How does daily family-supportive supervisor behavior relieve subordinates’ job stress? The effect of ethical leadership and positive emotions

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Abstract

Purpose – Relying on a multilevel approach, this paper investigates the day-to-day variations in family-supportive supervisor behaviors influencing subordinates’ job stress, as well as the mediating role of positive emotions and the moderating role of ethical leadership.

Design/methodology/approach – Using the experience-sampling methodology, the study collected the data from 137 civil servants in China who responded to one daily survey for 10 working days.

Findings – With a total of 1,370 surveys, results supported the hypothesized model linking daily family-supportive supervisor behaviors to daily job stress via subordinates’ daily positive emotions. In addition, the study found a moderating effect for ethical leadership positively in the indirect relationship between family-supportive supervisor behaviors and job stress.

Practical implications – The findings in this study serve practitioners in organizational and leadership development. For one thing, this study contributes to raising awareness about the importance of improving family-related support in the workplace in generating subordinates’ positive emotions and relieving their job stress. For another, the findings highlight the necessity of cultivating ethical leadership for leaders.

Originality/value – This study fulfills an identified need to clarify how and when daily family supportive supervisor behaviors influence subordinates’ daily job stress. This study moves beyond previous research by adopting the experience sampling method and demonstrating important cross-level effects of ethical leadership on the within-individual relationship between family supportive supervisor behaviors and job stress.

Keywords Family supportive supervisor behaviors, Positive emotion, Job stress, Ethical leadership

Introduction

Job stress stems from an individual’s belief that it is difficult to cope with work demands (Edwards, 1992), which is becoming an increasingly crucial factor influencing employees’ psychological states (Poon et al., 2019). One key to relieving employees’ job stress is organizational support (Lambert et al., 2016). Compared to formal organizational support, informal organizational support (i.e. support from supervisors and coworkers) is more effective for

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coping with stress (Behson, 2005). Particularly, researchers demonstrate that supervisor support plays a significantly essential role in alleviating subordinates’ job stress (e.g. Hammer et al., 2013; Yang et al., 2015). Given that the majority of employees must fulfill both family and work duties simultaneously, supervisor’s family support plays a key role in relieving job stress (Thomas and Ganster, 1995). Family-supportive supervisor behavior (FSSB) is based on the notion that supervisors performing family-supportive behaviors may permit employees to play more effective family roles and work roles (Hammer et al., 2009). Even though this is a general finding that FSSB matters for employees’ outcomes, the knowledge about contingencies influencing how and when FSSB may effectively relieve subordinates’ job stress is much less known.

Emotions reflect individuals’ response tendencies within a short time such as gratitude, joy, fear, anger and interest (Fredrickson, 2001). The importance of emotion in human functioning has richly been evidenced. Emotion-based theories such as the affective events theory (AET: Weiss and Cropanzano, 1996) hold that organizational environment and organizational events may stimulate employees’ emotional responses, which lead to emotion-driven behaviors, attitudes and perceptions. Despite the fact that most empirical researches draw on the AET by demonstrating the bridging role of emotions in the relationship between organizational characteristics and employee outcomes (e.g. Lee et al., 2017; Soriano et al., 2018), much less is known about the mediating role of emotions in the FSSB–job stress linkage. The emotions research proposes that integrating positive and negative emotional items into one emotion variable can cover up considerable distinctions (Vleugels et al., 2018). Thus, drawing upon the AET, our purpose is to examine how positive events (i.e. FSSB) elicit employees’ positive emotions, which in turn, result in a positive outcome (i.e. relieving job stress).

More importantly, AET also highlights the contingency role of leadership. Researchers provide empirical ground for this perspective by taking leadership as a contextual condition (Tse et al., 2008; George and Zhou, 2007). However, how ethical leadership (i.e. “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making”, Brown et al., 2005, p. 121) plays the contingency role posited in the AET is still unknown. Particularly, characterized by focusing on promoting the interests of others (Walumbwa et al., 2010), ethical leadership may be a critical conditional factor under the umbrella of the AET. Thus, our purpose is to examine ethical leadership as an important moderator influencing FSSB effects on job stress.

