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# A daily investigation of the role of manager empathy on employee well-being

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A Daily Investigation of the Role of Manager Empathy on Employee Well-Being

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## A Daily Investigation of the Role of Manager Empathy on Employee Well-Being

### Abstract

In a daily diary study, the authors investigated the top-down influence of manager empathy on a process model of employee well-being. Sixty employees supervised by one of 13 managers completed a daily survey for two weeks, producing a total of 436 observations. Hierarchical linear modeling results revealed that, at the daily level, employees who reported somatic complaints made less progress on their goals and felt lower levels of positive affect and higher levels of negative affect. At the group level, cross-level main and interactive effects of manager empathy were observed, such that groups of employees with empathic managers experienced lower average levels of somatic complaints, and daily goal progress was more strongly related to positive affect for groups of employees with empathic managers. We discuss the implications of these results for the emerging literature on leaders as managers of group emotion.

Keywords: Empathy; Emotions; Affect; Personality; Well-Being

### A Daily Investigation of the Role of Manager Empathy on Employee Well-Being

As one of life's most frequent activities, work "is a place where all our basic processes, including emotional processes, play out daily" (Weiss, 2002, p. 1). Not surprisingly, there is substantial variation in those processes from one day to the next. On some days, we feel well and energetic, make progress toward our aspirations, and are in good spirits. On other days, we feel run down, accomplish very little, and are frustrated. On such "good days" and "bad days," we may find that some individuals are more likely than others to understand our situation and share our feelings of accomplishment and failure, respectively.

The individual difference that perhaps best captures people's capacity to understand others and feel concern for them is empathy. Empathy is defined as "one's sensitivity to the emotional experiences of another" (McNeely & Meglino, 1994, p. 837). Empathy reflects the capacity to place oneself in the "emotional shoes" of another person (Lazarus, 1991, 1999). Empathic individuals are not only adept at gauging the emotions of others, but they also tend to share in those emotions, experiencing them vicariously. Thus, empathy involves both a cognitive (i.e., understanding or comprehending another's state) and an affective (i.e., sharing another's state) component (Davis, 1983; Eisenberg, 2000).

Importantly, although empathy typically is thought of as a response to another's suffering, individuals can also experience empathy toward another's well-being (Nezlek, Feist, Wilson, & Plesko, 2001), such as when individuals celebrate and share in another's success (Gable, Reis, Impett, & Asher, 2004). Thus, both positive and negative emotions displayed by others can trigger empathic feelings because empathy involves accurately perceiving and being sensitive to others' emotions, regardless of valence. For example, consider an employee who successfully completes a project and is elated as a result. An empathic individual would be more

likely to recognize and share in the employee's feelings of elation and success, whereas an individual lacking empathy would fail to notice or vicariously experience the employee's feelings. Interestingly, as we discuss below, such constructive responses by an empathic individual are likely to intensify the employee's positive feelings (Gable et al., 2004).

As a dispositional characteristic or trait, empathy has been studied extensively in psychology, where it has been linked to various prosocial behaviors including increased altruism, higher social competence, and decreased aggression (for reviews, see Eisenberg, 2000; Eisenberg & Miller, 1987; Miller & Eisenberg, 1988). In the organizational behavior literature, researchers have begun to examine the role of empathy in the workplace. With respect to predicting employee behaviors, the majority of research has paralleled the psychology literature, finding positive relationships between empathy and prosocial behaviors such as organizational citizenship behavior (Bettencourt, Gwinner, & Meuter, 2001; Borman, Penner, Allen, & Motowidlo, 2001; Joireman, Kamdar, Daniels, & Duell, 2006; Kamdar, McAllister, & Turban, 2006; McNeely & Meglino, 1994; Parker & Axtell, 2001; Settoon & Mossholder, 2002).

Our focus in the current manuscript is on manager empathy, which corresponds to an emerging literature that characterizes leaders as managers of group emotions (George, 2000; Pescosolido, 2002). George (2000) noted that leadership in work settings is an emotion-laden process on the part of both followers and leaders. Leaders who can understand and manage the emotions within their units may therefore be better able to improve the well-being and functioning of those units. Pescosolido (2002) argued that leaders can obtain more influence within their unit by playing the role of "emotional manager." For example, leaders can influence their groups by reading the emotions of others and protecting the "emotional tone" of the group (Sy, Côté, & Saavedra, 2005).

Although Pescosolido (2002) speculated that empathy would be a beneficial trait for leaders, few studies have examined empathy on the part of leaders. Those studies that have been done have tended to focus on leader emergence. For example, Kellett, Humphrey, and Sleeth (2002, 2006), and Wolff, Rescosolido, and Druskat (2002), in studies using student samples, found that individuals high in empathy tended to be perceived by others as leaders. In addition, Pillai, Williams, Lowe, and Jung (2003) found that students gave higher transformational leadership and charisma ratings to empathic presidential candidates.

Considering the dearth of research on manager empathy, and the fact that the literature on leaders as managers of group emotions is still in its infancy, the overall purpose of our study is to add to the literature on leaders as managers of group emotions by examining the effects of manager empathy on employees' daily well-being, conceptualized here as positive and negative affect (Diener, Suh, Lucas, & Smith, 1999). Because of the fleeting nature of affective states (e.g., Ekman & Davidson, 1994; Watson, 2000), it is important to articulate a process model at the within-individual level that captures and explains differences in employees' day-to-day well-being. Those within-individual processes may then serve as building blocks for explaining how and why manager empathy could impact group emotions.

To derive that process model, we integrated theory on the relationship between physical health and affect with Lazarus's (1999) appraisal theory of emotion. According to the disability hypothesis (Watson & Pennebaker, 1989; see also Watson, 2000), physical symptoms and health problems cause discomfort, which worsens mood (i.e., decreases positive affect and increases negative affect). According to Lazarus's (1991, 1999) appraisal theory, affective states arise from an appraisal of whether progress toward one's goals is facilitated or hindered, with positive affect stemming from appraisals of goal progress and negative affect stemming from appraisals

of goal impediment. Combining these perspectives suggests that goal progress may be a means by which physical problems influence subsequent affective states. That is, employees experiencing physical problems on a given day should be less likely to make progress on their goals, which in turn should elicit lower levels of positive affect and higher levels of negative affect. Indeed, in their review of the subjective well-being literature, Diener et al. (1999) suggested this notion specifically when they stated that poor health may harm subjective well-being “because it interferes with the attainment of important goals” (p. 287).

Using this within-individual framework as a foundation, our study tested the model shown in Figure 1. We tested the model using a daily diary methodology (see Bolger, Davis, & Rafaeli, 2003) to be able to examine the effects of empathy on employee well-being on a day-to-day basis. This method allowed us to model within-individual changes in affective reactions while removing the confounding effects of trait affectivity—an important nuisance variable in between-individual studies (e.g., Burke, Brief, & George, 1993; Schaubroeck, Ganster, & Fox, 1992; Watson & Pennebaker, 1989). Regarding physical problems, we focused specifically on somatic complaints (Spector, 1987; Spector, Dwyer, & Jex, 1988; Spector & Jex, 1988), examining the sort of ailments that could be expected to vary on a daily basis and that likely would interfere with the attainment of goals (e.g., backache, headache, upset stomach, fatigue).

Our model predicted that the empathy of a given manager would, in a top-down manner, influence his or her employees’ somatic complaints, daily goal progress, and affective states in several ways. Specifically, we hypothesized that, given their sensitivity and acuity to the conditions of others around them, empathic managers would impact directly their employees’ daily somatic complaints and affective states in a beneficial way. Moreover, we hypothesized that the degree to which daily affective states are elicited by employees’ perceptions of goal

progress would be affected by the empathy of their manager. Consistent with our purpose to examine leaders as managers of group emotion, we focused on de-contextualized, trait-like individual differences in empathy; that is, managers' characteristic inclinations to respond to others in empathic ways (Mehrabian, Young, & Sato, 1988). Though good arguments can be made in favor of focusing on managers' contextualized empathic emotions (i.e., manager state empathy in response to a particular follower problem or work event), here we study decontextualized (Fleeson, 2001) manager trait empathy so as to consider the influence of the manager across subordinates and work occurrences. Overall, by examining how stable individual differences in managers' empathy influence their employees' day-to-day work lives, we adopt a multilevel approach in the current research.

### Theory and Hypotheses

The sections below provide the theoretical justification for the linkages shown in Figure 1. We begin by more fully describing the integration of the disability hypothesis (Watson & Pennebaker, 1989) with Lazarus's (1991, 1999) appraisal model of emotion, in the form of the within-individual relationships among somatic complaints, goal progress, and state affect. We then describe the cross-level main and interactive effects of empathy on those constructs and relationships.

#### *Somatic Complaints, Goal Progress, and Affective States*

Health psychologists have long been interested in the potential link between physical wellness and affective experience, dating back to pioneering work of Cannon (1927) and Selye (1936). Much of this area of inquiry has focused on the relationship between negative affect and illness, at both state and trait levels. Indeed, several explanations have been proposed to account



for the rather pervasive finding that individuals experiencing physical symptoms report higher levels of negative affect, with those explanations differing in the presumed causal pathway.

As noted at the outset, one approach, referred to as the disability hypothesis, proposes that the experience of physical problems creates discomfort and distress, which leads to heightened negative affect. Two other approaches, labeled the psychosomatic hypothesis and the symptom perception hypothesis, propose the opposite causal direction. The psychosomatic hypothesis posits that the high levels of negative arousal associated with negative affect are taxing to individuals, eventually taking a toll in the form of illness and physical problems, while the symptom perception proposes that negative affect makes individuals more likely to be aware of, be sensitive to, complain about, and otherwise exaggerate physical discomfort (while not necessarily having objectively worse symptoms) (Watson & Pennebaker, 1989; see also Watson, 2000, for a detailed discussion of these three perspectives).

