, 1989, 2001). Resources are defined as anything that is perceived by individuals as helpful for attaining their goals such as task completion (Halbesleben et al., 2014). COR theory suggests that work behaviors influence affect, recovery, sleep, and work engagement, all of which are associated with resource gain/recovery or loss (Crain et al., 2014; Koopman et al., 2016; Qin et al., 2018; Sonnentag & Fritz, 2007). According to COR theory, we argue that empowering leadership behaviors in the morning help actors gain affective resources (i.e., reduced negative affect in the afternoon), which helps them recover well (i.e., high sleep quality at night) and engage in work the next day (i.e., work engagement).

We also propose that negative affect and sleep quality are mediators operating sequentially in the positive relationship between empowering leadership and work engagement. The review paper of COR theory concludes that a number of studies emphasize the importance of sleep quality for recovery based on the COR framework (Hobfoll et al., 2018). Moreover, studies have indicated that negative affect and sleep quality fluctuate daily and are associated with work engagement on a day-to-day basis (Bakker et al., 2008; Ferreira et al., 2019; Wagner et al., 2014). Furthermore, applying COR theory, several studies have proposed that emotional resources are transferred across work and family/life domains (e.g., Babalola et al., 2021; Ye et al., 2021). It is thus appropriate to develop a model that captures daily data for negative affect and work–family/life interfaces. In particular, resources acquired or depleted at work can influence nighttime recovery at home (Crain et al., 2014), and such recovery in non-work domains impacts next-day work engagement (Sonnentag, 2003).

COR theory also suggests that culture affects the processes of resource gain and loss because behaviors and resources are primarily ranked and valued according to what cultures appreciate or disregard (Hobfoll, 2001). Although we posit that empowering leadership is generally beneficial to actors, not all actors benefit equally. A cultural variable that captures individual differences in the ability to appreciate empowering leadership is power distance orientation. Research has indicated that submission to authority results in followers resisting delegation, which mitigates the beneficial effect of delegation (Chen & Aryee, 2007). We propose that actors with a high degree of power distance orientation benefit less from demonstrating empowering leadership behaviors than actors with a low degree of power distance orientation. On the basis of cultural and resource perspectives, this study illustrates how and when empowering leadership behaviors benefit actors.

Benefits of empowering leadership for leaders

This study examines the proximal positive effects of empowering leadership behaviors. Leadership behaviors fluctuate daily, and these fluctuations are associated with resource gain and conservation (Lanaj et al., 2016). Studies have applied COR theory to determine the short-term outcomes of daily behaviors for actors (Khan et al., 2023; Koopman et al., 2016; Qin et al., 2018). According to COR theory, individuals are motivated to conserve and gain personal resources, which helps explain the positive effects of empowering leadership behaviors.

Applying the resource-gain perspective from the COR literature, we propose that empowering subordinates helps leaders conserve and gain their affective resources. Numerous work activities are difficult, challenging, and resource-consuming for leaders (Hambrick et al., 2005). In leading subordinates, a leader's work involves making decisions, providing support, and planning the steps and details of subordinates' work. All of these activities can result in a loss of resources (Halbesleben et al., 2014), causing individuals to become worried, frustrated, angry, or annoyed.

COR theory suggests that individuals tend to retain their resources and avoid an undesirable and unpleasant state (Halbesleben et al., 2014). Negative affect is an unpleasant subjective emotional state, which refers to a person's momentary unpleasant emotional experience (Watson, 1988). It also reflects a facet of psychological strain, namely affective strain (French & Allen, 2020). Therefore, we expect individuals to make efforts to find a way to reduce their negative affect.

Empowering subordinates can reduce actors' negative affect for the following two reasons. First, empowering leaders make decisions together with their followers and give autonomy to their followers, which potentially helps such leaders share their workload and responsibilities with their followers, and thus, spend less time and effort scheduling and monitoring their followers' work. This process and its results give leaders an impression of reduced workload and stress, which is unlikely to deplete their affective resources. Research has concluded that stress is positively associated with negative affect (French & Allen, 2020). Second, requesting followers' opinions on work-related decisions can help leaders exchange ideas with their followers, thereby enhancing the quality of decisions. These followers embrace conflict constructively and address conflict through effective debate and communication, which in turn reduces the extent to which leaders need to handle conflict among followers. Thus, leaders can retain their personal resources for coping with daily life, and they experience fewer momentary unpleasant emotional experiences. Accordingly, we propose the following hypothesis: **Hypothesis 1** Empowering leadership in the morning is negatively related to negative affect at work in the afternoon.

COR theory suggests that resource depletion interferes with recovery (Hobfoll, 1989, 2001). Sleep is an important recovery process that is closely related to resource gain. Sleep quality refers to an assessment of the sufficiency of sleep (Barnes et al., 2015; Crain et al., 2014). We propose that negative affect has a detrimental effect on sleep quality. Research has indicated that negative affect is positively associated with high levels of systolic and diastolic blood pressure (French & Allen, 2020). Due to such high blood pressure, individuals lose physical control and are less prepared to sleep, leading to sleep problems (Lazarus & Folkman, 1984). Specifically, negative affect results in physiological arousal, which thwarts the physiological processes related to falling asleep (Wagner et al., 2014). A 5-year longitudinal study showed that individuals with high levels of anxiety experience sleep disturbances (Vahtera et al., 2007). Wagner et al. (2014) found that anxiety in the afternoon is positively associated with insomnia at night (Wagner et al., 2014). Consistent with these studies, we propose the following hypothesis:

Hypothesis 2 Negative affect at work in the afternoon is negatively related to sleep quality at night.