An influential review recognizes that “none of the studies in our database considered how perceptions of workplace support cascade across levels of analysis” (Kossek et al., 2011, p. 304). Even though there are some longitudinal designs (e.g. Thompson et al., 2004) aimed at addressing the dynamic processes, to the best of our knowledge, few research studies investigate employees’ real-time experiences. Neglecting within-individual variability overlooks substantial variance in employees’ daily job stress and emotions (e.g. Cole et al., 2006). Likewise, although there is a general consensus that supervisors’ support has a positive impact on employees’ emotions and job stress, much less is known about how individuals’ daily emotions and job stress are influenced by such support. As presented in Figure 1, we involve two-levels of analysis to examine the within-individual level relationship of FSSB and subordinates’ job stress via positive emotions, as well as the between-individual level moderating role of ethical leadership. In doing so, we contribute to the literature in three aspects.

![Figure 1. The research model](image-url)
First, although it has been generally recognized that supervisor support has a positive effect on relieving employees’ job stress (e.g. Hammer et al., 2013; Lambert et al., 2016), much less is known about how FSSB affects employees’ job stress. We empirically examine the influence mechanism of FSSB on employees’ job stress. For one thing, we move beyond previous research by demonstrating important effects of FSSB on job stress. For another, we extend the foundation of the AET to the job stress context by empirically confirming how FSSB serves as an organizational event relieving employees’ job stress via positive emotions.

Second, we recognize the importance of ethical leadership in the AET by introducing ethical leadership as a contingency factor in the relationship between FSSB and job stress. This research responds to Joplin et al.’s (2021) calling for investigating the moderating role of ethical leadership, as well as provides a robust ground for the AET by acknowledging the contextual role of leadership in the process of organizational events driving employees’ attitude, cognition and behavior. Specifically, we examine conditional indirect effects (i.e. the mediation of positive emotions at low and high levels of ethical leadership). Existing research has demonstrated the critical role of conditional mediation (e.g. Li et al., 2017), and we extend this line of work in a FSSB context. The development, captured by shifting the focus toward multiple levels (i.e. within-individual and between-individual) may benefit theoretical and practical advantages.

Third, even though there is some evidence as to how supervisor support influences employees’ job stress, much less is known about how daily the dynamics of supervisor support may influence job stress. By using experience sampling method (ESM), we understand more deeply the pivotal psychological processes regarding how employees’ daily experience of supervisors’ family support contributes to decreasing daily job stress. Indeed, the AET emphasizes the importance of studying within-person experiences. Regarding how and when supervisors’ support influences subordinates’ job stress, we move beyond the existing research by demonstrating the fluctuant effects of daily FSSB on daily job stress via daily positive emotions and the cross-level influence of ethical leadership down to the within-individual fluctuant effects.

**Theoretical framework and hypotheses**

Organizational support demonstrates a positive and secure environment (Shore and Shore, 1995). Researchers have confirmed that perceived organizational support results in a variety of positive outcomes, such as job performance (Wong et al., 2012) and organizational citizenship behaviors (Eva et al., 2020). Specially, supervisors’ support plays an essential role in employees’ outcomes such as psychological well-being (Gilbreath and Benson, 2004), organizational citizenship behavior (Choi et al., 2018), job satisfaction (Odle-Dusseau et al., 2012) and job performance (Odle-Dusseau et al., 2012). FSSB focuses on the supervisors’ specific support regarding subordinates’ family life, such as discussing family-related issues and approving family-related requests (Hammer et al., 2009). An abundance of empirical research confirms that FSSB may benefit a series of positive outcomes, including reduced work–family conflict (e.g. Hammer et al., 2013), increased job satisfaction and retention (e.g. Yragui et al., 2017), lower levels of stress and depression and increased well-being (e.g. Thomas and Ganster, 1995; Hammer et al., 2013).