Although all three hypotheses have received empirical support, (Watson, 2000), the disability hypothesis is unique in two noteworthy respects. First, the disability hypothesis has tended to focus on state affect, and indeed there is evidence that day-to-day fluctuations in physical problems are associated changes in affective states (Watson, 1988, 2000; Watson & Pennebaker, 1989). In contrast, the psychosomatic and symptom perception hypotheses have tended to focus on trait affect (see Watson, 2000). Second, studies examining the relationship between physical problems and state affect, such as those on the disability hypothesis, have yielded significant linkages with both state negative affect *and* state positive affect. For example, in samples of students, Watson (1988) and Clark and Watson (1988) both found that, within persons, somatic complaints were associated with higher state negative affect and lower state positive affect, and the strength of the relationships was similar. This is contrast to studies

examining the relationship between physical problems and trait affect, such as those on the psychosomatic and symptom perception hypotheses, which have tended to find significant relationships with trait negative affect only (see Watson, 2000). Considering the above, and given that our interest in the current study was on the within-individual relationship between somatic complaints and state affect (both positive and negative), we adopt a disability perspective and propose that employees experience lower levels of positive affect and higher levels of negative affect on days in which they report somatic complaints.

As shown in Figure 1, we further propose that perceptions of goal progress serve as a mechanism linking daily somatic complaints to state positive and negative affect. According to Lazarus (1991, 1999), affective states are the direct consequence of appraisal, which is an “evaluation of the significance of what is happening for one’s personal well-being” (Lazarus, 1991, p. 144). Specifically, the elicitation of affect is determined by appraisals of whether a goal is at stake, and the valence of affect is determined by appraisals of goal congruence or incongruence. Goal congruence elicits positive affective states; goal incongruence elicits negative affective states (Lazarus, 1991). The relevance of goals to affect is also a central tenet of control theories (Carver & Scheier, 1990, 1998) as well as theories of subjective well-being (for a review, see Diener et al. 1999), which both argue that high positive affect and low negative affect results from goal progress (see also Ilies & Judge, 2005; Seo, Barrett, & Bartunek, 2004).

Empirical studies have supported the relationship between goals and affect within individuals over time. Outside the work domain, Emmons (1986) found that undergraduate students who made progress towards their goals (i.e., “personal strivings”) felt more positive affect and less negative affect. Brunstein (1993), in a semester-long study of undergraduate students, found that perceived goal progress was associated with higher end-of-term subjective

well-being (a composite of positive and negative affective states). In addition, both Sheldon and Kasser (1998) and Louro, Pieters, and Zeelenberg (2007), using student samples, reported that short-term goal progress was associated with more positive affect and less negative affect. Within the work domain, similar results have been found. Alliger and Williams (1993) and Williams and Alliger (1994) linked goal progress to positive and negative affect, and Zohar (1999) found that daily hassles, which disrupt goal-directed behavior, were associated with negative mood. Taken together, both theory and research suggest that employees should experience more positive and less negative affective states on days in which they perceive they are making progress towards their goals.

Combining the disability hypothesis with Lazarus's (1991) notions of appraisal suggests that employees experiencing somatic symptoms on a given work day should experience lower levels of positive affect and higher levels of negative affect because they make less progress toward their goals. Feeling bad physically should constrain the amount of effort that employees' are able to put forth (LePine, Podsakoff, & LePine, 2005). Indeed, physical symptoms have been linked to higher levels of work withdrawal (Podsakoff, LePine, & LePine, 2007), further suggesting that somatic complaints should hinder goal progress. To the extent that goal progress is impeded, positive affect should decrease and negative affect should increase (Lazarus, 1991). Overall then, we propose that, at the within-individual level, experiencing somatic complaints is associated with less progress towards one's goals, which, in turn, is associated with lower levels of positive affect and higher levels of negative affect. Thus, consistent with Diener et al.'s (1999) assertion that ill health may harm subjective well-being because it hinders goal attainment, we propose that goal progress mediates the relationship between somatic complaints and affective states.

*H1: Within-individuals, somatic complaints are negatively associated with state positive affect (H1a) and positively associated with state negative affect (H1b), and these relationships are mediated by perceptions of goal progress (H1c).*

### *Influence of Manager Empathy*

Having laid the foundation for the within-individual relationships among somatic complaints, goal progress, and state affect, we now describe the role of manager empathy. Theory and research point to a number of ways in which the empathy of managers may influence their employees' daily well-being.

First, manager empathy should exert a direct effect on employees' daily somatic complaints. Individuals high in empathy possess a more prosocial orientation toward others, displaying consideration and concern (Eisenberg & Miller, 1987), while those low in empathy possess a more antisocial orientation toward others, engaging in aggression and unethical decision-making (Detert, Trevino, & Sweitzer, 2008; Miller & Eisenberg, 1988). Related research on abusive supervision has revealed that employees who work for managers possessing such antisocial tendencies are more likely to experience physical symptoms (Duffy, Ganster, & Pagon, 2002; Tepper, 2007), suggesting a link between manager empathy and somatic complaints.

Further justification for a link between manager empathy and employees' somatic complaints can be gleaned from the literature on social support and stress (e.g., Cohen & Wills, 1985; Viswesvaran, Sanchez, & Fisher, 1999). According to that literature, the perception of available social support from others reduces physical symptoms and distress directly because it provides a sense of predictability and helps one to avoid negative events that would otherwise produce physical problems (Cohen & Wills, 1985; Jemmott & Locke, 1984). Relevant to the

current investigation, research has shown social support to be negatively associated with employees' somatic complaints, especially when that social support came from their supervisor (Ganster, Fusilier, & Mayes, 1986). Given that empathy is associated with the provision of social support (Trobst, Collins, & Embree, 1994; Zellars & Perrewe, 2001), it follows that employees working for a manager who is high in empathy should be less likely to experience somatic complaints on a daily basis than employees working for a manager who is low in empathy.

*H2: Manager empathy is negatively associated with employees' average daily somatic complaint levels.*

In addition to somatic complaints, we also propose direct effects of manager empathy on employees' daily levels of state positive and state negative affect. As noted above, empathic individuals possess a prosocial orientation toward others, frequently displaying consideration (Eisenberg & Miller, 1987). As a result, those high in empathy tend to develop more positive interpersonal relationships with others than those low in empathy (Batson, 1987). From employees' perspectives, working for an empathic manager should be more enjoyable than working for a manager who lacks empathy, eliciting higher average levels of positive affect and lower average levels of negative affect. On this point, George (2000) proposed that empathy contributes to effective management in organizations, in part by being able to generate positive emotions in others.

One process by which an empathic manager may elicit more positive and less negative affect in his or her employees is emotional contagion, which occurs when individuals "catch" the emotions of others during social interactions (Hatfield, Cacioppo, & Rapson, 1994). Recent research has expanded this perspective to consider characteristics of one actor that may elicit affective reactions from another. For example, Bono and Ilies (2006) found that charismatic

leaders were more likely to transmit positive affective states to their followers compared to leaders who were less charismatic (see also Sy et al., 2005). Interestingly, Bono and Ilies (2006) suggested that emotional abilities of leaders, such as empathy, may play a role in the emotional contagion process.

Like charisma, trait empathy has similarly strong potential to elicit favorable (more positive and less negative) affective reactions from others, but the emotional contagion processes are more complex. To be sure, emotional mimicry—whereby one subconsciously feels or expresses the emotions of others (Jabbi & Keysers, 2008; Moody, McIntosh, Mann, & Weisser, 2007)—is one mechanism by which empathic individuals experience emotional contagion. However, this research concerns the emotions experienced by the empathic person (e.g., the effect of Harry's mimicry [of Sally's emotions] on Harry's affective state), not the other way around (the effect of Harry's mimicry [of Sally's emotions] on Sally's affective state). Pure emotional contagion would suggest a continuing contagion, but at this point the process might well depend on other factors, such as the perceived sincerity of the mimicked emotion (Stel & Vonk, 2009). Thus, this literature does not directly address the question at hand: Whether a supervisor's empathy affects their employees' affective states.

There are, however, two aspects of empathy that are suggestive of such an effect. First, the perspective taking associated with empathy implies an influence of an employee's emotions on the leader's affective state, operating much in the same way as emotional contagion (i.e., perspective taking makes the leader more vulnerable to “catch” and experience the employee's emotions [Hatfield, Cacioppo, & Rapson, 1993]). Second, the subsequent displays of warmth and concern by the leader toward the employee are likely to make an employee's emotions more positive (those who appear genuinely happy for our good fortune will augment our happiness

[Gable et al., 2004]), but may ameliorate the effects of negative emotions (those who express sympathy for our plight may help us feel less “down” [O’Brien, DeLongis, Pomaki, Puterman, & Zwicker, 2009]). Thus, managers who have an ability to take their subordinates’ perspective and to show empathic concern should enhance their subordinates’ good moods and mitigate their bad moods. Taken together, the above theory and research suggest that employees working for an empathic manager should tend to experience more positive affect and less negative affect.

*H3: Manager empathy is positively associated with employees’ average daily state positive affect levels (H3a) and negatively associated with employees’ average daily state negative affect levels (H3b).*

In addition to the above direct associations, we propose that manager empathy will influence the strength of the relationships between employees’ perceptions of their goal progress and their affective states. Individuals who are empathic take the perspective of others during social interactions and think more frequently about them than individuals who are not empathic (Nezlek et al., 2001). Via perspective taking, empathic individuals vicariously experience others’ feelings (Batson, Early, & Salvarani, 1997; Lazarus, 1991). As noted above, empathic reactions can be either positive or negative, occurring not only in response to others’ misfortunes but also to their successes (Nezlek et al., 2001).

