Followers' daily reactions to social conflicts with supervisors: The moderating role of core self-evaluations and procedural justice perceptions

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Abstract
Building on affective events theory (AET; Weiss & Cropanzano, 1996), the present research examined the short-term within-person effects of social conflicts with supervisors at work (SCSs) on followers' state negative affect (NA) at home. Moreover, it was examined whether personal (i.e., core self-evaluations, CSEs) and environmental (i.e., procedural justice perceptions, PJPs) factors would moderate the SCSs–NA relationship. Hypotheses were tested with a diary study incorporating data from 98 civil service agents over five consecutive working days. Hierarchical linear modeling revealed that on the daily level, SCSs were related with employees' NA before bedtime. Furthermore, results provide support for the moderating role of CSEs and PJPs in the SCSs–NA relationship. These findings show that the detrimental effects of SCSs are not restricted to the work context but spillover to employees' private lives and help us to understand when SCSs are particularly detrimental for employees.

Introduction

People strive toward a positive evaluation by others in order to maintain a positive self-view (Epstein, 1980). At work, employees encounter many social interactions with different people, such as clients, colleagues, and supervisors. Particularly, interactions with supervisors are central sources for employees' self- and other-evaluations, and can either boost or diminish employees' self-view. Although most social interactions at work are positive, there are also negative ones. Especially social conflicts have been found to be the most distressing events with the strongest effect on people's mood (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011). Moreover, and in contrast to other stressors, people show no habituation effect toward social conflicts (Bolger, De Longis, Kessler, & Schilling, 1989). Existing conflict research has documented widespread negative consequences of social conflicts at work on employee performance and well-being, including lowered job commitment, decreased job satisfaction, and impaired health (De Dreu & Beersma, 2005; Nixon et al., 2011).

However, although researchers have acknowledged the threat of social conflicts for organizational functioning and employee well-being and their affective experiences, there are some important limitations characterizing most conflict research that need further attention. First, most studies have assessed conflict with cross-sectional designs, conceptualizing conflict as a chronic work stressor rather than adopting a short-term perspective by viewing people's working experiences as a sequence of several episodes. Yet, it is
reasonable to assume that conflicts fluctuate from day to day and that they can have short-lived effects (Bakker & Daniels, 2013). Short-lived effects are important to consider because these daily changes might aggregate over time and transfer into more chronic impairments of well-being, such as anxiety and depression (Spector & Bruk-Lee, 2008) as well as depletion of the physiological system (McEwen, 1998). Second, only scant conflict research has explicitly focused on conflicts with supervisors (e.g., Ismail, Richard, & Taylor, 2012; Liu, Spector, Liu, & Shi, 2011). This is surprising as supervisors play a central role in organizations. For instance, supervisors have more power compared to other members of the organization, they are authorized to delegate tasks and they decide about employees’ future career development (Yukl, 2008). Thus, the effects of social conflicts with supervisors (SCSs) are likely to be crucial for employees’ affective experiences. Third, more research on moderators is needed in order to determine which personal and/or environmental factors can buffer the assumed detrimental effects of SCSs on employees’ affective experiences. Fourth, the study of effects of social conflicts at work on the non-work domain, so-called spillover effects, has been largely neglected in conflict research so far. Spillover describes “effects of work and family on one another that generate similarities between the two domains” (Edwards & Rothbard, 2000, p. 180). This study aims at addressing the limitations of previous research with a diary study over five consecutive working days with civil service agents.

Research aims

The present study contributes to the literature on workplace conflicts in several ways. First, the study examined the effects of supervisor conflicts on negative affective experiences across a day, therefore being able to assess real-time, dynamic relationships and within-person fluctuations in workplace conflicts and affective experiences which have been very rare until now (Ilies, Johnson, Judge, & Keeney, 2011; Meier, Gross, Spector, & Semmer, 2013). Second, the study extends previous research by aligning conflict research with spillover research. Only very few studies have investigated spillover effects of conflicts to the non-work domain (Dudenhöffer & Dormann, 2013; Volmer, Binnewies, Sonnentag, & Niessen, 2012). Third, the study explicitly investigated conflicts with supervisors. Previous conflict research has been dominated by studies on customer and co-worker conflict (e.g., Dormann & Zapf, 2004; Grandey, Dickter, & Sin, 2004). However, supervisors are very important for how subordinates feel as stated for example by George (1996): “Leaders who feel excited, enthusiastic, and energetic themselves are likely to similarly energize their followers, as are leaders who feel distressed and hostile likely to negatively activate their followers” (p. 84). Therefore, it is crucial to investigate SCSs as an antecedent of employees’ affective experiences. Finally, there is still only scant research on moderators in conflict research (e.g., Dijkstra, Van Dierendonck, Evers, & De Dreu, 2005), particularly when considering studies that examined short-term effects of workplace conflicts (see Ilies et al., 2011; Meier, Semmer, & Gross, 2014; Mroczek & Almeida, 2004 for exceptions). By identifying such moderators, the present study helps to identify starting points for interventions.

Affective events theory (AET) as theoretical framework

Affective events theory (AET; Weiss & Cropanzano, 1996) offers a useful framework for the structure of the proposed relationships in this study. In contrast to more traditional approaches, AET suggests that affective states fluctuate over time due to discrete events. Moreover, AET proposes that individual affect levels are influenced by dispositions and a variety of environmental factors. On a general level, affect refers to a broad range of emotions, mood, and dispositions (Barsade & Gibson, 2007). In organizational research, the positive and negative affectivity model by Watson, Clark, and Tellegen (1988) with two orthogonal dimensions of positive and negative affectivity has received most attention. Positive affect (PA) describes one’s degree of pleasant interaction with the environment (e.g., being joyful, excited, enthusiastic) whereas negative affect (NA) describes one’s personal level of experienced distress (e.g., being distressed, angry, anxious) (Watson et al., 1988). State affect includes mood and emotions whereas trait affect is rather considered to function as a stable personality characteristic. In the present study, short-term fluctuations of NA (i.e., state NA) as a consequence of daily SCSs were analyzed in more detail. It is important to examine short-term affective reactions (here: state NA) because they can be considered as important mediators between stressful work events and long-term stress reactions such as psychological well-being, somatic complaints, and social functioning (Lazarus, 1990). Accordingly, state NA in turn has been found to be associated with higher levels of health complaints and physical symptoms (Watson et al., 1988), impaired job performance (Shockley, Ispas, Rossi, & Levine, 2012), negative job attitudes (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003), and increased work–family interface (Ilies et al., 2007). The present study focused particularly on NA as a consequence of daily SCSs because negative events have been found to be mainly related to NA (Gable, Reis, & Elliot, 2000).