According to the AET (Weiss and Cropanzano, 1996), this study posits that FSSB may generate subordinates’ positive emotions. The AET proposes that employees exposed to positive situations and events in workplace may experience positive emotional reactions. This viewpoint has been confirmed by a number of research studies which show that employees in positive workplaces experience more positive emotions (e.g. Cooper et al., 2018; Tepper et al., 2018; Fehr et al., 2017). Particularly, some researchers suggest that
supervisors’ support has positive influence on employees’ positive emotions (e.g. Cole et al., 2006). Following the line of previous research, it can be inferred that, FSSB – as a content-specific form of supervisor support which reflects supervisors’ helpful and family-friendly behavior – may stimulate subordinates’ positive emotions. Accordingly, we put forward the following:

H1. Daily FSSB is positively related to subordinates’ daily positive emotions.

As a leadership style focusing on promoting the interests of others, ethical leadership refers to a moral individual as well as a moral leader. The former is characterized by integrity, honesty, fairness and altruistic motivation, whereas the latter shows respect toward subordinates, cares for their well-being, establishes two-way communication and demonstrates fair decision-making (Brown and Mitchell, 2010; Lu and Juy, 2014). Research posits that ethical leadership significantly benefits employees’ outcomes such as job satisfaction (Tu et al., 2016) and psychological well-being (Avey et al., 2012). To some extent, psychological well-being is determined by the experience of positive emotions (Grebner et al., 2005). Therefore, it may be inferred that ethical leadership may generate employees’ positive emotions. This viewpoint has been clarified by Brown and Mitchell (2010) who notice that ethical leadership is positively correlated to subordinates’ positive emotions (e.g. enthusiasm, joy).

However, as Joplin et al. (2021) noted, the context role of ethical leadership has not been sufficiently considered. On the basis of the AET, we infer that ethical leadership may moderate the relationship between FSSB and subordinates’ positive emotions. The AET provides an explanatory framework for leader behaviors acting as instigators of follower emotions and serving as a context within leadership. Ethical leadership captures treating people fairly and actively managing morality and has been examined in connecting with employees’ emotional state (Yang, 2014). Therefore, subordinates experiencing higher ethical leadership are more likely to experience positive emotions such as enthusiasm, joy, contentment, happiness and optimism (Brown and Mitchell, 2010; Velez and Neves, 2018; Avey et al., 2012). This is especially the case if they perceive their supervisors as being fair and trustworthy (Brown and Mitchell, 2010), as respecting their rights and dignity or as listening to their thoughts and concerns (Avey et al., 2012). Conversely, lower ethical leadership means that supervisors rarely respect subordinates’ dignity and care for subordinates’ welfare, which tends to trigger subordinates’ negative emotions (Avey et al., 2012). Under this circumstance, employees will be less likely to experience positive psychological well-being. Lower ethical leadership may also modify the extent to which FSSB is considered as beneficial. While supervisors may try to conduct family-supportive behavior, subordinates’ perception of an unethical leader will decrease their gratitude and correspondingly reduce positive emotions. Accordingly, we propose:

H2. Supervisors’ ethical leadership moderates the within-individual relationship between daily FSSB and daily subordinates’ positive emotions, such that the relationship is stronger for subordinates who experience higher ethical leadership, compared to those who experience lower ethical leadership.

Emotions in workplace affect an individual’s overall perception about the job (Grandey et al., 2002). Positive emotions are deemed to be beneficial to a variety of job-related outcomes such as task performance (Liang and Chi, 2013), creative performance (Gong and Zhang, 2017). With respect to job stress, most researchers suggest that positive emotions significantly predict individuals’ adaptability to stress (e.g. Folkman and Moskowitz, 2000; Duckworth et al., 2009). However, an opposite viewpoint is demonstrated by a few research studies (e.g. Gloria et al., 2013) holding no significant correlation between positive emotions and job stress.