COR theory suggests that individuals who have sufficient personal resources are likely to spend and exert such resources to handle daily life (Hobfoll, 1989, 2001). Employees with high work engagement invest energy in their work physically, cognitively, and emotionally (Kahn, 1990). Physical, cognitive, and emotional resources are thus a necessary condition for work engagement (Rich et al., 2010). Sleep is inherently beneficial to work engagement, as it offers people the opportunity to recover and acquire the aforementioned resources (Barnes, 2011). We posit that sleep quality is positively associated with work engagement because people who experience high-quality sleep are willing and able to devote energy at work as they obtain plenty of personal resources from sleep. Moreover, such people can control their attention at work and overlook irrelevant cues (Barnes et al., 2015). Conversely, people who experience poor-quality sleep do not have sufficient resources to maintain their attention across various tasks and are therefore unable to effectively engage in work (Sonnentag, 2003). Studies have shown the positive effects of day-level recovery on day-level work engagement (Qin et al., 2018; Sonnentag, 2003). Accordingly, we propose the following hypothesis:

Hypothesis 3 Sleep quality at night is positively related to next-day work engagement.

COR theory states that "initial resource gain begets further gain" (Hobfoll, 2001: 355). Applying the resource-gain argument in the context of empowering leadership, we contend that empowering leadership is an approach to start to gain resources. Gaining resources facilitates the process of resource recovery (Hobfoll, 1989, 2001). COR theory also argues that people are likely to devote effort to their daily life when they have an abundance of resources (Hobfoll, 1989, 2001). Integrating these argu-

ments, we argue that empowering leadership in the morning results in reduced negative affect in the afternoon and subsequent high sleep quality. Recovery at night finally results in high next-day work engagement. Therefore, we propose the following hypothesis:

Hypothesis 4 Empowering leadership in the morning has an indirect effect on a leader's next-day work engagement through negative affect in the afternoon and sleep quality at night.

Moderating role of power distance orientation

As discussed, COR theory posits that culture influences the processes of resource gain and loss, as it affects how behaviors and resources are ranked and valued (Hob-foll, 2001). Owing to cultural variables, individuals react differently to the processes of resource gain and loss, leading to implications for the resource-related outcomes of empowering leadership. As mentioned, power distance orientation is an important individual cultural variable in the context of empowerment (Eylon & Au, 1999). Empowering leadership behaviors may violate the cultural norm of power distance orientation, which emphasizes an unequal distribution of power (Hofstede, 1980). Leaders who have a high degree of power distance orientation accept an unequal distribution of power between leaders and subordinates in organizations. Such leaders believe that authorities should make decisions without subordinates' participation and that subordinates should follow their superiors' orders.

Although research has conceptually proposed a negative relationship between power distance orientation and empowering leadership (Sharma & Kirkman, 2015), the literature on empowering leadership has acknowledged that power distance orientation can be tested as a boundary condition of the effects of empowering leadership (Cheong et al., 2019). We argue that power distance orientation may nullify the positive effects of empowering leadership because acting in a manner that is inconsistent with one's values reduces the potential affective benefit of empowering others. As power distance and empowering leadership conflict in terms of their corresponding behaviors (Sharma & Kirkman, 2015), we expect that leaders with a high degree of power distance orientation tend to feel uncomfortable exhibiting behaviors in which followers are considered equal partners who are empowered, such as providing decision-making opportunities to followers. Leaders may worry that giving autonomy to their subordinates and soliciting their opinions on decisions would undermine their own power. As empowering leadership violates the cultural norm of power distance orientation, leaders with a high degree of power distance orientation are likely to be aware of this violation and have concerns; consequently, they may increase their monitoring of subordinates. Therefore, empowering leadership is less likely to alleviate the consumption of leaders' affective resources and may weaken the beneficial effects of empowering subordinates on leaders' negative affect. Conversely, leaders with a low degree of power distance orientation prefer to distribute power to subordinates and to have close and less formal relationships with them. Therefore, such leaders are comfortable granting freedom to their subordinates and asking for their opinions. They are less likely to have concerns about empowering subordinates and to spend additional time and effort to monitor their subordinates. Finally, they are likely to increase or retain affective resources by sharing power with followers. Therefore, we propose the following hypothesis:

Hypothesis 5 Power distance orientation moderates the within-person relationship between empowering leadership in the morning and negative affect in the afternoon, such that the relationship is stronger when the degree of power distance orientation is low rather than high.

