Do social conflicts at work affect employees’ job satisfaction?

The moderating role of emotion regulation

Alexandra Hagemeister and Judith Volmer

University of Bamberg, Bamberg, Germany

Abstract

Purpose – The purpose of this study is to examine social conflicts with co-workers (SCCWs) as a predictor of job satisfaction with co-workers (JSCWs) on a daily basis. Moreover, dispositional emotion regulation (ER) was suggested to moderate the within-person relationship between daily conflicts at work and JSCWs.

Design/methodology/approach – Ninety-eight employees from German civil service agencies completed surveys across five consecutive work days. Dispositional variables and controls were assessed in a general survey which was completed before the start of the daily surveys.

Findings – Hierarchical linear modeling showed that SCCWs at noon were significantly related to employees’ JSCWs in the evening and that dispositional ER moderated this relationship, indicating that people with high abilities of ER reported higher levels of job satisfaction with their co-workers than people with low abilities of ER after experiencing SCCWs.

Originality/value – The present study links conflict research with organizational and personality research. The findings broaden the understanding of social conflicts in an organizational context and further highlight ER as an important factor which can buffer the negative effects of workplace conflicts.

Keywords Job satisfaction, Emotion regulation, Diary study, Social conflicts with co-workers

Paper type Research paper

Introduction

Social interactions are an important component of interpersonal relationships and part of almost everyone’s job. For instance, at work people interact socially with co-workers, clients and supervisors. It is reasonable to assume that social interactions play an essential role regarding different individual outcomes, such as employees’ affective experiences, work-related attitudes or behaviors. When it comes to negative social interactions at the workplace, past research has demonstrated that links between interpersonal conflicts and diverse individual outcomes exist. According to the European Framework for Psychosocial Risk Management (Leka et al., 2008), negative interpersonal relationships at work (e.g. social conflicts with co-workers [SCCWs]) represent one of ten different sources of occupational hazards. Additionally, Nixon et al. (2011) indicated that social conflicts have a strong impact on employees’ experiences at work (e.g. individuals’ mood). Moreover, past research demonstrated that destructive interpersonal relationships at the workplace can elicit similar health problems as physical stressors (e.g. noise, poor working conditions) or organizational ones (e.g. workload; Hauge et al., 2010). Further, previous studies showed that negative

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social interactions serve as severe work stressors (Bolger et al., 1989; Hashimoto, 1995; Spector and Bruk-Lee, 2008; Spector and Jex, 1998; Thomas et al., 2005) and that workplace conflict can be understood as a potential stressor which leads to psychological strain (Dijkstra et al., 2011).

On the basis of these findings, the importance of workplace conflicts for employee-related outcomes, such as employee health and well-being, can no longer be questioned. As broadly defined by Boulding (1963), social conflicts constitute the perception of incompatibilities and the discrepancy in views by the parties involved. More specifically, social workplace conflict can be classified as a:

[... “dark side” construct that has primarily negative, destructive, and aversive consequences to employees’ well-being and task performance, to citizenship behavior and performance in work teams, and to organizational fitness and survival chances. (De Dreu, 2011, p. 461)

In particular, the literature distinguishes task conflict from relationship conflict (Amason, 1996; Jehn and Bendersky, 2003; Simons and Peterson, 2000), two types of conflicts that can occur at the workplace. According to Jehn (1995), relationship conflict “exists when there are interpersonal incompatibilities among group members, which typically includes tension, animosity, and annoyance among members within a group” (p. 258). Task conflict, in turn, is described as “disagreements among group members about the content of the tasks being performed, including differences in viewpoints, ideas, and opinions” (Jehn, 1995, p. 258). Regarding the research question of the present study, relationship conflict, operationalized as SCCWs, was assumed to predict employees’ job satisfaction with co-workers (JSCWs).