This study proposes that positive emotions are negatively related to job stress. Stress is deemed as the result of a potential or actual loss of resources (Hofboll, 2002). While positive emotions may trigger an interpersonal resource which help employees cope with stress
A similar viewpoint was advanced by Folkman and Moskowitz (2000), who propose that positive emotions benefit in building high-quality relationships with others as well as engaging in adaptive coping and adjusting to stress. In addition, positive emotions have been evidenced to encourage resilience in the face of stressful situations (Ong et al., 2010). There are also some researchers claiming that positive emotions provide a store of resources to prevent stress and resultant burnout (e.g. Gustafsson and Skoog, 2012; Smith et al., 2010). For instance, Cooper et al. (2018) empirically demonstrate that positive emotions, such as building immediate intrapersonal resources can reduce stress (burnout). In sum, the above arguments lead us to predict the negative effect of positive emotions on job stress, we hypothesize that:

**H3.** Subordinates’ daily positive emotions are negatively related to daily job stress.

According to the AET, organizational environments and events occurring in the workplace can be viewed as a fuse that stimulates employees’ emotional response, which subsequently affects their work-related attitude, cognition and behavior. In other words, emotions play a pivotal role in linking environmental conditions and employees’ subsequent responses (Pérez-Rodríguez et al., 2019; Harmon-Jones et al., 2017). In terms of empirical research, previous studies have underlined the mediating role of emotions in the relationship between organizational environments and employees’ attitudes and behaviors (e.g. Soriano et al., 2018). For example, Pérez-Rodríguez et al. (2019) investigate the mediating role of emotions in the effect of organizational justice on job-related stress.

Based on the theoretical perspective and empirical conclusion, we assert that subordinates’ experience of positive emotions serve as a linkage between FSSB and job-related stress. To some extent, FSSB shapes employees’ beliefs and perceptions regarding the extent to which supervisors care about their family-related needs and welfare. According to the AET, Weiss and Cropanzano (1996) identify the importance of workplace events in eliciting employees’ emotions, which in turn impact employees’ attitudes and behaviors. FSSB functions as a positive event in the workplace, which reflects that leaders provide daily instrumental and affective support for subordinates to deal with family obligations. As unique affective states, an emotional response to workplace events engenders emotional reactions in organizational members that result in behavioral reactions or changes in attitudes (Weiss and Cropanzano, 1996). In sum, according to the AET, we propose that:

**H4.** Subordinates’ daily positive emotions mediate the relationship between daily FSSB and daily job stress.

**Methods**

*Participants and procedure*

Data were collected through self-reported, structured questionnaires completed by 137 full-time Chinese public servants who had daily contact with their immediate supervisors. To ensure the representativeness of the sample, we initially connected multiple public organizations from multiple cities such as Beijing, Shijiazhuang, Qingdao and Guangzhou located mainly in eastern China through our social relationship. Previous studies have shown a higher frequency and intensity of positive emotional experiences in women (e.g. Goh et al., 2015). In order to avoid the impact of gender difference on our research result, we originally selected 81 females and 80 males most working in primary-level agencies who agreed to participate in the survey.

To capture participants’ emotions and job stress daily, we employed the experience-sampling methodology. Compared with the conventional retrospective method, the experience-sampling methodology may effectively reduce the recall and response bias of the investigated objects and help the researchers to obtain more accurate data (Shrout and Lane, 2012).
Each participant was asked to complete one survey per day over 10 consecutive working days, which was individually distributed through a private, online survey. Due to variable working hours, the participants were allowed to complete the survey at the end of the workday, between 4 and 10 p.m. A total of 137 participants (68 females and 69 males) completed the investigation; it yielded a final sample of 1,370 unit-days nested within 137 participants.

Measures

**Daily family-supportive supervisor behavior.** We adopted Hammer et al.’s (2013) FSSB to assess the leaders’ support toward family obligations. A sample question was: “Today, my supervisor makes me feel comfortable talking to him/her about my conflicts between work and non-work”. Responses were scored on a 5-point scale, where 1 = strongly disagree to 5 = strongly agree. The internal consistency reliability across days was 0.91.