Besides the direct effect of SCSs on employees’ affective experiences (i.e., state NA), the present study aimed at contributing to determining factors that moderate the SCSs–NA association. Following AET theory (Weiss & Cropanzano, 1996) which suggests that dispositions and environmental factors influence how people feel and react to affective events, the present study examined the moderating role of core self-evaluations (CSEs) (as a personal factor) and employees’ procedural justice perceptions (PJP) (as an environmental factor). CSEs “pertain to individual’s global evaluation of themselves, other people, and the world” (Judge, Locke, & Durham, 1997, p. 179). It has been stated that “individuals with positive core self-evaluations appraise themselves in a consistently positive manner across situations; such individuals consider themselves capable, worthy, and in control of their lives” (Judge, Van Vianen, & De Pater, 2004, p. 326–327). PJP refer to employees’ evaluation of the fairness of procedures an organization uses in order to determine outcome distributions or allocations (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). By studying core self-evaluations and procedural justice perceptions, it was possible to examine both personal and environmental factors that were considered to moderate the SCSs–NA association. In the following, I will first discuss the direct relationship between SCSs and NA, followed by the moderator hypotheses. The conceptual model of the present study is depicted in Fig. 1.
Social conflicts and followers’ affective experiences

Conflicts can be defined as “a process that begins when an individual or group perceives differences and opposition between itself and another individual or group about interests and resources, beliefs, values, or practices that matter to them” (De Dreu & Gelfand, 2008, p. 6). In terms of AET, workplace conflicts can be considered as negative work events that influence employees’ affective experiences (Weiss & Cropanzano, 1996). Particularly, social conflicts that refer to interpersonal disagreements regarding personal issues have been shown to have detrimental effects on employees’ well-being (e.g., De Dreu & Weingart, 2003; Spector & Bruk-Lee, 2008). For example, De Dreu and Weingart’s (2003) meta-analysis showed negative correlations between relationship conflict and team member satisfaction (mean $\rho = - .54$). A meta-analysis by Alarcon (2011) investigated, among others, the association between job demands (i.e., role ambiguity, role conflict, and workload) and burnout (i.e., emotional exhaustion). They found a positive association between role ambiguity, role conflict, and workload with emotional exhaustion (mean $\rho = .32$, .53, and .49, respectively). Why is it important to study negative affective experiences (i.e., NA) as an outcome? According to the AET (Weiss & Cropanzano, 1996), current affective states influence subsequent affective states, behaviors, and attitudes which in turn can develop to severe long-term consequences.

Existing empirical findings on short-term affective reactions in conflict research have shown daily variations of NA through workplace conflicts (e.g., Bolger et al., 1989; Dudenhöffer & Dormann, 2013; Ilies et al., 2011). For instance, Ilies et al. (2011) asked participants three times a day about conflicts that occurred within the last 3 h at work and about their current mood at work. They found that conflicts were associated with both an immediate and lagged change of negative mood. However, their study did not focus exclusively on supervisor conflict, which was of interest in the present study, and they did not examine whether conflicts at work might spill over to the employees non-work life. Further, Dudenhöffer and Dormann (2013) showed—by means of a diary design and a two-week panel design with employees from public service organizations—that conflicts with customers elicited short (across a day) and mid-term (across 2 weeks) changes in NA. Yet, they focused on customer conflicts and their association with service providers’ affective reactions. Bolger et al. (1989) examined lagged effects of conflicts at work or at home on people’s NA on the next day. They found that interpersonal conflicts were the most detrimental daily stressors, explaining more than 80% of daily mood variations. But, Bolger et al. (1989) did not examine spillover effects to people’s private life and again, their measurement of conflicts did not include one category solely for conflicts with supervisors. Taken together, neither study examined spillover effects of SCSS on NA.

Surprisingly, there is generally only sparse conflict research that has explicitly investigated conflicts with supervisors (for exceptions, see for example Ismail et al., 2012; Liu et al., 2011). Supervisors—who have more power compared to other people in organizations—are often the agents of feedback, providers of performance appraisals, and task delegates. Thus, supervisors are a potential source of conflict (Spector & Bruk-Lee, 2008) and should be highly relevant for employees’ affective experiences at work. Yet, researchers have not often distinguished between different sources of conflict (e.g., Ilies et al., 2011; Meier et al., 2013), so that the effects were not able to be clearly attributed to one specific source (e.g., supervisor, customer, supervisor). To the best of my knowledge, the present study is the first study that adopted a within-person approach for the test of the SCSS–NA association.