On the positive side, perceptions of daily goal progress should be more strongly associated with feelings of positive affect for employees with an empathic manager. According to Lazarus (1991), positive emotions stemming from appraisals of goal progress are likely to be muted if individuals believe their favorable situation will be reacted to with negativity by others (e.g., with resentment or discouragement). Empathic managers, with their qualities of warmth, understanding, and general concern toward others (e.g., Eisenberg, 2000), should be less likely to

display such negativity relative to less empathic managers, instead reacting positively. Indeed, research on capitalization has revealed that feelings of well-being elicited from positive events are enhanced when others' respond with enthusiasm and genuine concern (Gable et al., 2004). In addition, the emotional support provided by empathic managers should increase the sense of accomplishment that employees derive from their work efforts (Zellars & Perrewe, 2001), amplifying those employees' positive feelings. Based on the above, employees working for an empathic manager should perceive a greater likelihood that their manager will be pleased with rather than resent their sense of accomplishment, generating positive self-appraisals and affective states and resulting in a stronger, positive relationship between goal progress and positive affect.

On the negative side, perceptions of a lack of daily goal progress should be less strongly associated with feelings of negative affect for employees with an empathic manager. By adopting the perspective of a person who is troubled, empathic individuals experience feelings such as tolerance, concern, compassion, and sympathy (Batson et al., 1997; Lazarus, 1991). This empathic arousal in response to another's distress is aversive, motivating individuals high in empathy to reduce the aversive state by providing social support (Batson, O'Quinn, Fultz, Vanderplas, & Isen, 1983; Trobst et al., 1994). The provision of social support by empathic managers may serve as a buffer against the deleterious emotional consequences of failing to make adequate goal progress. Social support may exert a buffering effect for two reasons. First, the perception of available support by an empathic manager may reduce the extent to which a situation such as a lack of goal progress is appraised as negative and detrimental to well-being. Second, actual social support provided by an empathic manager may act as a coping resource to employees, diminishing the onset of emotional distress (Cohen & Wills, 1985; Lazarus & DeLongis, 1983).



Empathic managers not only should be more likely to provide social support to employees who are struggling, but research also suggests that such managers should be less likely to blame those employees for their failures. Via perspective taking, empathic individuals are more likely to attribute others' actions to external factors (Parker & Axtell, 2001). The lower likelihood of being blamed for failures such as a lack of goal progression, coupled with the higher likelihood of receiving sympathy, reassurance, and social support, should leave employees with an empathic manager feeling reassured that their manager will understand their situation and be supportive, which should lower the likelihood that such employees will experience detrimental effects such as negative affect.

Thus, we propose that manager empathy will exert cross-level, moderating effects on the relationships between goal progress and affective states. Specifically, the positive relationship between perceptions of goal progress and state positive affect should be stronger for groups of employees with empathic managers, while the negative relationship between perceptions of goal progress and state negative affect should be weaker for groups of employees with empathic managers.

*H4: Manager empathy moderates the relationships between perceptions of goal progress and affective states, such that goal progress is associated with more state positive affect (H4a) and less state negative affect (H4b) in groups of employees working for empathic managers.*

## Method

### *Sample and Procedure*

Participants included 60 information-technology employees (26 females, 34 males) working at a large medical facility in the Southeast. The 60 employees worked in groups that

were supervised by one of 13 different managers. In total, 104 employees worked for the 13 managers (average group size = eight employees), with groups ranging in size between two and 15 employees. The average percentage of employees per group who participated in the experience-sampling portion of the study was 62% (SD = 27%). As we describe below, the 60 focal participants completed 436 daily surveys over the course of a two-week period.

Participants' ages ranged from 26 to 61 years old ( $M = 42.5$ ,  $SD = 9.7$ ), and 47 (78.3%) identified themselves as Caucasian. This sample size of focal participants compares favorably with other field studies collecting daily observations from employees (e.g., Alliger & Williams, 1993; Fuller et al., 2003; Scott & Judge, 2006).

We recruited participants via an organizational contact. The study was described to participants as an examination of day-to-day feelings in the workplace. Interested employees were contacted by the researchers, who provided study instructions. All data were collected online using electronic surveys. After viewing an informed consent, participants were first instructed to have their immediate manager complete a short online survey, which assessed the manager's empathy. Next, participants were asked to complete a daily survey for a two-week period, workdays only (i.e., Mondays through Fridays). To facilitate response rates during the daily diary portion of the study, we sent email reminders to participants at 9:00 a.m. each day. The email reminders contained the link to the online survey. Participants were instructed to complete the daily survey at or near the end of their workday. The daily survey contained the measures of somatic complaints, goal progress, and state affect. Measures within the daily survey were counterbalanced to avoid potential order confounds. Participants also completed a one-time survey that included measures of demographics and leader-member exchange quality, which was

used as a control variable in our analyses. In exchange for participating, participants received \$40.

Seventy-four employees originally volunteered for the study. Of those, 62 had managers who completed the manager survey. Of this group, two employees did not complete the daily survey portion of the study, resulting in a final sample of 60 employee-manager dyads. Together, these employees completed 454 daily surveys across the two-week period. We inspected timestamps collected in tandem with the daily surveys to assess whether participants adhered to the study instructions. This inspection revealed that two daily surveys were completed on non-work days (i.e. Saturday and Sunday). In addition, 16 daily surveys were completed before 12:00 pm, which may not provide enough work time for relationships among somatic complaints, goal progress, and affective states to occur. Consequently, we excluded these 18 surveys from the analyses, leaving 436 daily surveys ( $M = 7.3$  daily surveys per employee). Given that each employee could complete a maximum of 10 surveys each (for a total of 600 daily surveys), this corresponds to a daily survey response rate of 72.7%. The 436 daily surveys were completed between 12:09 pm and 12:01 am ( $M = 2:41$  pm,  $SD = 2$  hours, 44 minutes).<sup>1</sup> Because of the range of survey completion times, as we describe below, we controlled for the time of day that participants completed their daily surveys in all analyses. Finally, comparison of Internet Protocol (IP) addresses as well as timestamps between the manager and employee surveys provided evidence that participants did not complete the manager surveys themselves.

### *Measures*

*Manager empathy.* The literature on empathy has distinguished between two types of vicarious responses that individuals may experience toward others: empathic concern and personal distress (Batson, Fultz, & Schoenrade, 1987; see also Davis, 1994). Empathic concern

encompasses traditional notions of empathy and consists of positive responses toward others such as concern, warmth, and compassion, whereas personal distress is a negative orientation consisting of responses toward others such as alarm, worry, and being upset. These distinct responses motivate different actions toward others. Specifically, empathy motivates prosocial, altruistic behaviors, while personal distress motivates egoistic, self-serving behaviors (to reduce the unwanted feelings of distress) (Batson et al., 1987; Batson et al., 1983). Given that our interest was in examining the influence of managers' empathy on their employees' well-being, our arguments and analyses focus on empathic concern. However, we measured both constructs in order to account for the influence of the personal distress factor in a supplemental analysis.<sup>2</sup>

To assess empathic concern and personal distress, we utilized the widely-used scales developed by Batson and colleagues (e.g., Batson, 1987; Coke, Batson, & McDavis, 1978). As noted by Davis (1994), considerable evidence supports the psychometric adequacy of these scales. Each scale consists of a number of discrete feelings that individuals may feel as a result of taking another's perspective: "sympathetic," "moved," "compassionate," "tender," "warm," and "softhearted" comprise the empathy scale, while "alarmed," "grieved," "upset," "worried," "disturbed," "perturbed," "distressed," and "troubled" comprise the personal distress scale. Given that we were interested in assessing trait-like, individual differences in empathy, we asked managers to indicate "on average" how strongly they experience each of the feelings toward their subordinates using a scale 1 = *very slightly or not at all* to 5 = *very much*. This general, "on average" instruction is identical to measures of trait affectivity (Watson, 2000; Watson & Clark, 1994). Coefficient alpha was  $\alpha = .94$  for both the empathic concern scale and the personal distress scale.<sup>3</sup>

*Somatic complaints.* Because participants were asked to complete a survey each day for two weeks during work hours, it was necessary to keep the daily survey measures brief. To assess somatic complaints, we utilized six symptoms taken from Spector and colleagues' physical symptoms inventory (Spector, 1987; Spector, et al., 1988; Spector & Jex, 1988). The physical symptoms inventory assesses somatic symptoms of which individuals would be aware (e.g., headache), rather than symptoms of which individuals may experience but may not be aware (e.g., elevated blood pressure). We chose symptoms based on their relevance to our particular temporal context (i.e., day-to-day variation in employee well-being), excluding items that appeared less bounded to that context. For example, we excluded the symptoms "infection" and "skin rash" because such symptoms are likely to carry over and last longer than one day, making inferences regarding their relationships with goal progress and affective states tenuous. The six items chosen for inclusion were as follows: "backache," "headache," "shortness of breath," "acid indigestion or heartburn," "upset stomach or nausea," and "tiredness or fatigue." Participants were asked to indicate the frequency with which they experienced each of the symptoms "today" using a scale 1 = *never* to 5 = *very often*. Average coefficient alpha for this scale over the 10 days of data collection was  $\alpha = .76$ .

*Goal progress.* Given that individuals may place a greater value on progressing toward some goals rather than others (Austin & Vancouver, 1996), the perceived valence of a given goal could have an impact on subsequent affect, such that progress made toward highly valued goals may elicit greater feelings of positive affect, while lack of progress toward such goals may elicit greater feelings of negative affect. To avoid this potential between-individual confound, we presented participants with a list of goals rather than have them identify goals themselves. Thus, goal content was held constant, allowing us to examine associations involving goal progress

(e.g., the relationship between goal progress and state affect) uniformly both between and within individuals (e.g., Louro et al., 2007).