**Daily positive emotions.** Daily positive emotions experienced by subordinates were assessed with a 5-point measure borrowed from the Positive and Negative Affect Schedule (PANAS) Scale developed by Watson et al. (1988). Responses were scored on a 5-point scale, where 1 = rarely to 5 = very often. The internal consistency reliability across days was 0.89.

**Daily job stress.** The Daily Job Stress Scale was adopted from the 4-point measure developed by Motowidlo et al. (1986). A sample question was: “Today, I feel a great deal of stress because of my job”. Responses were scored on a 5-point scale, where 1 = strongly disagree to 5 = strongly agree. The internal consistency reliability across days was 0.94.

**Ethical leadership.** Ethical leadership was measured with the Ethical Leadership Scale developed by Brown et al. (2005). Ethical leadership is a between-persons level variable in our study. To measure the subordinates’ general perceptions of their supervisors’ ethical style, we averaged the data for 10 working days from each sample to form a broad and stable measure of ethical leadership. A sample question was: “My supervisor sets an example of how to do things the right way in terms of ethics”. Responses were scored on a 5-point scale, where 1 = strongly disagree to 5 = strongly agree. The internal consistency reliability was 0.90.

**Control variables.** Gender is the only control variable in this study as previous studies have shown a higher frequency and intensity of positive emotional experiences in women (e.g. Goh et al., 2015), while age, education and job tenure have been evidenced to have no significant relation to positive emotions (Fernández-Ballesteros et al., 2010; Velez and Neves, 2018).

Analytic strategy

As the data were collected from a single respondent in the same way, the common method issue is hard to avoid (Podsakoff and Organ, 1986). Therefore, following Podsakoff et al.’s (2012) recommendation, we take some remedies from the procedural and statistical perspective. With regards to procedural remedies, we placed the dependent variables in front of the independent variables in this survey. Furthermore, the variables adopted were a small percentage of the total ESM survey. And in terms of statistical remedies, we tested the potential bias by Harman’s one-factor test, which indicated that no single factor explained most of the variance.

In addition, we adopted Mplus 7.4 to conduct confirmatory factor analysis tests to eliminate the problem of common method variance. We compared the fit indices of the proposed four-factor model and the alternative models through confirmatory factor analysis. As shown in Table 1, the fit indices in the four-factor model are better than that in the other models, which empirically indicate mutual independence of the four variables.

Results

Means, standard deviations, reliability and variable correlations are reported in Table 1. Our hypotheses were supported preliminarily by the within-individual correlations. Daily FSSB
was positively correlated to daily positive emotions experienced by subordinates ($r_{within} = 0.48, p < 0.01$) and was significantly related to daily job stress ($r_{within} = -0.20, p < 0.01$). The level of daily positive emotions experienced by subordinates was negatively correlated to daily job stress ($r_{within} = -0.25, p < 0.01$). As we can see in Table 2, the coefficients of the variables in this study ranged from 0.89 to 0.94, which indicated that the instruments were reliable.

Because of the multilevel nature of our data, we tested the hypotheses in two interlinked steps using Mplus7 software (Muthén and Muthén, 1998–2012). First, we estimated the model that specified the level 1 random slope of daily FSSB on daily positive emotions experienced by subordinates and the level 1 random slope of the daily positive emotions of subordinates on daily job stress. Next, we tested the cross-level moderating effect of level 2 ethical leadership on the relationship between daily FSSB and the daily positive emotions of subordinates by adding ethical leadership to level 1 random slope.

Table 3 presents the results of our hypotheses. Hypothesis 1 proposed that daily FSSB was positively related to subordinates’ daily positive emotions. Results in model 1 provided support for H1: daily FSSB predicted subordinates’ daily positive emotions positively ($\gamma = 0.34, p < 0.01$).