Previous research has shown that social conflicts cost effort and cause job-related stress (De Dreu and Weingart, 2003; De Wit et al., 2012; Dijkstra et al., 2005). Moreover, stress triggered by social conflicts at work has been found to result in impaired relationships, decreased job satisfaction and a loss of productivity (Kidder, 2007). In addition, empirical findings demonstrate that – in contrast to other distressing events – employees do not show habituation effects toward social conflicts (Bolger et al., 1989). Another important issue that has been gaining organizational importance in recent years is that social conflicts at work are linked to different negative outcomes, such as higher turnover intentions, decreased organizational and affective commitment as well as lower job satisfaction (Frone, 2000; Guerra et al., 2005; Heffner and Rentsch, 2001; Spector and Jex, 1998; Thomas et al., 2005). Further, Bruk-Lee and Spector (2006) studied the impact of social conflicts with supervisors and co-workers on counterproductive work behavior and showed a significant relationship between both variables. Additional empirical findings highlighted the detrimental effects of social conflicts at work on diverse indicators of team effectiveness (Behfar et al., 2011; De Dreu and Van Vianen, 2001; Ensley and Pearce, 2001; Jehn, 1995; Jehn and Chatman, 2000; Rau, 2005). Also, previous studies indicated that conflicts in general limit information processing because team members are likely to spend a lot of time and energy focusing on each other rather than on their tasks (Greer et al., 2008; Pelled, 1996; Simons and Peterson, 2000). Moreover, social conflicts have been found to limit employees’ cognitive functioning by increasing their stress and anxiety levels, which in turn results in negative interpersonal behaviors, including harsh language, hostility, threats and intimidation (Behfar et al., 2011; Simons and Peterson, 2000; Yang and Mossholder, 2004). Additionally, it has been found that social conflict leads to negative interpersonal attributions for co-workers’ behaviors and creates a circle of conflict escalation (Greer et al., 2008; Simons and Peterson, 2000).

Focusing on employee health and well-being, several studies provided insight into the negative consequences of workplace conflicts (Bolger et al., 1989; De Dreu and Beersma, 2005; De Dreu et al., 2004; Dijkstra et al., 2005; Dijkstra et al., 2005; Volmer, 2015; Volmer
et al., 2012). For instance, social conflicts at work have been found to elicit burnout (De Dreu et al., 2004), anxiety and depression (Spector and Jex, 1998) as well as tension and fatigue (De Dreu et al., 2003). Further, as reported by Ilies et al. (2011) as well as by Volmer (2015), employees who experience more frequent daily social conflicts at work tend to report higher levels of negative affect than employees who are less involved in social conflicts.

Although there might be positive aspects of conflicts in organizations, including enhanced individual achievement, higher quality of group decision-making, stimulating effects on change, learning and productivity (De Dreu and Van de Vliert, 1997), there is a considerable amount of studies highlighting the negative impact of social conflicts on different physiological and psychological outcomes (Bruk-Lee and Spector, 2006; De Dreu et al., 2004). However, to increase employee well-being, to positively influence employees’ work-related attitudes (e.g. job satisfaction) and behavior (e.g. prosocial behavior) as well as to enhance performance, more and fully differentiated research on social conflicts at the workplace, different individual outcomes and especially on personal resources is needed.

More specifically and given that job stress and therefore workplace conflicts constitute a key risk factor, it is necessary to determine antecedents, potential mediators and moderators as well as different individual outcomes of social conflicts. As conflict, work and organizations are strongly intertwined (De Dreu, 2011) and as organizations without conflicts do not exist (Pfeffer, 1997; Pondy, 1967), this study aims at providing important implications for both organizations and individuals to counteract the detrimental effects of social workplace conflicts.