To identify a broadly-applicable set of goals, we drew from the work of Cropanzano, Byrne, Bobocel, and Rupp (2001) (see also Williams, 1997), who identified four basic goals of concern to individuals. Each day, participants were asked to indicate the extent to which they made progress toward eight general goals using a scale 1 = *I made no progress toward achieving this goal today* and 5 = *I made a great deal of progress toward achieving this goal today*. Examples of goals included, “Being able to predict what will happen at work,” “Having a meaningful work existence,” “Maintaining a strong sense of self worth,” and “Maintaining strong interpersonal bonds at work.”

We conducted an exploratory principal axis factor analysis on the eight goal progress items in order to examine their underlying factor structure (e.g., Fabrigar, Wegener, MacCallum, & Strahan, 1999). One factor emerged explaining 71.7% of the variance in the items (eigenvalue = 5.74), with an average factor loading of .82 (range of .76 to .89). Based on this, we combined the eight goal progress items into a single scale. Average coefficient alpha for this scale over the 10 days of data collection was  $\alpha = .94$ . These factor analytic results, along with the relatively high internal consistency, are in line with research showing that aggregating across seemingly disparate goals does not necessarily lose information (Harris, Daniels, & Briner, 2003; Sheldon & Elliot, 2000).

*State positive and negative affect.* We assessed state positive and state negative affect using items from the PANAS-X (Watson & Clark, 1994). In order to reduce problems of retrospective recall (Robinson & Clore, 2002), we collected “online” reports of affect each day by asking participants to indicate the extent to which they were experiencing each state “right

now” using a scale 1 = *very slightly or not at all* to 5 = *very much*. Items comprising the positive affect scale included “excited,” “enthusiastic,” “happy,” and “delighted.” Items comprising the negative affect scale included “hostile,” “angry,” “nervous,” “sad,” and “blue.” Average coefficient alphas for these scales over the 10 days of data collection were  $\alpha = .93$  for the positive affect scale and  $\alpha = .83$  for the negative affect scale.

*Leader-member exchange quality.* According to leader-member exchange theory, the quality of dyadic relationships a manager has with his or her subordinates may vary, such that the manager has better relationships with some subordinates than others (Graen, 1976; Graen & Scandura, 1987). Research has demonstrated the influence of leader-member exchange quality on subordinates’ attitudes and behaviors (for a meta-analysis, see Gerstner & Day, 1997). Thus, we controlled for leader-member exchange quality in order ascertain the influence of a manager’s level of empathy on his or her subordinates as a group, over and above the differential quality of the dyadic exchange relationships existing between that manager and each subordinate. Participants responded to the seven-item scale described by Graen and Uhl-Bien (1995). An example item is, “How would you characterize your working relationship with your leader?” (1 = *extremely ineffective* to 5 = *extremely effective*). Coefficient alpha for this scale was  $\alpha = .94$ .

### *Analyses*

Given the multilevel nature of our data, we used hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002) to test the relationships among participants’ somatic complaints, goal progress, positive and negative affective states, and managers’ empathy. HLM consists of a series of regression equations that take into account the nonindependence in the data that arises from having participants contribute multiple data points across time and from having participants

cluster in groups. In the current study, the data comprises three levels because days are nested in employees, who are themselves nested in managers. The first level, or Level 1, captures variance within employees and consists of the repeated, within-individual measures taken daily of employees' reports of somatic complaints, goal progress, and affective states. The second level, or Level 2, captures variance between individuals within groups and consists of the measure of leader-member exchange quality. The third level, or Level 3, captures variance between groups (of employees under a given manager) and consists of the measure of managers' empathy.

To test the hypothesized within-individual relationships (H1), the outcome variable at Level 1 was regressed on the hypothesized predictors. To test the hypothesized influence of manager empathy on the Level 1 variables and relationships (H2, H3, and H4), manager empathy was included at Level 3 as: 1) a predictor of the intercept of the Level 1 regression with somatic complaints as the outcome variable, 2) a predictor of the intercept of the Level 1 regressions with state positive and state negative affect as the outcome variables, and 3) a predictor of the slopes of the Level 1 relationships between goal progress and both state positive and state negative affect. Because manager empathy is a Level 3 variable, the first two analyses test whether *groups* with empathic managers experience lower average daily levels of somatic complaints, higher average daily levels of positive affect, and lower average daily levels of negative affect, and the latter analyses test whether the within-individual relationships between goal progress and state positive/negative affect are stronger or weaker, respectively, in *groups* with empathic managers. Thus, our analyses concerning the influence of managers' empathy on the groups they supervise match our focus on empathy as a dispositional, de-contextualized individual difference.

Following the recommendation of Hofmann, Griffin, and Gavin (2000), we centered all Level 1 predictors at participants' means. Individual-mean centering is preferred when testing



within-individual relationships because it removes all between-individual variance from the Level 1 variables. That is, by centering variables relative to each participant's mean, each participant's overall mean for a given variable, across the days of data collection, becomes zero, and hence the variance between individuals becomes zero. As a result, the within-individual relationships are not confounded by individual differences such as response tendencies or personality traits. The Level 2 control variable (leader-member exchange quality) was group-mean centered, and the Level 3 variables (manager gender and manager empathy) were grand-mean centered.

As noted above, the times at which employees completed the daily survey varied. Research has shown that there is significant diurnal variation in affect, especially positive affect, which rises steadily from morning until noon, remains steady, and then falls in the evening (Clark, Watson, & Leeka, 1989; Watson, 2000). In addition, research has revealed systematic day of week variation in affect, such that positive affect increases, and negative affect decreases, as the typical workweek (i.e., Monday through Friday) progresses (Watson, 2000). As a result, any observed relationships with employees' daily affective states could be contaminated by these natural cycles. To eliminate this possibility, we controlled for the time of day that employees completed the daily survey as well as the day of the week in all analyses. In addition, given that research has revealed gender differences in empathy, such that women tend to be more empathic than men (Eisenberg, 2000), we controlled for manager gender when examining the direct and moderating effects of manager empathy. Job type was controlled by design because employees and their managers all worked for the same company and in the same occupation (information-technology).<sup>4</sup>

### *Confirmatory Factor Analyses*

Before proceeding with hypothesis testing, we conducted within-individual factor analyses on the items comprising the Level 1 measures of somatic complaints, goal progress, and positive and negative affective states in order to provide some evidence of construct validity (Edwards, 2003). These analyses were performed in LISREL 8.80 (Joreskog & Sorbom, 1996), with the covariance matrix of the items computed after centering all the item scores relative to each participant's mean item scores. The analyses test the hypothesized four-factor structure (somatic complaints, goal progress, positive state affect, and negative state affect) at the within-individual level and are analogous to pooled P-technique factor analyses (Nesselroade, McArdle, Aggen, & Meyers, 2002). Kline (2005) stated that model fit is acceptable when CFI is .90 or above and SRMR is below .10. Fit statistics for the four-factor model indicated acceptable fit and were as follows:  $\chi^2 (df = 224, N = 436) = 1064.53, p < .01$ , comparative fit index (CFI) = .90, standardized root-mean-square residual (SRMR) = .068. All 23 factor loadings were statistically significant ( $p < .001$ ) and standardized factor loadings for each variable averaged .51 for somatic complaints, .72 for goal progress, .82 for state positive affect, and .66 for state negative affect. We also tested two alternative three-factor models: one combining the state positive and state negative affect items into a single factor, and one combining the state negative affect and somatic complaint items into a single factor. Chi-square difference tests revealed that the four-factor model fit the data significantly better than either alternative three-factor model, with respective results as follows:  $\Delta\chi^2 (df = 3, N = 436) = 776.27, p < .001$ , and  $\Delta\chi^2 (df = 3, N = 436) = 258.41, p < .001$ .

## Results

### *Descriptive Statistics and Correlations*

Descriptive statistics and correlations are shown in Table 1. Correlations below the diagonal are at the within-individual level and are calculated by standardizing the regression coefficient obtained in HLM analyses between one predictor and one criterion at Level 1. Correlations above the diagonal are at the group level, with Level 1 variables aggregated across the 10 days of data collection and across employees under a given supervisor. As shown in Table 1, at the within-individual level, somatic complaints were significantly correlated with goal progress ( $r = -.23, p < .05$ ), state positive affect ( $r = -.29, p < .05$ ), and state negative affect ( $r = .28, p < .05$ ). In addition, goal progress was significantly correlated with state positive affect ( $r = .46, p < .05$ ) and state negative affect ( $r = -.26, p < .05$ ).

#### *Partitioning of Variance Components*

Before testing our hypotheses, we estimated null models in HLM (simple regressions of each Level 1 variable with no Level 1, Level 2, or Level 3 predictors) to partition the amount of variance present at each level. Starting with Level 1, Table 2 shows that a substantial portion of the variance in each variable was within individuals, meaning that an employee's daily amount of each variable (e.g., goal progress) differed over the two-week period. Specifically, the amount of within-individual variance was 25.0% for somatic complaints 41.9% for goal progress, 40.1% for state positive affect, and 46.4% for state negative affect. At Level 2, Table 2 shows that there was also a significant portion of the variance in each variable between individuals within groups ( $p < .05$ ), meaning that employees under a given manager differed in their average levels of each variable (e.g., state positive affect) over the two-week period. Finally, at Level 3, Table 2 shows that there was a significant portion of the variance in somatic complaints and state positive affect between groups ( $p < .05$ ); however, there was not significant variance between groups in goal progress and state negative affect. This indicates that groups of employees under a given

manager differed in their average levels of somatic complaints and state positive affect, but not in their average levels of goal progress and state negative affect, over the two-week period.

Overall, these results suggest that multilevel modeling was appropriate for the data.