The above arguments represent an integrated framework in which daily empowering leadership has an indirect effect on leaders' next-day work engagement via negative affect and sleep quality, and power distance orientation buffers the negative effect of daily empowering leadership on negative affect. Thus, we propose that power distance orientation also moderates the strength of the indirect effect of empowering leadership on work engagement. In particular, when leaders with a high degree of power distance orientation benefit to a lesser extent from empowering leadership behaviors, the indirect effect of empowering leadership on work engagement through negative affect and sleep quality will be weaker. Conversely, when leaders with a low degree of power distance orientation benefit to a greater extent from empowering leadership behaviors (i.e., a reduction in negative affect and better sleep quality), the indirect effect of empowering leadership on work engagement will be stronger. Therefore, we propose the following hypothesis:

Hypothesis 6 Power distance orientation moderates the indirect effect of empowering leadership in the morning on next-day work engagement through negative affect in the afternoon and sleep quality at night, such that the indirect effect is stronger when the degree of power distance orientation is low rather than high.

Methods

Sample and procedures

The survey participants were recruited from two companies in China¹: a retailing company and a manufacturing company. China is an appropriate setting to test our proposed model because Chinese people have a high degree of power distance ori-

¹ The data were collected by the second and third authors, whose universities in China do not have an Institutional Review Board (IRB) but require their researchers to adhere to the rights granted to human subjects, including a participant's rights to privacy, confidentiality, informed consent, dignity, protection, and free choice, and to maintain the privacy of the data collected on human subjects, as declared in the Nuremberg Code, the Declaration of Helsinki in 1964, and other international conventions on human rights. As an independent third party, the associate deans of research in the second and third authors' business schools reviewed and approved the research materials. All of the data collection procedures fully complied with these requirements.

entation (Eylon & Au, 1999) and because empowerment is a key issue for Chinese organizations (Wang et al., 2022). Both companies encouraged leaders to empower their followers and required employees to start working at 8:00 a.m. In the retailing company, employees were responsible to acquire new clients and generate sales in creative ways. In the manufacturing company, the job responsibilities of workers were to refine existing models and the production process, and to design and build new models and products. Therefore, these sites were appropriate for collecting data related to our research questions. Before conducting the survey, we requested the human resources department of each company to assist us in sending letters to possible participants (supervisors). The supervisors who indicated interest received the informal consent document, and instructions and assurances of confidentiality. Of 350 supervisors, 162 (46.3%) agreed to participate. Two participants guit the study due to their sudden unavailability during the data collection period. The final sample consisted of 160 supervisors, of which 78.8% were male participants. In addition, 43.8% of the supervisors had a bachelor's degree, and 85% were below the age of 35 years. The average job tenure was 7.9 years (SD=4.45).

We collected the data in two phases. At the beginning of the study, we asked the participants to complete a one-time survey that collected data on their demographics and between-person variables (i.e., power distance orientation). Two weeks later, we asked the participants to complete two web-based daily surveys over a 2-week period; this approach is consistent with those used in previous studies (e.g., Barnes et al., 2015). In our study, we collected data corresponding to 10 weekdays for the retailing company and 11 weekdays for the manufacturing company).²

Following previous studies (e.g., Ilies et al., 2017), we chose a fixed schedule for the participants' convenience. We sent a morning survey at 9:00 a.m. each weekday; this survey included questions about the participants' sleep quality the previous night, their empowering leadership behaviors, and their current negative affect. We also sent an afternoon survey at 4:00 p.m. each weekday; in this survey, the participants were asked to report their current negative affect and current work engagement. To further motivate participation, we sent a reminder to those who had failed to complete and submit a survey within 30 min. We requested all participants to complete the daily surveys within 1 h. Overall, the participants completed 1,696 out of 1,744 possible daily surveys (124 participants from one company × 11 daily surveys+38 participants from the other company \times 10 daily surveys), resulting in a compliance rate of 97.2%. Each participant who completed all of the surveys received a cash remuneration of RMB200 (USD29) to improve the response rate. The compliance rate in our study aligns with those in other recent daily diary studies for which compliance rates were above 90% (e.g., Hu et al., 2020; Uy et al., 2017). We used the method of Liu et al. (2015) to match the data. Specifically, we matched the available data from day T (i.e., Monday through Friday for one company and Monday through Thursday for the other company each week) and day T+1 (i.e., Tuesday through Saturday for one company and Tuesday through Friday for the other company each week). We obtained 1,372 complete two-day observations.

² During the data collection period, the participants in one of the companies were legally allowed to work on Saturday. Thus, we collected data for 11 workdays.

Measures

We adopted measures used in previous studies to help ensure the validity of the survey. As the surveys administered were in Chinese, the native language of the participants, we applied the procedures recommended by Brislin (1986) to translate the surveys from English to Chinese and back-translate them from Chinese to English. With the exception of the measure of negative emotions, the participants responded to all of the measures on a 5-point Likert-type scale (1=*strongly disagree*, 5=*strongly agree*).

Empowering leadership in the morning

We measured empowering leadership in the morning because it is a behavioral construct that potentially sets the direction of work-related activity during a workday (Grant & Ashford, 2008). We were informed that all of the teams from the two companies had a meeting at approximately 8:00 a.m. each workday for such directions. Following previous studies (e.g., Schilpzand et al., 2018), we used an abbreviated leadership scale to avoid overburdening the participants and to encourage continued participation (Lanaj et al., 2016). Thus, we used three items from a scale developed by Ahearne et al., (2005) to measure the extent to which supervisors empowered their subordinates with decision-making authority and task autonomy. Schilpzand et al. (2018) provided evidence that this abbreviated scale is strongly correlated with the full scale (r=.70, p<.01), thereby supporting the content validity of the abbreviated scale. A sample item is "This morning, I requested my subordinates' opinions on work-related decisions that may affect them." Cronbach's alpha was 0.72.