Why should there be a direct spillover effect from daily SCSS at work to employees’ NA before bedtime when being at home? Conflicts with supervisors signal employees that they are on the wrong track and that action is needed (Schwarz & Clore, 1983). As SCSS can be considered to be particularly harmful because supervisors are powerful within organizations (e.g., in charge of salary and promotion decision latitude), employees are expected to continue thinking about the negative interaction with their supervisor. In terms of mood-congruent cognitions, individuals tend to process subsequent information after a negative event in a way that reinforces NA (cf. Judge & Ilies, 2004). Consequently, when employees come into conflict with their supervisors, the negative interaction leads to a negative perception (and interpretation) of the experiences at work and are likely to also influence perceptions (and interpretations) of experiences in the non–work domain. These negative affective states resulting from negative supervisor interactions in turn should

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Fig. 1. Conceptual model of suggested integration of negative work events, personal and environmental moderators, and negative affect.
affect social interactions at home, resulting in daily NA at bedtime. Moreover, employees who experience a higher level of SCSs than they usually do, are less likely to effectively recover from work because thinking about SCSs during leisure time is time consuming and effortful. On the basis of the AET and the given suggestive empirical evidence, I propose the following:

**Hypothesis 1.** Within individuals, there will be a positive effect of daily social conflicts with supervisors (SCSs) on state negative affect (NA) at bedtime.

**Moderators in the short-term association of social conflicts and followers' affective experiences**

In addition to the lack of research studying direct effects of conflicts with supervisors on employees' NA at home, there is still only scant research on moderators and particularly when considering studies that examined short-term effects of workplace conflicts (see Ilies et al., 2011; Meier et al., 2014; Mroczek & Almeida, 2004 for exceptions). For instance, Ilies et al. (2011) found that daily conflicts at work were more strongly related with NA for employees higher in agreeableness and for those with lower levels of social support at work. Meier et al. (2013) revealed by means of a cross-sectional study and a diary study over two weeks that people with relatively high levels of chronic depressive symptoms reacted particularly strongly to conflicts experienced at work.

The present study focused on CSEs and PJPs as moderators in the SCSs–NA association for at least three important reasons: First, both constructs have received considerable attention in organizational research and practice (Chang, Ferris, Johnson, Rosen, & Tan, 2012; Colquitt et al., 2001, 2013; Robbins, Ford, & Tetrick, 2012) and can be considered as important personal and environmental variables accordingly that influence how employees are affected by SCSs. Second, by studying CSEs and PJPs, the present study allowed us to examine, in line with AET theorizing, both the role of personal and environmental factors. According to AET, personal variables like CSEs and environmental variables like PJPs are supposed to moderate the relationship between work events and employees' affective experiences. Third, CSEs were assumed to moderate the SCSs–NA association because earlier research has found CSEs to be significantly related to stressors (ρ = −.30) and strains (ρ = −.42), and particularly to negative affectivity (ρ = −.60) (Chang et al., 2012). Likewise, PJPs were examined as a moderating variable between SCSs and NA because past research showed that PJPs have been meaningfully related to employees' well-being and affective states (Spell & Arnold, 2007), particularly state NA (meta-analytical association between PJPs and state NA: ρ = −.34; Colquitt et al., 2013). In the following, I will explain the moderating role of CSEs and PJPs in more detail.

**The moderating role of core self-evaluations**

Researchers who have considered personality in conflict research have often built on the Big Five conceptualization (e.g., Dijkstra et al., 2005; Ilies et al., 2011). Alternatively, a higher-order personality construct termed the core self-evaluations (CSEs) has been proposed by Judge et al. (1997). Core self-evaluations are people's fundamental appraisals of their self-worth and capabilities, characterized as “evaluation-focused, fundamental, and wide in scope” (Judge et al., 1997, p. 157). Specifically, CSEs represent four dispositional traits: self-esteem, generalized self-efficacy, emotional stability, and locus of control (Judge, Erez, Bono, & Thoresen, 2002). Self-esteem refers to people's general appraisal of themselves, including self-judgments about how much one accepts and likes oneself and whether one has self-respect (Judge et al., 1997). Generalized self-efficacy is the assessment of one's ability to perform successfully in a wide range of situations (Chen, Gully, & Eden, 2001). Emotional stability refers to one's character to remain calm and safe in stressful situations (Eysenck, 1990). Lastly, locus of control refers to one's beliefs about the causes of events in life, with an internal locus of control having the belief that one has control over one's life events (Rotter, 1966). Research has found that the four dispositional traits constituting CSEs were highly correlated and should be therefore conceptualized as a higher order one factor construct (Judge et al., 2002). Past research has shown that CSEs were associated with numerous work and non-work related outcomes, such as job satisfaction and performance, health, career success, and life satisfaction (e.g., Bono & Judge, 2003; Chang et al., 2012). One of the proposed influences of CSEs on employee affective experiences and organizational outcomes is that CSEs function as a moderator between variables (Judge et al., 1997). Specifically, one can imagine that employees react differently to workplace events (e.g., workplace conflicts) depending on the degree to which they evaluate themselves as a competent person.

In the present study, I proposed that within individuals, CSEs would moderate the association between SCSs and NA at bedtime. A review from Chang et al. (2012) helped to understand why CSEs should moderate the relationship between SCSs and NA. Specifically, Chang et al. (2012) suggested approach/avoidance theoretical frameworks as useful for integrating CSE research, proposing that people can be classified in terms of their sensitivity toward positive and negative events (Elliot, 1999). Extraverted individuals, for example, were found to be sensitive to positive (e.g., praise from supervisor) but insensitive to negative stimuli (e.g., conflicts with supervisor). Neurotic individuals showed the reverse reaction pattern toward their environment, focusing highly on negative information. People with low CSEs had low scores in the four dispositional traits self-esteem, generalized self-efficacy, emotional stability, and internal locus of control. Thus, these dispositional traits should foster an avoidance focus. For example, low values in emotional stability should trigger a focus on negative outcomes because one feels anxious and insecure in stressful situations. Potentially, SCSs can be harmful for employees' self-worth since supervisors have—among other privileges—more power compared to their followers. Following the reasoning from the approach/avoidance framework, employees with low emotional stability should be more sensitive to the potential ego-threat of SCSs because they should focus more on negative stimuli. Likewise, a low generalized self-efficacy should make employees more vulnerable to the negative effects of conflicts with their supervisors because people with low self-efficacy should consider themselves incapable of performing successfully in a wide range of situations. Therefore, a conflict
with one’s supervisor should harm employees’ self-worth and evaluations of one’s abilities substantially (Bowling, Eschleman, Wang, Kirkendall, & Alarcon, 2010).