### *Tests of Hypotheses*

*Within-individual relationships.* Hypothesis 1 predicted that, within individuals, somatic complaints are negatively associated with state positive affect (H1a) and state negative affect (H1b), and these relationships are mediated by perceptions of goal progress (H1c). We tested this hypothesis from a variety of mediation perspectives. The first, which is referred to as the *causal steps* approach (Baron & Kenny, 1986; see also MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), requires three conditions for mediation: (a) the predictor (somatic complaints) is significantly associated with the proposed mediator (goal progress), (b) the proposed mediator is significantly associated with the outcomes (state positive and state negative affect), and (c) a previously significant relationship between the predictor and the outcome is no longer significant with the mediator included. Results of HLM regressions testing the first condition revealed a significant, within-individual relationship between somatic complaints and goal progress ( $\gamma_{300} = -.30, p < .05$ ), such that individuals made less progress on their goals on days in which they reported somatic complaints. Somatic complaints explained an additional 6.0% of the within-individual variance (2.5% of the total variance) in goal progress beyond the other variables in the model (time of day, day of week, leader-member exchange quality, manager gender, and manager empathy).

Tables 3 and 4 show the results of the HLM regressions testing the second and third conditions. Beginning with state positive affect at the outcome, the top panel of Table 3 shows that somatic complaints were negatively associated with state positive affect ( $\gamma_{300} = -.45, p <$

.05), explaining an additional 9.4% of the within-individual variance (3.8% of the total variance) in state positive affect beyond the other variables in the model. Thus, Hypothesis 1a was supported. Turning to state negative affect as the outcome, the top panel of Table 4 shows that somatic complaints were positively associated with state negative affect ( $\gamma_{300} = .32, p < .05$ ), explaining an additional 24.0% of the within-individual variance (11.1% of the total variance) in state negative affect beyond the other variables in the model. Thus Hypothesis 1b was supported. Overall, employees felt lower levels of positive affect and higher levels of negative affect at the end of workdays in which they had experienced physical ailments.

The bottom panels of Tables 3 and 4 reveal that once goal progress was included in the HLM regressions predicting state positive and state negative affect, the regression coefficient for somatic complaints decreased in each case, indicating mediation. Table 3 shows that goal progress was significantly associated with state positive affect ( $\gamma_{400} = .50, p < .05$ ), explaining an additional 28.9% of the within-individual variance (11.6% of the total variance) in state positive affect beyond the other variables in the model. In contrast, Table 4 shows that the within-individual relationship between goal progress and state negative affect only approached significance ( $\gamma_{400} = -.09, p = .059$ ). This suggests that goal progress mediated the within-individual relationship between somatic complaints and state positive affect but not the within-individual relationship between somatic complaints and state negative affect.

To test this possibility more formally, we utilized the *product of coefficients* approach, or the Sobel test (Sobel, 1982; see also MacKinnon et al., 2002). The results of these analyses revealed a significant indirect effect of somatic complaints on state positive affect through goal progress ( $z = 3.04, p < .05$ ); however, the indirect effect of somatic complaints on state negative affect through goal progress only approached statistical significance ( $z = 1.68, p = .09$ ), which is

to be expected given that goal progress was not significantly associated with state negative affect. Overall, these results provide partial support for Hypothesis 1c.<sup>5</sup>

Although our hypothesized direction of effects from somatic complaints to goal progress to affective states was derived from theory specifying this casual order, our results cannot speak to the issue of causal direction. To partially address this issue, we conducted lagged analyses by estimating (a) the effects of somatic complaints and goal progress at time  $t - 1$  (the day prior to the ratings of state positive and state negative affect) on state positive and state negative affect at time  $t$ , and (b) the effects of goal progress and state positive and negative affect at time  $t - 1$  (the day prior to the ratings of somatic complaints) on somatic complaints at time  $t$ . Results of these analyses revealed no significant relationships between the lagged predictors and the outcome variables, which is consistent with research showing that relationships with affective states tend to be bounded within days (Ilies, Scott, & Judge, 2006; Judge & Ilies, 2004). However, it should be noted that these analyses were based on a Level 1 sample size of 267. Because lagged analyses require consecutive data, the Level 1 sample size decreases each time a participant does not respond on a given day.

*Influence of manager empathy.* Hypothesis 2 predicted that manager empathy is negatively associated with employees' average daily somatic complaint levels. Supporting this hypothesis, an intercepts-as-outcomes model revealed that manager empathy was indeed negatively related to employees' average somatic complaint levels ( $\gamma_{002} = -.24, p < .05$ ), such that groups of employees working for empathic managers experienced lower average daily levels of somatic complaints than groups of employees working for less empathic managers.

Hypothesis 3a predicted that manager empathy is positively associated with employees' average daily state positive affect levels, and Hypothesis 3b predicted that manager empathy is

negatively associated with employees' average daily state negative affect levels. Results shown in Tables 3 and 4, respectively failed to support these hypotheses, as groups of employees working for empathic managers did not experience higher average daily levels of either state positive affect ( $\gamma_{002} = .20$ ) or state negative affect ( $\gamma_{002} = -.00$ ) than groups of employees working for less empathic managers.

Hypothesis 4 predicted that manager empathy moderates the relationships between perceptions of goal progress and both state positive (H4a) and state negative affect (H4b). To test this hypothesis, we first examined whether significant variance existed in the slopes of the within-individual relationships between goal progress and both state positive and negative affect. Significant chi-square statistics ( $\chi^2(df=54) = 80.19, p < .05$  for the goal-progress—state positive affect relationship;  $\chi^2(df=54) = 122.11, p < .05$  for the goal-progress—state negative affect relationship) revealed that the within-individual slopes did vary, providing potential variance to be explained by manager empathy. We then added manager empathy as a Level 3 predictor of the Level 1 relationships between goal progress and each affective state. The coefficient for manager empathy was significant for the goal-progress—state positive affect relationship ( $\gamma_{301} = .20, p < .05$ ) but not for the goal-progress—state negative affect relationship ( $\gamma_{301} = .05$ ). Manager empathy explained 32.8% of the variance in the within-individual goal progress—state positive affect slopes. A plot of this interaction is shown in Figure 2 and reveals that the positive within-individual relationship between goal progress and state positive affect was stronger in groups of employees with empathic managers. Put differently, groups of employees with empathic managers were especially likely to experience positive affect on days in which they made progress toward their goals.

## Discussion

To date, the bulk of research on individual differences of managers or leaders has focused on indentifying traits associated with emerging as a leader or being an effective leader (Judge, Bono, Ilies, & Gerhardt, 2002). Despite a growing interest in how leaders can shape the emotions and well-being of the groups they manage (George, 2000; Pescosolido, 2002), little is know about how managers' personalities influence their employees, especially their employees' experiences at work on a day-to-day basis. To address this void, we took a multilevel approach and examined the influence of manager empathy on a process model of employees' daily well-being.

To derive that process model, we integrated the disability hypothesis (Watson & Pennebaker, 1989) with Lazarus's (1991) appraisal theory of emotions. Our results revealed that, at the within-individual level, employees made less progress on their goals and felt less positive affect and more negative affect on days in which they experienced somatic complaints. Moreover, the results showed that the within-individual relationship between somatic complaints and state positive affect was mediated by perceptions of goal progress. Overall then, our results support the integration of these two perspectives and suggest that an employee who feels physically unwell on a given day will have difficulty accomplishing goals at work, which in turn will be associated with decrements in mood. Research has yet to test an integrated, mediated model linking somatic complaints to affective states via goal progress within individuals, despite suggestions within the subjective well-being literature that physical ailments might reduce well-being via their impact on goal progress (Diener et al., 1999). Our results thus reveal part of the underlying process by which employee well-being at work is better on some days than others, and they extend findings on affective states in the workplace. It is important to reiterate that, because



they lie at the within-individual level, our findings are not confounded by trait negative affect, which has been described as a nuisance variable in the literatures on stress and well-being (Burke et al., 1993; Schaubroeck et al., 1992; Watson & Pennebaker, 1989).

With respect to our focus on manager empathy, our results also reveal the complex ways in which empathy is associated with his or her employees' well-being on a daily basis. First, manager empathy was associated directly with employees' physical wellness, as groups of employees with empathic managers experienced lower average levels of somatic complaints. As noted above, one potential explanation for that finding is that empathic managers engage in more social support. Research in the stress literature has shown that support has a direct effect on strain (Halbesleben, 2006), and conceptualizations of supervisor support emphasize doing things to make work life easier, being easy to talk to, being reliable, and being willing to listen (Caplan, Cobb, French, Harrison, & Pinneau, 1975). Empathy may therefore stand as a dispositional predictor of supervisor support behaviors.

Second, manager empathy moderated the within-individual relationship between goal progress and state positive affect. Perceptions of daily goal progress were more strongly associated with positive affect for groups of employees with empathic managers. These results suggest that managers' characteristic inclinations to respond to their employees in empathic ways foster a climate of understanding and support that is associated with greater happiness following daily accomplishments at work. Combined, our results suggest that empathic managers may have a beneficial impact on their employees that is both direct (by influencing average levels of somatic complaints) and indirect (by influencing the strength with which progress or failure at work goals is associated with daily well-being).

Those findings aside, not all hypothesized links were supported. Manager empathy was not associated with employees' average daily affect levels, and manager empathy did not moderate the relationship between goal progress and state negative affect. In addition, while the indirect effect of somatic complaints on state positive affect through goal progress was significant, the indirect effect of somatic complaints on state negative affect through goal progress only approached significance. It appears that the lack of goal progress associated with bouts of physical ailments is more likely to reduce one's feelings of happiness and enthusiasm than it is to increase one's feelings of anger and nervousness. Consistent with this notion, some research has found that goal progress is more strongly associated with state positive affect than state negative affect (e.g., Alliger & Williams, 1993).