Negative affect in the afternoon

We assessed the supervisors' perceptions of negative affect at work in the afternoon on each workday with the five adjectival descriptors of mood from Foo et al. (2009). Sample items are "upset" and "irritable." The supervisors were asked to indicate the extent to which they were experiencing each of the feelings described by the adjectives at the time they completed the survey. The 5-point Likert-type scale ranged from 1 (*very slightly or not at all*) to 5 (*extremely*). Cronbach's alpha was 0.97.

Sleep quality at night

Sleep quality was measured through three self-reported items on a scale originally developed by Scott and Judge (2006) and later applied by Schilpzand et al. (2018). Each morning, we asked the supervisors to report whether they had trouble falling asleep, whether they had trouble staying asleep, or whether they had woken up several times the previous night. A sample item is "I had trouble staying asleep (including waking up too early)." As all of the items were framed to reflect poor sleep quality, we reverse-coded the items so that the ratings represented the participants' sleep quality. Cronbach's alpha was 0.95.

Next-day work engagement

We used the five-item daily work engagement scale (two items for vigor, two items for dedication, and one item for absorption) developed by Bledow et al. (2011) and adapted from the Utrecht Work Engagement Scale (Schaufeli et al., 2002). At the end of each workday, before leaving the office, the supervisors were asked to report the extent to which they had engaged in their assigned tasks. Bakker et al. (2011) suggested that frequency-based time anchors are not suitable for measuring daily work engagement. Therefore, we adopted agreement anchors, following previous studies (e.g., Ilies et al., 2017). A sample item is "I am bursting with energy today." Cronbach's alpha was 0.97.

Power distance orientation

Power distance orientation was measured using an eight-item scale from Kirkman et al. (2009), and this variable was rated in the initial one-time survey before the daily surveys. A sample item is "In most situations, managers should make decisions without consulting their subordinates." Cronbach's alpha was 0.71.

Control variables

At the within-person level, we controlled for the effects of the supervisors' negative affect reported in the morning on the mediator (i.e., negative affect in the afternoon) because the supervisors' negative affect may confound the mediating effect of negative affect in the afternoon in the model. We controlled for the effects of the supervisors' sleep quality the previous night on the mediator (i.e., sleep quality at night) and for the effects of the supervisors' work engagement the previous workday on their current work engagement.

Analytical strategy

We conducted multilevel path analysis using Mplus 7.4 to examine the hypothesized model shown in Fig. 1. This method was used because we could accommodate the multilevel structure of the data (i.e., daily behaviors nested within individuals) and estimate the path coefficients for the hypothesized associations. As control variables, negative affect in the morning, sleep quality at night (for the previous night), and next-day work engagement (for the previous day) were specified to have fixed effects on negative affect in the afternoon, sleep quality at night, and next-day work engagement, respectively. We specified the Level 1 (i.e., intra-individual level) fixed effects of negative affect in the afternoon on sleep quality at night, and sleep quality at night on next-day work engagement. We also specified the Level 1 random effect of empowering leadership in the morning on negative affect in the afternoon (Kim et al., 2018). Before conducting the analyses, all Level 1 predictors were person-meancentered to obtain unbiased estimates of the within-person relationships among the Level 1 variables (Enders & Tofighi, 2007). Before testing the cross-level moderating effect of power distance orientation and its moderated mediation, power distance

orientation was grand-mean-centered to mitigate potential multicollinearity problems (Hofmann & Gavin, 1998).

To test the indirect effects of empowering leadership in the morning on next-day work engagement, we ran Monte Carlo simulations with 20,000 replications and computed 95% confidence intervals (MacKinnon et al., 2004; Preacher & Selig, 2012). To test the moderated sequential mediation effect, we calculated the indirect effects of empowering leadership in the morning on next-day work engagement via negative affect in the afternoon and sleep quality at night at higher (+1 *SD*) and lower levels (-1 *SD*) of power distance orientation.

Results

Preliminary analyses

Table 1 shows the descriptive statistics and correlations between the studied variables. As expected, at the within-person level, empowering leadership in the morning was negatively related to negative affect in the afternoon ($\gamma = -0.07$, p = .013). Negative affect in the afternoon was negatively related to sleep quality at night ($\gamma = -0.39$, p = .000). Sleep quality at night was positively related to next-day work engagement ($\gamma = 0.23$, p = .000).

We examined whether the within-person variances for the Level 1 variables were sufficient before testing the within-person hypotheses. Table 2 shows the within- and between-person variance components for the Level 1 variables with the proportion of their variance. The results indicated that the percentage of within-person variance of the Level 1 variables ranged from 34 to 44%. In line with our expectation of day-specific fluctuations, the results of the variance decomposition showed that our multilevel model was suitable for this study.