Kammeyer-Mueller, Judge, and Scott (2009) also offered some important explanations for why CSEs should play a role in the stress process. They proposed a theoretical framework in which, on the one hand, CSEs should affect the exposure and the reactivity to stressors, and on the other hand, the choice and the effectiveness of coping. For example, they suggested that employees should be more strongly affected by work stressors when having low core self-evaluations because they are missing a protective personal resource against work stressors. Likewise, they suggested that employees with low CSEs should be more affected by work stressors because they do not believe in having enough resources and control over the stressor SCSs in order to cope with it successfully (Karasek & Theorell, 1990). Regarding coping strategies, Kammeyer-Mueller et al. (2009) assumed that high CSE make employees make more use of a problem-focused coping style, and that CSE increases the effectiveness of this coping style, for example, due to self-confidence. Similar empirical findings support the important role of CSE in the stress process (e.g., Bowling, Wang, & Li, 2012; Kammeyer-Mueller et al., 2009). Related to the present research question therefore, low CSE employees should be particularly affected by SCSs because they lack a personal resource against work stressors, they feel less in control, and they have less confidence, each of which is necessary to cope with SCSs.

Taken together, I propose—based on the above reported theoretical and empirical considerations including AET—that for individuals with low CSEs, the effect of daily SCSs on NA at bedtime should be stronger compared to individuals with high CSEs.

**Hypothesis 2.** Within individuals, core self-evaluations (CSEs) will moderate the positive association between conflicts with supervisors (SCSs) and state negative affect (NA) at bedtime. Specifically, for employees with low CSEs, the effect of SCSs on NA will be stronger compared to employees with high CSEs.

**The moderating role of procedural justice perceptions**

Procedural justice can be defined as “the perceived fairness of decision-making processes and the degree to which they are consistent, accurate, unbiased, and open to voice and input” (Colquitt et al., 2013, p. 200). In their pioneering work, Thibaut and Walker (1975) suggested that people are at least as interested in whether the procedures during a decision-making process are just as they are in the outcomes themselves. The focus in the present study was on PJPs as a moderator in the SCSs–NA relationship because first procedural justice has been suggested to be linked with supervisor–subordinate relationships (Byrne, 1999), second theorists have argued that PJPs have profound effects on a variety of employees’ attitudes and outcomes (e.g., De Cremer & Tyler, 2005) due to their relevance for employees’ self-esteem and social belonging (Koper, Van Knippenberg, Bouwuijs, Vermunt, & Wilke, 1993), and third because procedural justice showed the highest meta-analytical associations with negative emotional state (Robbins et al., 2012). Procedural justice has also been shown to be strongly associated with trust in one’s supervisor and the organization (Colquitt et al., 2013) and with subordinates’ perception of leadership (Folger & Konovsky, 1989). PJPs can be an important resource at work for recipients and they affect emotions (Murphy & Tyler, 2008). When employees have previously experienced injustice within their organization, they tend to be highly sensitive to subsequent justice events (Loi, Yang, & Diefendorff, 2009). Supervisors who are in charge of communicating organizational goals and evaluating employees are often considered as representatives of the broader organization (Eisenberger et al., 2010). Therefore, employees who experience their work organizational context as unjust might show greater affective reactions as a response to SCSs because they do not expect a fair conflict resolution to be achieved within the organization. Further, employees who believe they work in a procedurally fair work environment might not be too worried about a conflict with their supervisor because they are confident that a just resolution to the conflict will be reached. When experiencing a social conflict with one’s supervisor, the previous experience of procedural injustice within the organization is therefore likely to amplify the negative effects of SCSs on NA. Since employees are particularly sensitive to their supervisors’ behavior under the condition of injustice (Loi et al., 2009) and seek support from interpersonal relationships with their supervisors (Lam, Loi, & Leong, 2013), they are expected to be particularly vulnerable when supervisors show inappropriate expectations, verbal aggression, unpleasantness, and ambiguous behavior.

Thus, based on AET and the above considerations, I propose that for individuals with low PJP scores, the effect of daily SCSs on state NA at bedtime should be stronger compared to individuals with high PJPs.

**Hypothesis 3.** Within individuals, procedural justice perceptions (PJPs) will moderate the positive association between conflicts with supervisors (SCSs) and state negative affect (NA) at bedtime. Specifically, for employees with low PJPs, the effect of SCSs on NA will be stronger compared to employees with high PJPs.

**Method**

**Overview**

Within-person and between-person data were collected in 18 public service organizations in the south of Germany. Data were collected by one general survey and by daily surveys. Participants filled out daily surveys over five consecutive workdays (Monday to Friday), three times per day (i.e., in the morning, after the workday, before bedtime). The general survey was completed one week before the start of the daily surveys. Data on workplace conflicts (i.e., SCSs) were collected after the workday and measures on NA
were collected at bedtime. Measures of CSEs and PJPs were collected in the general questionnaire. Control variables were either measured in the daily morning survey (i.e., state NA) or in the general questionnaire (i.e., age, gender, tenure, trait NA).

Procedure
Several mayors of local cities and communities were approached to give consent to their employees’ participation in this study. Employees were then informed about the study’s procedure via Intranet or email systems. The participation was voluntary. Employees enrolled as participants via sending a fax or an email to the research team. After registration, participants first responded to a general one-time survey at the beginning of the study. Then, for five consecutive working days, they were asked to respond to one daily survey in the morning, after the workday and at home before bedtime, respectively. Participants wrote down the exact time when they filled out each questionnaire. To be able to match participants’ questionnaires, participants were asked to generate an identification code for their respective questionnaires. After completion, questionnaires were sent back to the research team in a pre-stamped envelope. As an incentive to complete the questionnaires, participants were offered the participation in a lottery and detailed feedback on the results.