Taken together, our findings contribute to the emerging literature on leaders as managers of group emotion by examining the impact of manager empathy on employee well-being. To date, research on empathy has tended to consider individuals' perceptions of those who are empathic (e.g., perceptions of leadership [Kellet et al., 2006; Pillai et al., 2003; Wolff et al., 2002]). Though such perceptions are important to consider, given the interpersonal nature of empathy, we believe it is also important to examine how subordinates are influenced by the empathy of their managers. Toward that end, our study is the first (of which we are aware), to consider how employees are affected by the empathy of their managers and to do so with a method that captured a two-week snapshot of the ebb and flow of employee well-being.

### *Limitations*

Some limitations of our study should be noted. First, although we obtained data from both employees and their managers, the within-individual relationships among somatic complaints, goal progress, and state affect were based on employee-reported responses, raising

the possibility that the within-individual relationships are inflated by common source variance, especially given that some of the variables (i.e., somatic complaints and goal progress) were based on retrospective recall of day-level experiences. Given their perceptual nature, these variables are perhaps best assessed via self-report, as perceptions of physical symptoms such as headaches, perceptions of goal progress, and feelings of positive and negative affect are rather subjective assessments not easily observed by others. In addition, because we centered the daily measures relative to participants' means, we avoided several sources of common method variance, such as response tendencies and trait affectivity. Indeed, state affectivity was modeled as a substantive variable in our analyses and thus was a valid source of variability. However, centering does not remove all sources of common-method variance, such as implicit theories of how measures interrelate, concurrence of measures, and common scale formats (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Thus, our results should be interpreted with this issue in mind.

A second concern is that the causal ordering of our variables is open to question. Manager empathy was assessed prior to the daily survey portion of the study; however, the relationships among somatic complaints, goal progress, and state affect were collected each day at the same time. As stated above, research on the disability hypothesis (e.g., Watson & Pennebaker, 1989) has shown somatic complaints to precede affect, particularly state affect, and our findings are in line with that perspective. However, it also is plausible that affective states could influence somatic complaints. Although our "online," momentary measures of state negative and positive affect guard against this alternative causal order, they do not eliminate the possibility entirely, and thus future research collecting multiple surveys throughout a given day could better address the issue of causal direction. Researchers able to do so may find that the

causal relationship between somatic complaints and affect is reciprocal, especially considering that perspectives giving causal precedence to somatic complaints (e.g., the disability hypothesis) and perspectives giving casual precedence to affect (e.g., the psychosomatic hypothesis) both have received support (Watson, 2000). Alternatively, it may be that the psychosomatic hypothesis holds more for trait affect but the disability hypothesis holds more for state affect.

Other limitations center on our choice of measures. Given the demanding nature of our diary design, some of our daily measures (somatic complaints, state affect) were truncated for practical purposes. Despite this, those measures demonstrated acceptable reliabilities, and confirmatory factor analyses provided some evidence for their validity. In addition, although we assumed that participants perceived the goals they pursued as important, we did not assess goal importance directly. Despite the fact that our within-individual design removed differences in goal importance between individuals, it could be the case that the same individual perceived some goals as more important on one day than on another. Consequently, it may be that the relationship between goal progress and well-being is stronger (i.e., more positive) when the goals pursued are important to individuals (e.g., Austin & Vancouver, 1996; Harris et al., 2003; Sheldon & Kasser, 1998). Future research could not only include a measure of goal importance at the within-individual level, but also could explore whether our results replicate with a more personalized, work-specific measure of goal progress. It may also be that manager empathy is more important for specific, work-related goals than the more general goals examined here. Finally, we did not assess the frequency with which employees and their managers interacted. As with goal importance, interaction frequency may be an additional moderator to consider, as empathic managers may exert a stronger influence the more they encounter their employees.

*Implications and Suggestions for Future Research*

Notwithstanding the above limitations, our results have implications for future research. Although we know that employee empathy is associated with outcomes such as organizational citizenship behavior (e.g., McNeely & Meglino, 1994), we know very little about employee outcomes associated with having an empathic manager. Future research could thus examine whether other employee outcomes besides somatic complaints and affect are influenced by manager empathy. To the extent that employees working for empathic managers experience better well-being, one might expect other work outcomes to be positively affected, including job attitudes such as satisfaction and commitment and job behaviors such as performance, organizational citizenship behavior, and retention (Sonnentag & Frese, 2003).

In addition to examining additional outcomes, future research could also examine the ways in which empathic managers are perceived by their employees. Research has already indicated that empathic leaders are perceived to be more charismatic (Pillai et al., 2003). It may also be that empathic managers are perceived to be fairer than less empathic managers (Patient & Skarlicki, 2005). Indeed, research linking empathy to lower levels of moral disengagement and unethical decision making provide some indirect evidence supporting this possibility (Detert et al., 2008).

As noted at the outset, we felt that a more decontextualized, trait approach to manager empathy would be congruent with our overall purpose to contribute to the emerging literature on leaders as managers of group emotions and well-being (George, 2000; Pescosolido, 2002), because such an approach would capture managers' general tendencies toward multiple employees. Although "noncontingent descriptions of individuals can be highly accurate and useful descriptions of individuals' behavioral distributions" (Fleeson, 2001, p. 1023), we would

be remiss if we did not acknowledge a certain unresolved tension in our model. Namely, though individuals possess trait-like tendencies in empathic responding (Mehrabian et al., 1988), empathic responses themselves are more state-like and emotional in nature (Nezlek et al., 2001) and thus by definition are contextualized (Ekman & Davidson, 1994). Thus, one could argue that we should have assessed manager empathy as a transient, contextualized emotion felt toward a specific employee. Though that would be a worthwhile endeavor, it would necessitate not only assessing empathy at the within-individual level, but also assessing the stimulus or context that brings about empathic responses on a given day toward a given employee. Indeed, at this state level, manager empathy may not exhibit the same effects observed here, because that would require an employee to accurately perceive a manager's empathic reactions on a daily basis. Instead, it may be that the general perception that one's manager is "an empathic person" is a stronger driver of well-being. Then again, it may be that, when specific empathic responses are directly observed, the effects on employee well-being are amplified.

As noted by Fleeson (2001), one's personality encompasses both mean tendencies (i.e., "traits") as well as variability (i.e., "states"), or deviations from those mean tendencies. Importantly "a large degree of variability does not deny the stability of means, and the stability of means does not dismiss the large degree of variability" (Fleeson, 2001, p. 1025). Thus, contrary to being a threat to trait concepts such as empathy, within-individual deviations serve to paint a more complete picture of traits and dispositions. Ultimately, future research able to capture both trait and state measures of manager empathy (or related characteristics) could examine some interesting possibilities. For example, individuals who show high reactivity to situational cues exhibit more variation in personality trait expression (Fleeson, 2001). Given that empathic individuals are more reactive to social cues (Davis, 1983), it may be that empathic

managers are effective at positively influencing employee well-being not only because of a high central tendency to show concern and warmth, but also because variability around that central tendency tends to coincide with appropriate cues (e.g., highly empathic responses are activated when an employee shows distress). In contrast, managers lacking empathy may have a low central tendency and low variability around that tendency, failing to display empathy even when cues are displayed by their employees.

Although participants in our sample all were from the same organization and had similar job responsibilities (worked in information-technology), it may be that contextual characteristics such as job type influence the prevalence of empathic managers via an attraction-selection-attrition process (Schneider, 1987). Empathic managers may be drawn to jobs emphasizing the display of emotions such as warmth and concern (e.g., health services). The end result may be the creation of a climate whereby the well-being of employees is higher compared to jobs that are less likely to attract empathic managers (e.g., debt collection). It also would be interesting to examine the potential interactions between manager empathy and contextual features such as work climate. Can an overall positive work climate substitute for the beneficial impact of an empathic manager or neutralize the detrimental impact of a manager lacking empathy (e.g., Kerr & Jermier, 1978)? Can an empathic manager exacerbate the advantages of a positive work climate or counteract the disadvantages of a negative work climate? Future research able to capture variance in contextual features such as climate could examine these interesting questions.

Finally, our results also have several implications for practice. Perhaps most evident is the benefit of empathic managers to employees and organizations. For employees, having an empathic manager may mean having a better day-to-day work life, at least from psychological and physiological perspectives. For organizations, given the costs associated with poor employee

well-being, such as reduced productivity, increased health care costs, and increased absenteeism (Sonnentag & Frese, 2003), employing empathic managers may reduce the likelihood of such costs. A trait perspective of empathy would suggest that organizations would be best served at targeting efforts toward the selection of empathic managers, rather than toward training.

However, because there also are state differences in empathy (Nezlek et al., 2001), it also might be worthwhile to train managers to be more empathic, through such behaviors as perspective taking. Ultimately, a combination of selection and training may be most beneficial. Of course, some employees may find themselves without an empathic manager. Such employees may benefit by finding other alternative sources for support (e.g., coworkers, family, and friends) in order to improve well-being.