We conducted a multilevel confirmatory factor analysis (CFA) using Mplus 7.4 to assess the distinctiveness of the focal constructs. The hypothesized five-factor model (empowering leadership in the morning, negative affect in the afternoon, sleep quality at night, next-day work engagement, and power distance orientation) yielded an acceptable fit with the data. All of the factor loadings were significant: $\chi^2_{(118)}=374.66$, CFI=0.97, TLI=0.96, RMSEA=0.040, and SRMR within/between = 0.034/0.079. Our model showed a significantly better fit with the data than alternative models in which any two of the four within-person variables were set to load on a single factor (739.31 $\leq \Delta \chi^2 (\Delta df=3) \leq 3,209.34$).

Hypothesis testing

Tables 3 and 4 show the results of the tests of the proposed hypotheses. Hypothesis 1 posits a direct effect of empowering leadership in the morning on negative affect in the afternoon. The results in Table 3 indicated that the direct effect of empowering leadership in the morning on negative affect in the afternoon was significant ($\gamma = -0.08$, *SE*=0.03, *p*=.017), thus supporting Hypothesis 1. Hypothesis 2 predicts that negative affect in the afternoon negatively relates to sleep quality at night. The results

(0.96) -0.44** -0.32**).96) 0.54**	(0.90 -0.5	0.65	0.77	0		Within-person Level
(0.96) -0.44^{**} -0.32^{**}).96) 0.54**	(0.90 -0.5	0.65	0.77	0		
	0.54**	-0.5	71 0	00.1		1.58	 Morning's negative affect (Day T morning)
-0.54^{**} (0.94) 0.19**			0.70	1.02	1	3.74	 Previous night's sleep quality (Day T morning)
-0.32^{**} 0.23^{**} (0.97)	0.32**	-0.3	0.88	0.77	0	3.81	 Afternoon's work engagement (Day T afternoon)
-0.05 0.09 0.19*	0.05	-0.0	0.64	0.79	0	3.31	 Morning's empowering leadership (Day T morning)
0.94^{**} -0.46^{**} -0.34^{**}	.94**	0.94	0.70	0.83	0	1.61	 Afternoon's negative affect (Day T afternoon)
-0.56** 0.98** 0.24**	0.56**	-0.5	0.78	66.0	0	3.81	 6. Night's sleep quality (Day T+1 morning)
-0.40** 0.24** 0.87**	0.40**	-0.4	0.66	0.79	0	3.80	7. Next-day's work engagement (Day T+1 afternoon)
						[-	Between-person Level
						C - C	8. Power distance orientation
-0.56** 0.98** 0.24** -0.40** 0.24** 0.87**	0.56** 0.40**	-0.5	0.78 0.66	0.99	0 0	3.81 3.80	 (Day T afternoon) 6. Night's sleep quality (Day T+1 morning) 7. Next-day's work engagement (Day T+1 afternoon) Between-person Level

Table 2 Percentage of within-person variance among studied daily variables							
Daily Variables	Within- person Variance (e ²)	Between- person Variance (r ²)	% of Within- person Variance				
Morning's empowering leadership	0.23	0.39	37%				
Afternoon's negative affect	0.24	0.46	34%				
Night's sleep quality	0.43	0.55	44%				
Next-day's work engagement	0.22	0.41	35%				

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 $e^{2}/(e^{2}+r^{2})$ equals the percentage of within-person variance

indicated that the direct effect of negative affect in the afternoon on sleep quality at night was significant ($\gamma = -0.21$, SE=0.05, p=.000), thus supporting Hypothesis 2. Hypothesis 3 posits a direct effect of sleep quality at night on next-day work engagement. The results in Table 3 indicated that the direct effect of sleep quality at night on next-day work engagement was significant ($\gamma = 0.09$, SE = 0.02, p = .000), thus supporting Hypothesis 3.

Hypothesis 4 proposes that negative affect in the afternoon and sleep quality at night fully mediate the relationship between empowering leadership in the morning and next-day work engagement. To verify this hypothesis, we applied the Monte Carlo bootstrap approach with 20,000 estimations of the indirect effect of empowering leadership in the morning on next-day work engagement via negative affect in the afternoon and sleep quality at night. Based on the bootstrap results, the confidence interval of the indirect effect was significant (indirect effect=0.001, 95% CI [0.0002, 0.003] excluding 0), thus supporting sequential mediation and Hypothesis 4.

Hypothesis 5 posits the moderating role of power distance orientation, such that the relationship between empowering leadership in the morning and negative affect in the afternoon is stronger for employees with a low degree (versus high) of power distance orientation. We tested the cross-level moderation effect by including power distance orientation as a predictor of the random slope of the effect of empowering leadership in the morning on negative affect in the afternoon. From the results shown in Table 3, power distance orientation was positively related to the random slope between empowering leadership in the morning and negative affect in the afternoon $(\gamma = 0.14, SE = 0.05, p = .006)$. Figure 2 depicts the pattern corresponding to this interaction effect. Simple slope analyses (Cohen et al., 2003) revealed that the magnitude of the relationship between empowering leadership in the morning and negative affect in the afternoon was stronger when the degree of power distance orientation was low (+1 SD, $\gamma = -0.17$, p=.000) versus high (-1 SD, $\gamma = 0.01$, p=.793), thus supporting Hypothesis 5.