Sample
The initial sample consisted of 138 full-time employees from 18 civil service agencies in the south of Germany who signed up to participate in the study. From these employees, 98 sent back questionnaires that had been filled out in the respective time frames (response rate: 71%). Participants interacted frequently and on a daily basis with their supervisors. The number of completed surveys was 438 for SCS surveys (out of a maximum of 490) at the end of the workday and 482 for NA surveys (out of a maximum of 490) at bedtime. For CSEs and PJPs that were assessed in the general survey, I had complete data sets from 98 participants. Thus, the final sample comprises 920 sets of experience-sampling surveys (out of a maximum of 980), resulting in a very high overall response rate of 93.88%.

Of the participants, 67.3% were female; participants were on average 39.78 years of age (SD = 10.76). The average job tenure was 11.30 years (SD = 9.34) with 39.63 of contract working hours (SD = 2.75). Most participants held a university degree or a comparable education (48.0%), followed by participants with an apprenticeship (35.7%), and with a master craftsman (16.3%). Regarding leadership, 29.6% of the participants indicated holding a supervisory position.

Measures
Day-level variables
Social conflicts with supervisors at work (SCSs). Daily SCSs were measured with an adaptation of the customer-related social stressor scale (CSS, Dormann & Zapf, 2004). The procedure of adaptation and item selection is described in detail by Dudenhöffer and Dormann (2013). The adapted 16-item scale has been used for customer conflicts before (e.g., Dudenhöffer & Dormann, 2013; Volmer et al., 2012). In the present study, the word “customer” was replaced by the word “supervisor”. Responses had to be given on a 5-point agreement scale ranging from 1 (not at all true) to 5 (totally true). Sample items included, “This afternoon, I had to deal with supervisors who criticized me.”, “This afternoon, I had to deal with supervisors who disturbed my working rhythm.”, and “This afternoon, I had to deal with supervisors who were distracted during our interaction.”. Cronbach’s alpha ranged from .88 to .95 over the five days (mean α = .93).

Negative affect (NA). To assess state NA before bedtime, I followed the procedure from Sonnentag, Binnewies, and Mojza (2008) and assessed NA daily at bedtime with six items of the Positive and Negative Affect Scale (PANAS; Watson et al., 1988). Participants indicated on 5-point Likert-type scales (1 = not at all to 5 = very much) the degree to which they felt each affective state described by the adjectives (i.e., distressed, upset, irritable, nervous, jittery, and afraid) at that moment. Cronbach’s alpha ranged from .82 to .85 over the five days (mean α = .84).

Person-level variables
Core self-evaluations (CSEs). CSEs were assessed in the general survey with the 12-item scale from Judge, Erez, Bono, and Thoresen (2003) in a German version from Stumpf, Muck, Hülsheger, Judge, and Maier (2010). A sample item included “I am capable of coping with most problems.”. All items used a 5-point scale with anchors from 1 = to a small extent to 5 = to a large extent. Cronbach’s alpha was α = .91. To examine whether, in line with assumptions from earlier research, a second-order factorial model fits the data better than an uncorrelated first-order model (e.g., Judge et al., 2002), I conducted confirmatory factor analyses (CFAs). Findings showed that the second-order model (i.e., the items of each of the four CSE sub-dimensions, namely self-esteem, generalized self-efficacy, emotional stability, and locus of control load on the respective underlying factors, and then the four sub-dimensions load on an overall CSEs factor) fit the data better than a first-order model where the four dimensions with their respective items are represented as independent constructs (ΔX2 = 252.19, p < .001) (fit indices: first-order model: X2 = 84.67, df = 54, CFI = 0.53, TLI = 0.42, RMSEA = 0.23, SRMR = 0.35; second-order model: X2 = 82.43, df = 48, CFI = 0.94, TLI = 0.92, RMSEA = 0.09, SRMR = 0.05). Subsequently, CSEs are entered as one higher-order construct into the respective analyses.
Procedural justice perceptions (PJPs). The 7-item procedural justice scale from the organizational justice questionnaire by Colquitt et al. (2001) in a German version from Maier, Streicher, Jonas, and Woschée (2007) was employed to measure procedural justice perceptions. Sample items included “How much is the procedure based on accurate information?” and “How much are you able to express your views and feelings during procedures?”. All items used a 5-point scale with anchors from 1 = to a small extent to 5 = to a large extent. Cronbach’s alpha was α = .73.

Control variables. As control variables, age, gender (1 = women, 2 = men), and tenure (years within the current company) were included because relations between negative affect and age and gender exist (e.g., Thomsen, Mehlsen, Viidik, Sommerlund, & Zachariae, 2005). Further, there could be a link between tenure and different degrees of habituation to SCSs. In addition, state NA in the morning was controlled for in the analyses because NA in the morning might increase the likelihood of people engaging in certain types of work-related conflicts. The daily assessment of NA in the morning was analogous to the assessment of NA before bedtime, yet the time of assessment was before lunch. Cronbach’s alpha ranged from .78 to .85 over the five days (mean α = .82). Trait NA was measured in the general survey with six items of the Positive and Negative Affect Scale (PANAS; Watson et al., 1988). I controlled for the general level of NA to account for interindividual differences in participants’ propensity to experience NA. Participants indicated on 5-point Likert-type scales (1 = not at all to 5 = very much) the degree to which they felt each affective state described by the adjectives (i.e., distressed, upset, irritable, nervous, jittery, and afraid) in general. Cronbach’s alpha for trait NA was α = .84.

Results

Data analysis

Because the data had a hierarchical structure with days nested within persons, I used hierarchical linear modeling (HLM version 7; Raudenbush et al., 2011) for analyzing this data set. The person-level variables were centered at the grand mean and the day-level variables were centered at the respective person mean.