Hypothesis 2 predicted that ethical leadership positively moderated the within-person relationships between daily FSSB and subordinates’ daily positive emotions. Hierarchical linear analysis (HLM) intercepts and slopes as outcomes regressions were conducted, demonstrating FSSB and positive emotions group mean centered appraisals (level 1) and grand mean centered ethical leadership (level 2). As was shown in model 2 of Table 3, ethical leadership was significantly and positively related to the FSSB-positive emotions random slope ($\gamma = 0.13, p < 0.05$); Hypothesis 2 was supported.

In addition, by means of Aiken and West’s (1991) procedure, we plotted the simple slopes so as to better interpret the moderation patterns of ethical leadership. As demonstrated in

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>pe, el, fssb, js</td>
<td>565.13</td>
<td>84</td>
<td>6.73</td>
<td>0.97</td>
<td>0.06</td>
<td>0.04</td>
<td>0.96</td>
</tr>
<tr>
<td>pe + el, fssb, js</td>
<td>3915.77</td>
<td>87</td>
<td>45.01</td>
<td>0.76</td>
<td>0.18</td>
<td>0.12</td>
<td>0.71</td>
</tr>
<tr>
<td>pe + fssb, el, js</td>
<td>3700.61</td>
<td>87</td>
<td>42.54</td>
<td>0.77</td>
<td>0.17</td>
<td>0.11</td>
<td>0.73</td>
</tr>
<tr>
<td>pe + fssb + el, js</td>
<td>3794.74</td>
<td>89</td>
<td>42.64</td>
<td>0.77</td>
<td>0.17</td>
<td>0.12</td>
<td>0.73</td>
</tr>
<tr>
<td>pe + fssb + el + js</td>
<td>6656.70</td>
<td>90</td>
<td>73.96</td>
<td>0.59</td>
<td>0.23</td>
<td>0.16</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Note(s): $N = 1,370$ observations derived from 137 individuals. pe = positive emotions; fssb = family-supportive supervisor behaviors; el = ethical leadership; js = job stress

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. FSSB</td>
<td>3.89</td>
<td>1.22</td>
<td>(0.91)</td>
<td>0.59**</td>
<td>-0.32**</td>
<td>0.94**</td>
<td>-0.03</td>
</tr>
<tr>
<td>2. Positive emotions</td>
<td>4.50</td>
<td>1.02</td>
<td>0.48**</td>
<td>(0.89)</td>
<td>-0.37**</td>
<td>0.59**</td>
<td>0.04</td>
</tr>
<tr>
<td>3. Job stress</td>
<td>2.39</td>
<td>1.25</td>
<td>-0.20**</td>
<td>(0.94)</td>
<td>-0.35**</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Ethical leadership</td>
<td>4.03</td>
<td>1.17</td>
<td>(0.90)</td>
<td></td>
<td>-0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Gender</td>
<td>1.5</td>
<td>0.50</td>
<td></td>
<td></td>
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</table>

Note(s): Gender (1 = Female, 2 = Male). Cronbach’s alpha coefficients are in parentheses. The between-individual correlations are above the diagonal ($N = 137$). The within-individual correlations are below the diagonal ($N = 1,370$). *$p < 0.05$, **$p < 0.01$
Figure 2, FSSB was more strongly and positively related to positive emotions under conditions where subordinates perceived high ethical leadership ($\gamma = 0.18$, $p < 0.01$) than where there was a low level of perceived ethical leadership ($\gamma = 0.06$, ns).

**Hypothesis 3** posited daily positive emotions were negatively correlated to daily job stress. As presented in Model 4, daily positive emotions predicted daily job stress significantly ($\gamma = 0.31$, $p < 0.01$); **Hypothesis 3** was supported.