Hypothesis 6 proposes that power distance orientation moderates the indirect relationship between empowering leadership in the morning and next-day work engagement via negative affect in the afternoon and sleep quality at night. Table 4 shows these results. To test the moderated mediation effect, we followed the method of Bauer et al. (2006) and estimated the indirect effect of empowering leadership in the

Table 3 Unstandar	dized coeffic	ients of	the multil	evel model					
Predictors	Afternoon's negative affect (Day T afternoon)		Night's sleep quality (Day T+1 morning)			Next-day's work engagement (Day T+1 afternoon)			
	Estimate	SE	p-value	Estimate	SE	p-value	Estimate	SE	p- value
Intercept	1.63**	0.06	0.000	3.80**	0.06	0.000	3.79**	0.05	0.000
Level-1 control variables									
Morning's nega- tive affect (Day T morning)	0.39**	0.05	0.000						
Previous night's sleep quality (Day T morning)				0.17**	0.03	0.000			
Work engagement (Day T afternoon)							0.08	0.05	0.085
Level-1 predictors									
Morning's empowering leadership (Day T morning)	-0.08*	0.03	0.020	-0.02	0.05	0.707	0.06*	0.03	0.024
Afternoon's negative affect (Day T afternoon)				-0.21**	0.05	0.000	-0.04	0.04	0.351
Night's sleep quality (Day T+1 morning)							0.09**	0.02	0.000
Level-2 predictors									
Power distance orientation	0.04	0.08	0.576						
Morning's empowering leadership×Power distance orientation	0.14**	0.05	0.006						
Level-1 residual variance	0.20**	0.02	0.000	0.41**	0.03	0.000	0.21**	0.02	0.000
Level-2 residual variance	0.44**	0.05	0.000	0.55**	0.06	0.000	0.41**	0.05	0.000

Day T=the day that independent variables were measured; Day T+1=the day after Day T; * p<.05, **p<.01

morning on next-day work engagement via negative affect in the afternoon and sleep quality at night for high (+1 SD) and low degrees (-1 SD) of power distance orientation. Empowering leadership in the morning had a significant indirect effect of 0.003 (95% CI [0.001, 0.006]) at a low degree of power distance orientation compared with -0.000 (95% CI [-0.002, 0.002]) at a high degree of power distance orientation. The difference in the indirect effects for the two conditions was -0.003 (95% CI [-0.007,

Table 4 The results of moderated mediation effect		
Paths and effects	Estimate	95% Confi- dence Interval
Morning's empowering leadership \rightarrow Next-day's work engagement (via afternoon's negative affect and night's sleep quality)		
High power distance orientation	-0.000	[-0.002, 0.002]
Low power distance orientation	0.003	[0.001, 0.006]
Effect differences	-0.003	[-0.007, -0.001]

Conditional indirect effects estimates and confidence intervals are generated from 20,000 Monte Carlo bootstrap simulations. Unstandardized effects are presented in the table



Fig. 2 Cross-level moderating effect of power distance orientation on the relationship between the morning's empowering leadership and the afternoon's negative affect

-0.001]), which was significant. Thus, the results showed that empowering leadership in the morning had an indirect effect on next-day work engagement via negative affect in the afternoon and sleep quality at night, but only for the participants who had a low degree of power distance orientation, thus supporting Hypothesis 6.

Discussion

As research interest on empowering leadership has dramatically increased (Lee et al., 2018), the original follower-centric approach to understanding the effect of empowering leadership have become limited. Therefore, studies have called for further research on the effects of empowering leadership on leaders (Sharma & Kirkman, 2015). Drawing on COR theory (Hobfoll, 1989) and the actor-centric perspective (Lanaj et al., 2016), our model aims to explain how and when empowering leadership

behaviors benefit actors. In our model, empowering leadership helps leaders gain resources. This is particularly true for leaders who believe that power between leaders and followers should be distributed equally (i.e., they have a low degree of power distance orientation). Consequently, leaders who engage in empowering leadership behaviors sleep better at night and are able to engage in work the next day.

Applying the experience sampling method, we find that all of our hypotheses are supported. Negative affect and sleep quality operate sequentially to mediate the effects of empowering leadership on work engagement, and there are particularly pronounced beneficial effects for leaders who have a low degree of power distance orientation. By considering the moderated mediation effects, we account for both how empowering leadership spurs work engagement, and the type of leaders who will benefit the most in terms of affect, sleep, and work engagement when empowering their followers. Although numerous studies have examined the relationship between the perceptions of empowering leadership and the positive outcomes of followers, the benefits of empowering leadership remain unclear (Lee et al., 2018). We apply the resource perspective (Halbesleben et al., 2014) and the cultural perspective (Hofstede, 1980) to examine how and when empowering leadership affects actors' work engagement. This approach responds to Hobfoll's (2001) call to investigate how culture influences resource gain and loss, the call of Lee et al. (2018) and Sharma and Kirkman (2015) for a better understanding of the benefits of empowering leadership behaviors, and that of Inceoglu et al. (2018) to examine the effects of leadership on well-being.