Preliminary results

First, it was necessary to examine whether HLM modeling was appropriate. Therefore, I examined the between-person and within-person variance components of the variables (i.e., SCSs and negative affect). For SCSs, within-individual variance was 45.40%. For NA, within-individual variance was 47.57%. Thus, a high proportion of the variance can be attributed to variance within persons, indicating that hierarchical linear modeling is appropriate.

To test the hypotheses, I used the full maximum-likelihood procedure in HLM. All hypotheses were tested in a two-tailed manner. Means and standard deviations of all variables included in the analyses and zero-order correlations are shown in Table 1.

Test of hypotheses

Social conflicts with supervisors at work (SCSs) and negative affect at bedtime (NA)

In Hypothesis 1, I predicted that within individuals, day-level SCSs would be positively related with NA at bedtime. Results are shown in Table 2.

Table 1

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<th>Mean and standard deviations of variables included in the multilevel model and correlations among core study variables.</th>
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<td>Person-level measures&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Age</td>
<td>39.78</td>
<td>10.76</td>
<td>.19</td>
<td>.58</td>
<td>−.00</td>
<td>.06</td>
<td>−.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Gender&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.33</td>
<td>0.47</td>
<td></td>
<td>.20</td>
<td>−.07</td>
<td>.11</td>
<td>−.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Tenure</td>
<td>11.30</td>
<td>9.34</td>
<td></td>
<td></td>
<td>−.10</td>
<td>.08</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 CSES&lt;sup&gt;c&lt;/sup&gt;</td>
<td>3.72</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td>.91</td>
<td></td>
<td>.37</td>
<td>−.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 PJPs&lt;sup&gt;d&lt;/sup&gt;</td>
<td>3.01</td>
<td>0.61</td>
<td></td>
<td></td>
<td></td>
<td>(.73)−.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Trait NA&lt;sup&gt;e&lt;/sup&gt;</td>
<td>1.92</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.84)−.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily measures&lt;sup&gt;f&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 State NA (morning)</td>
<td>1.45</td>
<td>0.60</td>
<td></td>
<td>.11</td>
<td>.01</td>
<td>.02</td>
<td>−.16</td>
<td>.53</td>
<td>(.82)−.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 SCSs&lt;sup&gt;g&lt;/sup&gt;</td>
<td>1.35</td>
<td>0.57</td>
<td></td>
<td>−.03</td>
<td>.05</td>
<td>.07</td>
<td>−.33</td>
<td>−.25</td>
<td>.21</td>
<td>.33</td>
<td>(.93)−.42</td>
</tr>
<tr>
<td>9 State NA (before bedtime)</td>
<td>1.30</td>
<td>0.33</td>
<td></td>
<td></td>
<td>−.01</td>
<td>−.03</td>
<td>−.15</td>
<td>.42</td>
<td>.57</td>
<td>.37</td>
<td>(.84)</td>
</tr>
</tbody>
</table>

<sup>a</sup> p < .05.
<sup>**</sup> p < .01.
<sup>⁎</sup> N = 98.
<sup>b</sup> Gender is coded as 1 = female, 2 = male.
<sup>c</sup> CSES = core self-evaluations.
<sup>d</sup> PJPs = procedural justice perceptions.
<sup>e</sup> NA = negative affect.
<sup>f</sup> N = 438–482.
<sup>g</sup> SCSs = social conflicts with supervisors at work.
To test Hypothesis 1, I started with a null model in which the intercept was the only predictor. In Model 1, the control variables (i.e., age, gender, tenure, trait and state NA in the morning) were added. In Model 2, the predictor variable SCSs was included. Findings from the relevant model for hypothesis testing (Model 2) showed that the effect of daily SCSs on daily NA was significant ($\gamma = 0.1220; SE = 0.0521, t = 2.34, p < .05$). Analyses indicated that on days that employees experienced higher SCSs than their baseline, they reported more negative affect at bedtime. Thus, Hypothesis 1 was supported.

In order to estimate the duration of effects, I ran additional analyses to test spillover effects of SCSs reported after the workday on negative mood before lunchtime and bedtime on subsequent days. These across-day(s) analyses yielded no significant results.

**The moderating role of core self-evaluations (CSEs) and procedural justice perceptions (PJPs) in the social conflicts with supervisors (SCSs) negative-affect-at-bedtime (NA) relationship**

Hypotheses 2 and 3 predicted cross-level moderation between within-person relationships of SCSs at work and NA at bedtime by core self-evaluations (Hypothesis 2) and by procedural justice perceptions (Hypothesis 3). The predictor (i.e., SCSs) on the within-person level was centered on the mean of each person so that the within-person relationship was unconfounded by between-person variance.

In support of Hypotheses 2, CSEs moderated the relationship between SCSs and NA at bedtime ($\gamma = -0.1464; SE = 0.0522, t = -2.80, p < .01$; Model 2 in Table 3). The relationship between SCSs and NA at bedtime was plotted at different levels of CSEs (i.e., at 25th/50th/75th percentiles: see Fig. 2). Findings revealed that only for people with low CSEs there was a positive relationship between high SCSs and NA at bedtime under conditions of low CSEs (for $SD = -1; \beta = 0.15, t = 2.92, p < .01$). Thus, Hypothesis 2 which suggested that the SCSs–NA relationship is stronger under conditions of lower CSEs was supported.

Likewise, there was support for Hypothesis 3 because I found that procedural justice perceptions moderated the SCSs and NA at bedtime association ($\gamma = -0.1996; SE = 0.0619, t = -3.23, p < .01$; Model 3 in Table 3). To obtain a graphical impression of the interaction term—analogous to the procedure to test Hypothesis 2—I plotted the relationship between SCSs and NA at bedtime at different levels of PJPs (i.e., at 25th/50th/75th percentiles: see Fig. 3). Findings showed that only for people with low PJPs there was a positive association between high SCSs and NA at bedtime. Multilevel simple slope tests showed that SCSs were unrelated with NA at bedtime under conditions of high PJPs (for $SD = +1; \beta = -0.7, t = -0.83, p = .41$) and positively related with NA at bedtime under conditions of low PJPs (for $SD = -1; \beta = 0.15, t = 2.92, p < .01$). Thus, Hypothesis 2 which suggested that the SCSs–NA relationship is stronger under conditions of lower PJPs (Hypothesis 3) was supported.