Research gaps and study goals
Regarding the literature on social workplace conflicts, a few limitations should be mentioned. First, traditional research on social conflicts mainly focused on conflicts as a chronic work stressor rather than providing a more dynamic conceptualization of conflicts. Predominantly, social conflicts were assessed within cross-sectional designs, whereas a daily within-person understanding of conflicts and its consequences remained largely unconsidered. Although a cross-sectional approach has been effective in demonstrating a link between social conflicts and different outcomes, it does not explain the substantial daily fluctuations in social conflicts within employees. However, most research on social conflicts at work does not take into account that conflicts can fluctuate from one day to another and that they can elicit short-term effects on individual outcomes (e.g. well-being; Bakker and Daniels, 2013). According to this aspect, day-level conflicts should be taken into consideration, indicating that daily experiences of social conflicts might aggregate over time and result in chronic impairment, such as anxiety and depression (Spector and Bruk-Lee, 2008) as well as depleted physiological resources (McEwen, 1998), in the long run. Further, a few studies demonstrated that daily spillover effects of social conflict at work to the nonwork domain exist (Martinez-Corts et al., 2015; Volmer, 2015; Volmer et al., 2012). However, further research on daily social conflicts is still needed.

As a second point of limitation, it should be noted that there is only little research focusing on SCCWs (for exceptions, see Bruk-Lee and Spector, 2006; Ilies et al., 2011; Sliter et al., 2011). Previous studies paid attention to supervisor or customer conflict (Grandey et al., 2004; Ismail et al., 2012; Liu et al., 2011; Totterdell and Holman, 2003), or took broader categories of workplace conflicts into consideration (Bolger et al., 1989; Mroczek and Almeida, 2004). Further, if SCCWs have been investigated in previous studies, conflicts were rarely assessed with within-person designs. As Katz and Kahn (1978) emphasized, “every aspect of organizational life that creates order and coordination of effort must overcome tendencies to action, and in that fact lies the
potentiality for conflict” (p. 617). Drawing on this aspect and further considering that nowadays in organizations most employees usually work in teams, interact with people from the same department or have their workplace in open-space offices, it is reasonable to assume that SCCWs (e.g. regarding similar job tasks, different interests and other issues) occasionally occur and that these interpersonal relationships with co-workers affect employees’ well-being as well as their work-related attitudes and behaviors. Beside the importance of social interactions at the workplace regarding diverse employee-related outcomes, SCCWs are also likely to affect organizational functioning and success, considering the increasing popularity of team-based organizational structures (Labich, 1996).

Third, previous studies have scarcely investigated the role of potential moderators in the relationship between social conflicts at work and employees’ work-related attitudes, especially in consideration of personal and/or environmental factors acting as cross-level moderators (for exceptions, see Dijkstra et al., 2005; Volmer, 2015). For instance, dispositional variables such as personality characteristics might affect the detrimental effects of social conflicts on different individual outcomes. Thus, personal factors (e.g. emotional intelligence, emotion regulation [ER]) might have an influence on how employees cope with stressful situations and therefore buffer the negative effects of social conflicts on employees’ work-related attitudes (e.g. job satisfaction) and other important outcomes. Hence, in this context, more research regarding moderators is needed.

As an initial step toward addressing the abovementioned gaps in the literature, the aim of this study is to broaden the understanding of short-term effects of social conflicts at work on employees’ work-related attitudes in the evening after work. Social conflicts at the workplace were examined as a temporally dynamic construct focusing on how social conflicts can predict JSCWs on a daily basis. As mentioned above, very few publications focused on daily fluctuations and within-person variance in workplace conflicts (for exceptions, see Ilies et al., 2011; Martinez-Corts et al., 2015; Meier et al., 2013; Volmer, 2015). Further, this study assessed SCCWs because conflicts with customers and supervisors have already been investigated in previous studies (Grandey et al., 2004; Liu et al., 2011; Volmer et al., 2012). On the basis of the assumption that employees have numerous daily interactions with their co-workers, SCCWs are likely to not only affect employees’ health and well-being but also their attitudes and behaviors. Thus, this study considered daily SCCWs as an antecedent of employees’ work-related attitudes, which were operationalized as employees’ JSCWs. As mentioned above, studies considering moderators, specifically on a dispositional level, are still lacking (for exceptions, see Dijkstra et al., 2005; Volmer, 2015). Therefore, an important goal of this study is to examine whether dispositional ER acts as a moderator in the daily SCCWs–JSCWs association (see Figure 1 for the conceptual model).