Theoretical implications

This study contributes to the COR literature by proposing empowering leadership as an effective way for leaders to conserve resources. Although studies have provided evidence of the benefits of leadership behavior (e.g., Qin et al., 2018), little is known about the positive impact that leaders can make by empowering their subordinates. Using COR theory to examine empowering leadership, we respond to the call to examine the effects of exhibiting empowering leadership (Sharma & Kirkman, 2015) and provide evidence that empowering subordinates is an effective way for leaders to retain their resources. Given the need and expectation of leaders to empower followers, it is critical to examine how these behaviors influence leaders' work behaviors and well-being. Our findings thus contribute to research on the consequences of empowering leadership by showing that leaders benefit from exhibiting such behaviors. Research has shown the destructive effects of empowering leadership (e.g., misalignment of effort) on leaders due to the intensive coordination required (Sharma & Kirkman, 2015). Our study may provide a springboard for researchers to also focus on the detrimental effects of empowering leadership on leaders.

Although our model primarily focuses on empowering leadership, its core is likely to be applicable to other types of leader behaviors. For example, the delegation of tasks (Chen & Aryee, 2007) or the assignment of a senior employee to mentor subordinates (Kram, 1985; Kwan et al., 2011) by leaders are other methods of resource conservation that reduce negative affect and enhance sleep quality and work engagement. Scholars could use our theoretical model to examine the benefits of these other forms of empowerment for actors.

From a resource perspective, our model accounts for two mediators between empowering leadership and work engagement. Although studies have linked recovery to work engagement, they have primarily focused on leisure activities (Sonnentag, 2003) and other effective recovery activities such as relaxation, psychological detachment, and engagement in mastery experience (Wagner et al., 2014). However, sleep is an essential activity for recovery and for physical and psychological resource gains (Barnes, 2011). Our findings on the mediating role of sleep quality provide evidence that sleep contributes to the effects of empowering leadership on work engagement, as empowering leadership is a source of resource conservation based on COR theory. Thus, sleep should be considered in the framework of resource recovery based on COR theory.

Negative affect is another important mediator in the relationship between empowering leadership and work engagement. Negative affect has been conceptualized as a low degree of affective resources (Montani et al., 2018). Thus, it is reasonable to predict that empowering leadership is conceptualized as the resource gain, which leads to reduced negative affect. Empirical research has found that active coping decreases negative affect (Jun & Yeo, 2012). Thus, negative affect is a proximal outcome of empowering leadership and a key underlying mechanism of linking empowering leadership and work engagement. Our findings shed light on the importance of negative affect in resource gain and recovery.

This study also applies a cultural perspective to examine the boundary condition under which empowering leadership behaviors have stronger or weaker influences on actors. Power distance orientation is an important moderator in the Chinese setting for two reasons. First, Chinese people have a high degree of power distance orientation, which represents an individual's preference to accept power inequality and resist power equality. Several studies have investigated the moderating role of power distance orientation in the context of Chinese research on leadership and empowerment (Chen & Aryee, 2007; Lian et al., 2012; Wang et al., 2012; Yao et al., 2023). These studies have highlighted the moderating effect of power distance orientation on followers. Second, empowerment is a key issue for Chinese organizations (Wang et al., 2022). Although empowerment is an effective tool to enhance employee creativity, not all organizational members welcome empowering leadership. It is thus important to illustrate under what conditions empowering leadership leads to positive outcomes for actors. Accordingly, our study extends the literature on power distance orientation by broadening our understanding of the important role of power distance orientation in exhibiting empowering leadership. We encourage scholars to consider power distance orientation or other cultural values (e.g., collectivism, individualism) in an actor-based context.

Finally, although COR theory offers a useful lens through which to view the actorbased impacts of empowering leadership, the current study also gives back to COR theory. In particular, we expand the scope of COR theory by identifying empowering leadership as an essential behavior involving resource conservation and generation processes. Empowering leadership not only enables leaders to conserve resources (as manifested by decreased negative affect and enhanced sleep quality), but also empowers them to engage in more leader-specific actions, ultimately facilitating more efficient resource mobilization. On the basis of COR theory, past studies have emphasized the beneficial effects of leadership behaviors for actors (Qin et al., 2018). Following this line of research, we theorized and found that empowering leadership can also aid recovery and enhance work engagement via resource conservation and generation processes. More importantly, our findings indicated that the positive effects of empowering leadership depend on power distance orientation. Therefore, our findings provide support for the arguments suggested by COR theory, such that culture influences how individuals value and rank actions and resource gain and loss (Hobfoll, 2001). Therefore, future studies should incorporate cultural variables (e.g., power distance orientation) into COR theory as an important boundary condition (Hobfoll et al., 2018).

Practical implications

This study provides insightful practical implications for managers and organizations. Interest in work engagement has considerably increased in recent years because work engagement is a critical predictor of job performance (Qin et al., 2018). As discussed, leaders are likely to suffer from poor-quality sleep, and therefore, they may not be able to fully engage in their work (Jackson et al., 2013). The results of this study suggest that empowering subordinates is an effective method for leaders to sleep well and work energetically. Behaviors associated with empowering leadership include fostering participation in decision-making and providing autonomy (Zhang & Bartol, 2010). Managers should note that empowering leadership is beneficial to both followers and leaders. Our findings provide robust evidence that by empowering their subordinates, managers can benefit through better sleep quality and better work engagement.