**Discussion**

People are motivated to gain positive evaluations from others (Epstein, 1980). People's reactions to failure and success are guided by their specific self-views and by their global self-esteem (Dutton & Brown, 1997). Supervisors play a pivotal role in employees' lives and are often called a source of employees' self-evaluations and emotional experiences. Building on affective events theory (AET; Weiss & Cropanzano, 1996), the present study examined the spillover effects of daily conflicts with supervisors (SCSs) on employees' state negative affect (NA) at bedtime among civil service agents. In addition, the study investigated whether the association between SCSs and NA differed between persons by examining the moderating role of personal (i.e., core self-evaluations, CSEs) and environmental (i.e., procedural justice perceptions, PJPs) factors. As predicted, findings showed that on days with high levels of perceived

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**Table 2**

Multi-level estimates for models predicting day-specific state negative affect (NA) reported at bedtime.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Null model</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>SE</td>
<td>$t$</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.3015</td>
<td>0.0417</td>
<td>31.23***</td>
</tr>
<tr>
<td>Age</td>
<td>0.0030</td>
<td>0.0041</td>
<td>0.74</td>
</tr>
<tr>
<td>Gender$^a$</td>
<td>0.0011</td>
<td>0.0772</td>
<td>0.01</td>
</tr>
<tr>
<td>Tenure$^b$</td>
<td>-0.0041</td>
<td>0.0047</td>
<td>-0.88</td>
</tr>
<tr>
<td>Trait NA$^c$</td>
<td>0.2806</td>
<td>0.0455</td>
<td>6.17***</td>
</tr>
<tr>
<td>State NA (morning)$^d$</td>
<td>0.2257</td>
<td>0.0412</td>
<td>5.48***</td>
</tr>
<tr>
<td>SCS$^e$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔDeviance</td>
<td>62.06***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1 intercept</td>
<td>0.1317</td>
<td>0.1234</td>
<td></td>
</tr>
<tr>
<td>Level 2 intercept</td>
<td>0.1434</td>
<td>0.0970</td>
<td></td>
</tr>
</tbody>
</table>

Note. $N = 438$ observations nested within 98 individuals. The values are unstandardized parameter estimates for the regression weights ($\gamma$).

* $p < .05$.
** $p < .001$.

$^a$ Gender is coded as 1 = female, 2 = male.

$^b$ Tenure is coded as number of years within the organization.

$^c$ NA = negative affect.

$^d$ SCSs = social conflicts with supervisors at work.
SCSs, employees indicated a higher level of NA at bedtime. Moreover, results revealed that for those employees with low CSE scores and those with low PJP scores, the effects were stronger compared to those with high scores. Findings from the present study are in line with Berscheid’s note pointing to the Lewinian view that “…behavior is a function of the interaction between the properties of the people and the properties of their environment” (Berscheid, 1999, p. 264).

Theoretical implications

The present study makes three important contributions. First, the present study helps to better understand the role of the leader in the daily process that explains NA at bedtime. Thereby, the present study aligns conflict research with spillover research. To the best of my knowledge, the present study is the first that examined whether daily negative leader interactions encroach upon employees’ private lives. These spillover effects are important to consider because employees might be less able to meet family demands which consequently might lead employees to withdraw from work, being unsatisfied or even quit the current job. Furthermore, the support for

![Graph](image-url)
the proposed model at the within-person level provides evidence for the homology of the association between interpersonal conflicts and affective experiences across levels and thereby contributes to the parsimony and external validity of the proposed associations under study (Kozlowski & Klein, 2000). Earlier research has pointed to the issue that it is necessary and insightful to study the same phenomena at different levels (i.e., between-person and within-person) as associations between variables are not always the same across different levels (e.g., Chen, Bliese, & Mathieu, 2005). It should be emphasized that findings from the present study were robust even after controlling for important constructs like trait NA and daily state NA in the morning. Interestingly, there were no spillover effects from SCSs to NA of the next day(s). These findings are in line with earlier empirical findings that have studied the duration of daily life events on state affect (e.g., Johnson et al., 2008). For example, Johnson et al. (2008) measured in a computerized ambulatory monitoring study minor daily events and state affect every 3 h on average for a 7-day period. They found that event negativity is associated with state negative affect for a time period of 6–9 h following the event occurrence. Although there were no spillover effects that lasted longer than approximately 5–8 h in the present study, it is well conceivable that SCSs result in long-term stress reactions (e.g., psychological well-being, somatic health/illness). Experiencing NA at bedtime repeatedly due to SCSs might accumulate over time and influence employees’ allostatic load (cf. Ganster & Rosen, 2013). The allostatic load is defined “as the cost of chronic exposure to fluctuating or heightened neural or neuroendocrine response resulting from repeated or chronic environmental challenge that an individual reacts to as being particularly stressful” (McEwen & Stellar, 1993, p. 2093). Accumulation can not only be tested by spillover effects but also in terms of how frequently employees experience negative affect over a certain period of time or whether negative affective experiences change over a certain time period.

Second, knowledge is added to the understudied issue of workplace conflicts with supervisors. Particularly, supervisors can harm employees’ positive self-view by signaling respect or disrespect by their behavior with consequences for employees’ well-being (Semmer, Jacobshagen, Meier, & Elfering, 2007). The present study showed that daily SCSs—although not very high in frequency—can significantly harm employees’ affective experiences and therefore points to the importance of daily interactions with leaders for employees’ interpretations of how they feel.