**Hypothesis 4** suggested that subordinates’ daily positive emotions mediated the relationship between daily FSSB and daily job stress. As presented in Table 3, daily FSSB predicted significantly daily positive emotions ($\gamma = 0.34$, $p < 0.01$) and positive emotions predicted significantly job stress ($\gamma = -0.31$, $p < 0.01$); when adding positive emotions, the effect of FSSB on job stress was decreased ($\gamma = -0.17$, $p < 0.01$ vs $\gamma = -0.08$, $p < 0.05$). Additionally, our bootstrap results indicated that the indirect effect of daily FSSB on daily job stress via daily positive emotions was significant (indirect effect $= -0.18$, $p < 0.01$, 95% CI [−0.12, −0.44]); **Hypothesis 4** was supported.

We estimated the indirect effects of daily FSSB on daily job stress via daily positive emotions at two values of ethical leadership: 1 SD above the mean, 1 SD below the mean. As was predicted, the indirect effect on job stress was significant for those higher on ethical leadership ($\gamma = 0.14$, $p < 0.01$, 95% CI [0.07, 0.29]), and the indirect effect was not significant for those lower on ethical leadership ($\gamma = 0.01$, $p > 0.05$, 95% CI [−0.01, 0.03]). The difference in the indirect effect between the two conditions was significant ($\Delta \beta = 0.13$, $p < 0.01$, 95% CI [0.01, 0.24]), indicating that ethical leadership significantly moderated the indirect effect.

**Table 3.** Summary of the hypothesized regression model

<table>
<thead>
<tr>
<th></th>
<th>Positive emotions</th>
<th>Job stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td><strong>Level 1: Main effect</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSSB</td>
<td>0.34**</td>
<td>0.14*</td>
</tr>
<tr>
<td>Positive emotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level 2: Main effect</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Ethical leadership</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td><strong>Level 2: Cross effect</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSSB × ethical leadership</td>
<td>0.13*</td>
<td></td>
</tr>
</tbody>
</table>

**Note(s):** Level 1 $N = 1,370$, Level 2 $N = 137$. *$p < 0.05$, **$p < 0.01$
Discussion

By integrating the AET and ethical leadership literature, we investigated the indirect impact of supervisor family support on job stress via the mediating effect of positive emotions from the within-individual level, as well as the conditional effect of between-individual ethical leadership. Our results suggest that daily FSSB may indirectly affect daily job stress via daily positive emotions. Specifically, FSSB functioned as a positive daily event in the workplace and enhanced subordinates’ positive emotions, which in turn reduced the perception of job stress at the within-individual level. In addition, the between-individual ethical leadership positively moderated the relationship between daily FSSB and daily positive emotions, as well as the indirect relationship between daily FSSB and daily job stress via positive emotions. Specially, the relationship was stronger for supervisors perceived as having high levels of ethical leadership vs supervisors perceived as having lower levels of ethical leadership. This suggests that subordinates working with more ethical leaders experience more daily positive emotions from high FSSB and subsequently perceive their job as being less stressful. Thus, our research demonstrates that ethical leadership significantly increases the influence of high FSSB on positive emotions, and that it strengthens the indirect relationship between FSSB and job stress via positive emotions.

Theoretical implications

This research makes several contributions: First, although there are some studies demonstrating effects of supervisor support on job stress (e.g. Choi et al., 2018; Yang et al., 2015), these studies conducted between-individual assessments rather than looking at within-individual variations. Velez and Neves (2018) argued that emotion is a transient state difficult to assess accurately if a long period of time has passed after its occurrence and called for further research on real-time emotional experiences. This study responds to their calling and shows that the relationships between supervisor support, positive emotions and job stress occur within individuals and fluctuate daily. This finding supplements previous research that mainly focuses on the between-individual effects. Our results indicate that the overall assessment of employees’ job stress is a dynamic rather than a static process and could be indirectly derived from the daily FSSB experience.

Second, apart from investigating the daily, within-individual effects of FSSB on job stress, we expand our contribution by taking people’s emotional response into account when examining how this effect occurs. Our results show that FSSB has an indirect effect on job stress via positive emotions. This conclusion demonstrates that individuals may report less job stress when experiencing high levels of support from supervisors. Leader support may have an indirect positive impact on job stress through other variables (e.g. subject well-being, work engagement, etc.). However, supervisor support has a positive impact on job stress when it causes one to be in a positive emotional state. This indicates that studies on job stress should not simply be based on various aspects of organizational support but on how this support results in positive psychological spillover for employees. These findings expand the explanatory scope of the AET (Weiss and Cropanzano, 1996), demonstrating that daily workplace events can affect employees’ emotions and subsequently impact their judgments and appraisals toward the work too.