Organizations should also offer training to promote empowering leadership. This training should include topics such as ways of giving autonomy to subordinates and ways of making decisions together with subordinates. Research has indicated that humility inspires leaders to engage in empowering leadership (Ou et al., 2014). Therefore, organizations could select leaders who have this characteristic and reward those who are humble.

Finally, our findings reveal the importance of power distance orientation by showing that leaders with a low degree of power distance orientation can maximize the benefits obtained through empowering subordinates. Our findings suggest that organizations with a high degree of empowerment should provide training to and recruit leaders who prefer an equal distribution of power. As our findings indicate that empowering leadership does not have positive effects on leaders with a high degree of power distance orientation, we recommend that such leaders apply other strategies such as seeking peer support.

Strengths and limitations of the methods, and directions for future research

This study is an improvement over previous studies with respect to its methodology. Although studies have examined the outcomes of empowering leadership, these studies have methodological limitations. In particular, studies with a cross-sectional research design may limit the understanding of the consequences of empowering leadership (e.g., Lee et al., 2018). The outcomes of empowering leadership are dynamic, as COR theory assumes that resources fluctuate (Halbesleben et al., 2014). Therefore, it is important to collect daily data and apply experience sampling methods to capture the short-lived benefits and resource fluctuations resulting from empowering leadership. This study and other pioneering studies on empowering leadership (Schilpzand et al., 2018) could inspire the use of experience sampling methods in future studies. Findings obtained by using such methods will provide a more complete understand-ing of empowering leadership.

Nevertheless, this study has several limitations. First, due to limitations on the length of the survey questionnaires, we excluded other potential positive leadership behaviors (e.g., transformational leadership). Given that people can simultaneously apply more than one leadership behavior in response to situational contingencies, future studies should incorporate other leadership behaviors to examine the effects of empowering leadership on actors. Second, our data relied on self-ratings, which may result in common method bias. By applying the experience sampling method, we eliminated the potential effect of response tendencies (Sonnentag et al., 2008). To alleviate concerns about common method variance, future studies should allow followers to rate their leaders' empowering leadership. Third, the gap between the different time points for data collection may be problematic. For example, the data on empowering leadership were collected early in the morning but those on negative affect were collected late in the afternoon, which may introduce the possibility of other experiences having arisen and influencing negative affect, such as activities at lunch time. Therefore, future studies should include measurements of activities at lunch time. Fourth, positive affect was not included in our proposed hypotheses. Positive affect is an important variable in understanding work-family interfaces (Wang et al., 2019). However, a happy or excited person may also have difficulty sleeping, and therefore, positive affect is not necessarily associated with sleep quality. Our data set included data on positive affect, but positive affect did not have a mediating effect on the relationship between empowering leadership and work engagement. Specifically, empowering leadership was positively related to positive affect ($\gamma = 0.09$, SE=0.04, p=.034), which, however, was not significantly related to sleep quality ($\gamma=0.02$, SE=0.05, p=.684). To simplify our model, we included only negative affect. Future studies should consider conditions under which positive affect can have a significant effect on sleep quality. Finally, although COR theory is especially applicable to emotional resources (Bentein et al., 2017; Liu et al., 2020), other types of resources, such as cognitive resources (Mumford et al., 2015) and relational resources (Inceoglu et al., 2018) identified in the literature on leadership, were overlooked. Leaders' cognitive burden is likely to considerably decrease and the quality of their relationships with followers is likely to improve when leaders empower their subordinates. Future studies should examine variables related to cognitive resources and relational resources as mediators in the relationship between empowering leadership and work engagement.

Conclusions

Research on empowering leadership has progressed from exploring between-follower consequences to within-follower relationships through the perceptions of empowering leadership and followers' work and life outcomes. Our study expands the scope of empowering leadership by showing that empowering leadership influences actors' work engagement through reduced negative affect and enhanced sleep quality. Actors with a low degree of power distance orientation can maximize such benefits. This study could serve as a springboard to inspire future studies on the benefits that actors can obtain through empowering leadership.

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Authors and Affiliations

Ho Kwong Kwan¹ · Yang Chen² · Guiyao Tang³ · Xiaomeng Zhang⁴ · Jiagi Le⁵

Ho Kwong Kwan weicheong2317@hotmail.com; kwanhokwong@ceibs.edu

Guiyao Tang tangguiyao2010@gmail.com

> Yang Chen francisnju@gmail.com; cheny@uestc.edu.cn

Xiaomeng Zhang xmzhang@ckgsb.edu.cn

Jiaqi Le le_jia_qi@163.com

- ¹ Organizational Behavior and Human Resource Management Department, China Europe International Business School (CEIBS), Shanghai 201206, People's Republic of China
- ² School of Management and Economics, University of Electronic Science and Technology of China, No. 2006, Xiyuan Ave, West Hi-Tech Zone, Chengdu, Sichuan 611731, People's Republic of China
- ³ School of Management, Shandong University, Jinan, Shandong 250100, People's Republic of China
- ⁴ Cheung Kong Graduate School of Business, Beijing, People's Republic of China
- ⁵ College of Business, Shanghai University of Finance and Economics, Shanghai 200433, P. R. China