## References

- Alliger, G. M., & Williams, K. J. (1993). Using signal-contingent experience sampling methodology to study work in the field: A discussion and illustration examining task perceptions and mood. *Personnel Psychology, 46*, 525-549.
- Austin, J. T., & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin, 120*, 338-375.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic? In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 65-122). New York: Academic Press.
- Batson, C. D., Early, S., & Salvarani, G. (1997). Perspective taking: Imagining how another feels versus imagining how you would feel. *Personality and Social Psychology Bulletin, 23*, 751-758.
- Batson, C. D., Fultz, J., & Schoenrade, P. A. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. *Journal of Personality, 55*, 19-39.
- Batson, C. D., O'Quin, K., Fultz, J., Vanderplas, M., & Isen, A. M. (1983). Influence of self-reported distress and empathy on egoistic versus altruistic motivation to help. *Journal of Personality and Social Psychology, 45*, 706-718.
- Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and

- recommendations. *Psychological Methods*, *11*, 142-163.
- Bettencourt, L. A., Gwinner, K. P., & Meuter, M. L. (2001). A comparison of attitude, personality, and knowledge predictors of service-oriented organizational citizenship behaviors. *Journal of Applied Psychology*, *86*, 29-41.
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, *54*, 579-616.
- Bono, J. E., & Ilies, R. (2006). Charisma, positive emotions and mood contagion. *The Leadership Quarterly*, *17*, 317-334.
- Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, *9*, 52-69.
- Brunstein, J. C. (1993). Personal goals and subjective well-being: A longitudinal study. *Journal of Personality and Social Psychology*, *65*, 1061-1070.
- Burke, M. J., Brief, A. P., & George, J. M. (1993). The role of negative affectivity in understanding relations between self-reports of stressors and strains: A comment on the applied psychology literature. *Journal of Applied Psychology*, *78*, 402-412.
- Cannon, W. B. (1927). The James-Lange theory of emotions: A critical examination and an alternative theory. *The American Journal of Psychology*, *39*, 106-124.
- Caplan, R. D., Cobb, S., French, J. R., Harrison, R. U., & Pinneau, S. R. (1975). *Job demands and work health*. U. S. Department of Health, Education, and Welfare Publication No. 75-160. Washington, DC: Institute for Social Research.
- Carver, C. S., & Scheier, M. F. (1990). Origins and function of positive and negative affect: A control-process view. *Psychological Review*, *97*, 19-35.
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York:

Cambridge University Press.

- Clark, L. A., Watson, D., & Leeka, J. (1989). Diurnal variation in the positive affects. *Motivation and Emotion*, *13*, 205-234.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Coke, J. S., Batson, D., & McDavis, K. (1978). Empathic mediation of helping: A two-stage model. *Journal of Personality and Social Psychology*, *36*, 752-766.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310-357.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, *58*, 164-209.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*, 113-126.
- Davis, M. H. (1994). *Empathy: A social psychological approach*. Madison, WI: Brown & Benchmark.
- Detert, J. R., Trevino, L. K., & Sweitzer, V. L. (2008). Moral disengagement in ethical decision making: A study of antecedents and outcomes. *Journal of Applied Psychology*, *93*, 374-391.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*, 276-302.
- Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal*, *45*, 331-352.

- Edwards, J. R. (2003). Construct validity in organizational behavior research. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (2nd ed., pp. 327-371). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ekman, P., & Davidson, R. J. (1994). *The nature of emotion*. New York: Oxford University Press.
- Eisenberg, N. (2000). Empathy and sympathy. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (pp. 677-691). New York: Guilford Press.
- Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, *101*, 91-119.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, *51*, 1058-1068.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, *4*, 272-299.
- Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, *80*, 1011-1027.
- Fuller, J. A., Stanton, J. M., Fisher, G. G., Spitzmuller, C., Russell, S. S., & Smith, P. C. (2003). A lengthy look at the daily grind: Time series analysis of events, mood, stress, and satisfaction. *Journal of Applied Psychology*, *88*, 1019-1033.
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, *87*, 228-245.

- Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology, 71*, 102-110.
- George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53*, 1027-1055.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader– member exchange theory: Correlates and construct issues. *Journal of Applied Psychology, 82*, 827–844.
- Graen, G. B. (1976). Role-making processes within complex organizations. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201-1245). Chicago: Rand McNally.
- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (pp. 175-208). Greenwich, CT: JAI Press.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader–member exchange (LMX) theory of leadership over 25 years: Applying a multi-level, multi-domain perspective. *Leadership Quarterly, 6*, 219–247.
- Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology, 91*, 1134-1145.
- Harris, C. Daniels, K., & Briner, R. B. (2003). A daily diary study of goals and affective well-being at work. *Journal of Occupational and Organizational Psychology, 76*, 401-410.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Science, 2*, 96-99.
- Hatfield, E., Cacioppo, J., & Rapson, R. L. (1994). *Emotional contagion*. New York: Cambridge University Press.

- Hofmann, S. A., Griffin, M. A., & Gavin, M. B. (2000). The application of hierarchical linear modeling to organizational research. In K. Klein & S. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 75-170). San Francisco: Jossey-Bass.
- Ilies, R., & Judge, T. A. (2005). Goal regulation across time: The effects of feedback and affect. *Journal of Applied Psychology, 90*, 453-467.
- Ilies, R., Scott, B. A., & Judge, T. A. (2006). The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behavior. *Academy of Management Journal, 49*, 561-575.
- Jabbi, M., & Keysers, C. (2008). Inferior frontal gyrus activity triggers anterior insula response to emotional facial expressions. *Emotion, 8*, 775-780.
- Jemmott, J. B., III, & Locke, S. E. (1984). Psychosocial factors, immunologic mediation, and human susceptibility to infectious diseases: How much do we know? *Psychological Bulletin, 95*, 78-108.
- Joireman, J., Kamdar, D., Daniels, D., & Duell, B. (2006). Good citizens to the end? It depends: Empathy and concern with future consequences moderate the impact of a short-term time horizon on organizational citizenship behaviors. *Journal of Applied Psychology, 91*, 1307-1320.
- Joreskog, K. G., & Sorbom, D. (1996). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*, 765-780.
- Judge, T. A., & Ilies, R. (2004). Affect and satisfaction: A study of their relationship at work and

- at home. *Journal of Applied Psychology*, 89, 661-673.
- Kamdar, D., McAllister, D. J., & Turban, D. B. (2006). "All in a day's work": How follower individual differences and justice perceptions predict OCB role definitions and behavior. *Journal of Applied Psychology*, 91, 841-855.
- Kellet, J. B., Humphrey, R. H., & Sleeth, R. G. (2002). Empathy and complex task performance: Two routes to leadership. *Leadership Quarterly*, 13, 523-544.
- Kellet, J. B., Humphrey, R. H., & Sleeth, R. G. (2006). Empathy and the emergence of task and relations leaders. *Leadership Quarterly*, 17, 146-162.
- Kenny, D. A., Korchmaros, J. D., & Bolger, N. (2003). Lower level mediation in multilevel models. *Psychological Methods*, 8, 115-128.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, 22, 375-403.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York: Springer-Verlag.
- Lazarus, R. S. & DeLongis, A. (1983). Psychological stress and coping in aging. *American Psychologist*, 38, 245-254.
- LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor-hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48, 764-775.
- Louro, M. J., Pieters, R., & Zeelenberg, M. (2007). Dynamics of multiple-goal pursuit. *Journal of Personality and Social Psychology*, 93, 174-193.

- MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. New York: Erlbaum.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*, 83–104.
- McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology, 79*, 836-844.
- Mehrabian, A., Young, A., & Sato, S. (1988). Emotional empathy and associated individual differences. *Current Psychology: Research and Reviews, 7*, 221-240.
- Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin, 103*, 324-344.
- Moody, E. J., McIntosh, D. N., Mann, L. J., & Weisser, K. R. (2007). More than mere mimicry? The influence of emotion on rapid facial reactions to faces. *Emotion, 7*, 447-457.
- Nesselroade, J. R., McArdle, J. J., Aggen, S. H., & Meyers, J. M. (2002). Dynamic factor analysis models for representing process in multivariate time-series. In D. S. Moskowitz & S. L. Hershberger (Eds.), *Modeling intra-individual variability with repeated measures data: Methods and applications* (pp. 235-265). Mahwah, NJ: Erlbaum.
- Nezlek, J. B., Feist, G. J., Wilson, F. C., & Plesko, R. M. (2001). Day-to-day variability in empathy as a function of daily events and mood. *Journal of Research in Personality, 35*, 401-423.
- O'Brien, T. B., DeLongis, A., Pomaki, G., Puterman, E., & Zwicker, A. (2009). Couples coping with stress: The role of empathic responding. *European Psychologist, 14*, 18-28.
- Parker, S. K., & Axtell, C. M. (2001). Seeing another viewpoint: Antecedents and outcomes of



- employee perspective taking. *Academy of Management Journal*, *44*, 1085-1100.
- Patient, D. L., & Skarlicki, D. P. (2005). Why managers don't always do the right thing when delivering bad news. In S. W. Gilliland, D. D. Steiner, D. P. Skarlicki, & K. van den Bos (Eds.), *What motivates fairness in organizations?* (pp. 149-178). Information Age Publishing.
- Pescosolido, A. T. (2002). Emergent leaders as managers of group emotion. *Leadership Quarterly*, *13*, 583-599.
- Pillai, R., Williams, E., Lowe, K. B., & Jung, D. I. (2003). Personality, transformational leadership, trust, and the 2000 U.S. presidential vote. *Leadership Quarterly*, *14*, 161-192.
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*, 438-454.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879-903.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage.
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, *128*, 934-960.
- Schaubroeck, J., Ganster, D., & Fox, M. L. (1992). Dispositional affect and work-related stress. *Journal of Applied Psychology*, *77*, 322-335.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, *40*, 437-453.
- Scott, B. A., & Judge, T. A. (2006). Insomnia, emotions, and job satisfaction: A multilevel study.