Finally, the present research adds to existing research by investigating moderators in the daily SCSs–NA association. It is important to align workplace stressors (here: SCSs) with factors that strengthen or weaken their effects. Previous research has pointed to the importance of CSEs as well as PJPs for employees’ affective experiences (Chang et al., 2012; Spell & Arnold, 2007). The present study showed that employees with low CSEs and/or low PJPs are particularly vulnerable when facing SCSs. The lack of resources—in terms of CSEs and PJPs—hinders employees’ affective experiences even when being at home. Findings emphasize the important role of leaders, especially for employees who lack personal and environmental resources. Low CSEs can trigger an avoidance focus with a concentration on negative stimuli which can be regarded as a lack of a personal resource. Likewise, low PJPs could be understood as hindrance stressors which deplete people’s resources and energy. Employees with low PJPs lack trust in their supervisor and the organization (Colquitt et al., 2013) because they do not believe in a just solution of conflicts within the organization. Thus, it is likely, that on days that employees experience more SCSs at work, their negative emotional reactions tend to be stronger for individuals who have more personal (in terms of low CSEs) and organizational constraints (in terms of low PJPs) than for those with fewer personal and/or organizational constraints. The present research theoretically advances existing research by aligning conflict research with two important other research fields in psychology, namely personality research and organizational justice research.

**Limitations of the present study**

Besides several strengths, this study has some limitations that should be discussed. First, the sample was derived from civil service agencies, potentially limiting the generalizability of results to other industries. Civil service workers in Germany have a relatively high degree of job security (and rather regular working hours) compared to public workers. Future studies might replicate findings with
samples from different contexts. Second, a variety of variables known to be important in the stress process has not been examined. In particular, coping strategies (e.g., Dewe, O’Driscoll, & Cooper, 2010) and other forms of personality factors (e.g., hardiness; Eschleman, Bowling, & Alarcon, 2010) were not included in this study. To obtain a more comprehensive picture of possible moderators in the SCSS–NA relationship, future studies should test for other moderators. Likewise, future studies should investigate variables that have been discussed to potentially mediate the SCSS–NA at bedtime association (e.g., negative perceptions, conflicts at home, impaired recovery experiences). Third, reverse causation such as that those employees with high levels of NA perceive more SCSS should also be tested in future research, ideally by means of pre- and post-conflict measures. Fourth, future research should follow the work of other researchers on the independent effects of task and relationship conflict on employee well-being and affective experiences (e.g., De Dreu & Weingart, 2003; Meier et al., 2013), and examine short-term affective states resulting from conflicts with supervisors while distinguishing between task and relationship conflicts.

Finally, although the diary design of the present study has many advantages, such as that supervisor-related social stressors can be measured in its naturalistic environment and that employees only have to recall supervisor-related conflicts for the last couple of hours, there are also some potential disadvantages. Most importantly, the present diary study with repeated measurement points was quite demanding for participants and the diary study per se might have influenced participants’ reported supervisor-related social stressors.

**Practical implications**

For organizations it is important to know what helps to prevent employees from perceiving difficult supervisor interactions as highly stressful. First of all and most importantly, organizations should inform leaders about the potentially harmful spillover effects of SCSS and train supervisors and employees in strategies that help to prevent or reduce conflicts with supervisors. Deutsch’s (1994) theory of cooperative and competitive goal interdependence, for example, suggests that people who feel that their goals are tied together to other people’s goals in such a way that the chance of one party attaining its goal is increased by the probability of the other party successfully attaining its goal, are more interested in finding mutually beneficial solutions and are more open-minded. As conflict management ideally starts before the conflict arises, supervisors should be trained, for instance, to exchange their views and ideas with their employees about different issues at work. In addition, supervisors should signal to their employees that they work together for mutual advantage which helps to create cooperative goals (Tjosvold, Moy, & Sasaki, 1999).

Regarding personality factors, existing research has examined whether agreeableness acts as a moderator in the workplace conflict–well-being association. The present study extends existing research by focusing on a higher-order personality construct, namely CSEs. As findings showed that SCSS are particularly detrimental for those employees with low CSEs, it is suggested that managers should boost employees’ CSEs. Self-efficacy can be increased through validated self-efficacy trainings, for example by means of communicating support and reassurance (McNatt & Judge, 2008). Moreover, in order to strengthen employees’ personal resources, it seems advisable to increase employees’ coping strategies, particularly problem-solving coping, as it involves effective strategies for reducing strain levels (Kammeyer-Mueller et al., 2009). As CSEs play an important role in the stress process (e.g., Bowling et al., 2012; Kammeyer-Mueller et al., 2009), it seems worthwhile for organizations to strengthen CSEs as a personal resource against stressors which can otherwise impair employees’ affective experiences resulting in long-term stress reactions.

Regarding environmental factors that can buffer the detrimental short-term effects of interpersonal conflicts at work, particularly social support has been discussed in earlier research (Ilies et al., 2011). Findings from the present study suggest that managers should broaden their scope and particularly devote time to the issue of procedural justice. That is that employees should have a voice in decision-making processes, they should evaluate procedures as being unbiased, and they should be able to question certain experienced procedures. When employees evaluate the fairness of procedures an organization uses as fair, negative effects of SCSS for employees’ affective experiences can be attenuated. Communicating why things are done in a special way might therefore not be considered as a merely time-consuming activity but might rather be seen as a fruitful strategy to prevent spillover effects of SCSS to employees’ private lives.

**Conclusion**

Supervisors play a central role in employees’ working lives. The results of this study demonstrated that daily conflicts with supervisors can severely harm followers’ daily affective experiences and even spill over into followers’ private lives. Moreover, study findings suggested that conflicts with supervisors are particularly harmful for employees with low core self-evaluations and for those with low procedural justice perceptions. When possible, organizations should train supervisors and employees in strategies that help to prevent or reduce supervisor conflicts. As it is not always realistic to cut conflicts to zero, study findings indicate that providing employees with personal and/or environmental resources can help to prevent detrimental effects for followers’ affective experiences at home resulting from conflicts with supervisors at work.

**References**