Finally, this research supports the notion that ethical leadership is a vital factor in generating positive emotional states for individuals (Brown and Mitchell, 2010). To some extent, the cross-level interaction suggests that employees’ difference in the daily work environment stimulating positive emotions depend on the level of ethical leadership experienced by employees. Our study contributes to the literature by investigating the cross-level impact of ethical leadership on daily job stress experienced by employees.
Practical implications

There are several practical implications for organizational management in our study. The results indicate that reducing employees’ job stress is a daily undertaking and not simply a stand-alone task implemented by the organization. First, it is worth noting that supervisors’ daily behavior, such as being concerned with subordinates’ family needs and providing family-related assistance, can reduce the daily job stress experienced by subordinates. To some extent, compared to formal family-supportive policies, supervisors’ daily supportive behavior is more important when it comes to daily variation in subordinates’ job stress because it impacts subordinates’ daily emotional experience. Managers should be aware that creating a positive and family-supportive work environment is important. Specifically, it can generate positive emotional experiences for subordinates and subsequently reduce job stress. This awareness can translate into better organizational practices, such as frequent communication with subordinates about their family problems, making recommendations to subordinates regarding work–family balance, and adjusting employees’ work schedule when they have family difficulties.

Second, our research provides a unique perspective on the practical efforts to leverage the benefits of ethical leadership. Researchers have shown that leaders have an important effect on subordinates’ emotional experiences and job-related stress (e.g., Sy et al., 2005; Tepper et al., 2018; Yang et al., 2015). In fact, the literature indicates that ethical leadership seems to be a necessary condition in generating subordinates’ positive emotions (e.g., Joplin et al., 2021). For the reason that ethical leadership has a significantly positive effect on employee emotions, it is worthy for managers to devote themselves to improving ethical leadership and creating an ethical atmosphere. Furthermore, since ethical leadership can improve the positive effect of leaders’ supportive-family behavior on subordinates’ positive emotional experiences, it is a meaningful practice to encourage and train supervisors to treat subordinates morally and fairly in everyday interactions and to prevent or punish subordinates’ unethical behavior.

Limitations and future research

Our study has some limitations. First, we did not take negative emotions into account. Folkman (1997) argued that positive emotions are less intense and less persistent than negative ones. Likewise, Folkman and Moskowitz (2000) asserted that the frequency of positive emotions, rather than their intensity, brings benefits to individuals. Studies also suggest that negative emotions have negative consequences for individuals (Brown et al., 2005). Therefore, future research could consider both positive and negative emotions and compare the impact of both on job stress. Second, the self-reported data obtained from employees has some inevitable bias. However, the total variance of the Harman one-factor test on the self-reported constructs was less than 50% (Podsakoff and Organ, 1986), indicating that common method bias was unlikely to affect our research conclusion. Still, future research should consider using data from multiple sources, such as including self-reports from leaders regarding their own ethical leadership. Third, a related limitation is our sampling strategy. Previous research confirmed that positive emotions have no significant difference in age, education and job tenure (e.g., Fernández-Ballesteros et al., 2010; Velez and Neves, 2018), so we took only gender as our demographic variable. For the reason that the uneven frequency of demographic variables might limit the generalizability of our findings (Bui et al., 2017), we tried to ensure an equal number of female and male participants (68 females and 69 males), of whom, most were married. However, married participants do not guarantee more homogeneity of the sample. As the reviewer noted, maybe the results were different between married couples depending on the number of children and the amount of dependent relatives living together and so on; hence, it would be beneficial for future research to take more demographic variables into account and estimate the model with a large and variable sample.
References


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