- Journal of Management*, 32, 622-645.
- Seo, M., Barrett, L. F., & Bartunek, J. M. (2004). The role of affective experience in work motivation. *Academy of Management Review*, 29, 423-439.
- Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person- and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology*, 87, 255-267.
- Seyle, H. (1936). Syndrome produced by diverse nocuous agents. *Nature*, 138, 32.
- Sheldon, R. P., & Elliot, A. J. (2000). Personal goals in social roles: Divergences and convergences across roles and levels of analysis. *Journal of Personality*, 68, 51-84.
- Sheldon, K. M., & Kasser, T. (1998). Pursuing personal goals: Skills enable progress, but not all progress is beneficial. *Personality and Social Psychology Bulletin*, 24, 1319-1331.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). Washington, DC: American Sociological Association.
- Sonnentag, S., & Frese, M. (2003). Stress in organizations. In I. B. Weiner (Series Ed.) & W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Vol. Eds.), *Handbook of psychology: Vol. 12. Industrial and organizational psychology* (pp. 453-491). New York: Wiley.
- Spector, P. E. (1987). Interactive effects of perceived control and job stressors on affective reactions and health outcomes for clerical workers. *Work and Stress*, 1, 155-162.
- Spector, P. E., Dwyer, D. J., & Jex, S. M. (1988). Relation of job stressors to affective, health, and performance outcomes: A comparison of multiple data sources. *Journal of Applied Psychology*, 73, 11-19.
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors

- and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3, 356-367.
- Stel, M., & Vonk, R. (2009). Empathizing via mimicry depends on whether emotional expressions are seen as real. *European Psychologist*, 14, 342-350.
- Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90, 295-305.
- Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, 33, 261-289.
- Trobst, K. K., Collins, R. L., & Embree, J. M. (1994). The role of emotion in social support provision: Gender, empathy and expressions of distress. *Journal of Social and Personal Relationships*, 11, 45-62.
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology*, 54, 1020-1030.
- Watson, D. (2000). *Mood and temperament*. New York: Guilford Press.
- Watson, D., & Clark, L. A. (1994). *The PANAS-X: Manual for the positive and negative affect schedule – expanded form*. Unpublished manuscript, University of Iowa.
- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. *Journal of Personality and Social Psychology*, 96,

234-254.

Weiss, H. M. (2002). Introductory comments: Antecedents of emotional experiences at work.

*Motivation and Emotion*, 26, 1-2.

Williams, K. D. (1997). Social ostracism. In R. M. Kowalski (Ed.), *Aversive interpersonal*

*behaviors* (pp. 133-170). New York: Plenum Press.

Williams, K. J., & Alliger, G. M. (1994). Role stressors, mood spillover, and perceptions of

work-family conflict in employed parents. *Academy of Management Journal*, 37, 837-

869.

Wolff, S. B., Pescosolido, A. T., & Druskat, V. U. (2002). Emotional intelligence as the basis of

leadership emergence in self-managing teams. *Leadership Quarterly*, 13, 505-522.

Zellars, K. L., & Perrewe, P. L. (2001). Affective personality and the content of emotional social

support: Coping in organizations. *Journal of Applied Psychology*, 86, 459-467.

Zohar, D. (1999). When things go wrong: The effect of daily work hassles on effort, exertion,

and negative mood. *Journal of Occupational and Organizational Psychology*, 72, 265-

283.

## Notes

<sup>1</sup> Inspection of the timestamps also revealed that 38 daily surveys were completed after 6:00 pm, which fell outside of the normal work hours for this particular organization (and hence were likely completed at home). Eliminating these surveys did not alter our findings in terms of either magnitude or significance, and so they were retained in the tests of hypotheses.

<sup>2</sup> In that supplemental analysis, we re-estimated our HLM regressions controlling for the personal distress factor. Results were virtually identical, with the same patterns of significance for the level 1 relationships as well as the direct and moderating effects of empathy. Moreover, personal distress was not significantly associated with somatic complaints, goal progress, or state affect, and it did not moderate the within-individual relationships between goal progress and state positive/negative affect.

<sup>3</sup> Due to the relatively small sample of managers, we inspected the distributional properties of the empathy scores to determine whether there were any unusual, outlying observations that may have influenced our results. This inspection revealed that the distribution was relatively normal; both the skewness and kurtosis statistics fell within one standard error, and there were no instances where the leverage value for a manager's empathy score exceeded the recommended cutoff value (see Cohen, Cohen, West, & Aiken, 2003).

<sup>4</sup> Given the variance in the percentage of employees under each manager who participated, we re-estimated our HLM regressions controlling for the total number of employees supervised by each manager as well as the number of employees under each manager who participated. These Level 3 variables were not related to somatic complaints, goal progress, state positive/negative affect, or manager empathy, and controlling for them did not alter the significance of our findings.

<sup>5</sup> According to Kenny, Korchmaros, and Bolger (2003; see also Bauer, Preacher, & Gil, 2006; MacKinnon, 2008), random effects in lower level mediation models may covary, and this covariation, if present, should be taken into account when examining indirect effects. To examine this possibility, we followed the guidelines set forth by these authors and examined the covariance of the lower level random effects (e.g., the covariance between the effect of somatic complaints on goal progress and the effects of goal progress on state positive and state negative affect). The lower level random effects did not covary significantly, and taking this covariation into account did not alter the pattern of significance for the indirect effects (i.e., there was still a significant indirect effect of somatic complaints on state positive affect through goal progress).

Table 1

*Descriptive Statistics of and Correlations Among Focal Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Somatic complaints (level 1)	1.52	.35	---	-.27	-.31	.57*	-.42
2. Goal progress (level 1)	2.82	.41	-.23*	---	.79*	-.49	.01
3. State positive affect (level 1)	2.70	.52	-.29*	.46*	---	-.35	.34
4. State negative affect (level 1)	1.27	.23	.28*	-.26*	.28*	---	.12
5. Manager empathy (level 3)	3.42	.96	---	---	---	---	---

*Notes.* Correlations below the diagonal are based on within-individual (level 1) scores ( $N = 436$ ). Means, standard deviations, and correlations above the diagonal are based on scores aggregated to the group level (level 3) ( $N = 13$ ). \*  $p < .05$ .

Table 2

*Parameter Estimates and Variance Components of Null Models for All Focal Level-1 Variables*

Variable	Intercept ( $\gamma_{000}$ )	Variance within individuals ( $e^2$ )	Variance between individuals within groups ( $r^2$ )	Variance between groups ( $u^2$ )	% Variance within-individual
Somatic complaints	1.57*	.12	.30*	.06*	25.0%
Goal progress	2.77*	.31	.39*	.04	41.9%
State positive affect	2.64*	.45	.55*	.10*	40.1%
State negative affect	1.28*	.13	.15*	.00	46.4%

*Notes.*  $N = 436$ .  $\gamma_{000}$  = pooled intercept representing average level of variable across individuals. Percentage of variance within-individuals computed as:  $e^2 / e^2 + r^2 + u^2$ . \*  $p < .05$ .



Table 3

*HLM Results Predicting State Positive Affect*

Variable	$\gamma$	SE	T-Value
<u>Without goal progress</u>			
Level 1			
Intercept ( $\gamma_{000}$ )	2.66	.15	17.96*
Day of week ( $\gamma_{100}$ )	.07	.02	2.89*
Time of day ( $\gamma_{200}$ )	-.05	.03	-1.63
Somatic complaints ( $\gamma_{300}$ )	-.45	.11	-3.98*
Level 2			
Leader-member exchange ( $\gamma_{010}$ )	.16	.14	1.14
Level 3			
Manager gender ( $\gamma_{001}$ )	.24	.29	.84
Manager empathy ( $\gamma_{002}$ )	.20	.15	1.32
<u>With goal progress</u>			
Level 1			
Intercept ( $\gamma_{000}$ )	2.67	.14	19.09*
Day of week ( $\gamma_{100}$ )	.05	.02	2.45*
Time of day ( $\gamma_{200}$ )	-.06	.02	-2.26*
Somatic complaints ( $\gamma_{300}$ )	-.21	.10	-2.04*
Goal progress ( $\gamma_{400}$ )	.50	.08	6.53*
Level 2			
Leader-member exchange ( $\gamma_{010}$ )	.17	.15	1.10
Level 3			
Manager gender ( $\gamma_{001}$ )	.10	.28	.35
Manager empathy ( $\gamma_{002}$ )	.20	.15	1.35

*Notes.* All level 1 predictors were individually-mean centered; all level 2 predictors were group-mean centered; all level 3 predictors were grand-mean centered. Manager gender coded 1 = female, 0 = male.  $\gamma$  = regression coefficient obtained in HLM ( $N = 436$ ). \*  $p < .05$ .

Table 4

*HLM Results Predicting State Negative Affect*

Variable	$\gamma$	SE	T-Value
<u>Without goal progress</u>			
Level 1			
Intercept ( $\gamma_{000}$ )	1.28	.05	23.36*
Day of week ( $\gamma_{100}$ )	.01	.01	.92
Time of day ( $\gamma_{200}$ )	.02	.02	1.55
Somatic complaints ( $\gamma_{300}$ )	.32	.10	3.31*
Level 2			
Leader-member exchange ( $\gamma_{010}$ )	.04	.08	.59
Level 3			
Manager gender ( $\gamma_{001}$ )	-.12	.10	-1.15
Manager empathy ( $\gamma_{002}$ )	-.00	.05	-.08
<u>With goal progress</u>			
Level 1			
Intercept ( $\gamma_{000}$ )	1.28	.05	23.92*
Day of week ( $\gamma_{100}$ )	.01	.01	.79
Time of day ( $\gamma_{200}$ )	.03	.02	1.61
Somatic complaints ( $\gamma_{300}$ )	.27	.09	3.11*
Goal progress ( $\gamma_{400}$ )	-.09	.05	-1.92
Level 2			
Leader-member exchange ( $\gamma_{010}$ )	-.01	.06	-.11
Level 3			
Manager gender ( $\gamma_{001}$ )	-.09	.08	-1.24
Manager empathy ( $\gamma_{002}$ )	.01	.04	.34

*Notes.* All level 1 predictors were individually-mean centered; all level 2 predictors were group-mean centered; all level 3 predictors were grand-mean centered. Manager gender coded 1 = female, 0 = male.  $\gamma$  = regression coefficient obtained in HLM ( $N = 436$ ). \*  $p < .05$ .

## Figure Captions

*Figure 1.* Hypothesized multilevel model of the relationships among manager empathy, somatic complaints, goal progress, and positive/negative affective states.

*Figure 2.* The moderating effect of manager empathy on the within-individual relationship between goal progress and state positive affect.