Regarding the previous aspects, this study aims at contributing to the literature in several ways.

Theoretical background and development of hypotheses
With regard to the negative consequences of social conflicts, different affective reactions (e.g. frustration and anger) are likely to occur (Desivilya and Yagil, 2002; Medina et al., 2005). In turn, these affective experiences might influence employees’ work-related attitudes and behaviors in the long run. Considering SCCWs as negative work events and JSCWs as an important job-related attitude as well as ER as a personal disposition, the affective events theory (AET; Weiss and Cropanzano, 1996) offers an important theoretical framework for the research question of this study. Concisely, AET explicitly suggests work events as antecedents of affective states and subsequent work-related attitudes and behaviors.
Moreover, stable personal variables such as trait affect or emotional intelligence are proposed to directly influence the experience of emotions and to act as a moderator in the work events – affective states association. Drawing on these aspects, dispositional ER was suggested to moderate the SCCWs–JSCWs association in this study.

Additional conceptual justification for the hypothesized relationship was partially aided by the introduction of the job demands-resources model (JD-R model; Demerouti, et al., 2001). First, this model proposes job demands (e.g. physical workload, time pressure, shift work) to deplete employees’ energy resources and therefore to decrease employees’ psychological well-being (i.e. emotional exhaustion) in the long run. Second, Demerouti et al. (2001) suggest job resources (e.g. rewards, job control and social support) as antecedents of employees’ work engagement and positive work outcomes, such as organizational commitment or performance. Specifically, job demands refer to “physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological cost (e.g. exhaustion)” (Demerouti et al., 2001, p. 501). Job resources, in turn, are described as physical, social or organizational aspects of the job that are functional in achieving work goals, reduce job demands and stimulate personal growth and development. In the context of workplace conflict, SCCWs can be regarded as job demands which might affect employees’ well-being if resources are depleted. More importantly, supportive social interactions and cooperative co-workers might constitute critical job resources and might, for instance, affect employees’ work engagement through increased job satisfaction. Conversely, employees who experience SCCWs might not possess these social resources. Thus, it might be conceivable that a lack of social support due to prolonged SCCWs might affect employees’ JSCWs and their work engagement in the long run.

Social conflicts with co-workers and job satisfaction
On the basis of previous findings which demonstrated that social conflicts affect employees’ psychological well-being, such as negative affect (Ilies et al., 2011; Volmer, 2015) as well as burnout (De Dreu et al., 2004) and depression (Spector and Jex, 1998), it is reasonable to assume that SCCWs can result in negative mood. In turn and in line with AET, these negative affective experiences can lead to decreased job satisfaction, especially if SCCWs occur repeatedly. Indeed, negative work events, such as SCCWs, do not have to elicit direct negative reactions or consequences within the individual. Likewise, it is possible that SCCWs exert their negative effects on important employee outcomes (e.g. well-being or work-related attitudes) even a few hours later (e.g. in the evening after the work day). Therefore, in this study, a daily design was used to assess if SCCWs at noon affect employees’ JSCWs in the evening after the work day. Considering the findings from

**Figure 1.** Graphical illustration of the hypothesized model, including daily SCCWs as an antecedent of daily JSCWs, and dispositional ER as a personal moderator
previous studies which mainly focused on physiological and psychological well-being as outcome variables (De Dreu et al., 2003, 2004; Volmer, 2015), this study investigated the daily effect of SCCWs on a work-related attitude, namely, JSCWs.

In the literature, job satisfaction is defined as the “evaluative judgement one makes about one’s job or job situation” (Weiss, 2002, p. 175). Further, job satisfaction has been identified as a key job attitude which leads to important organizational outcomes, including productivity, absenteeism and turnover (Egan et al., 2004; Iaffaldano and Muchinsky, 1985; Judge et al., 2001; Locke, 1976). Although job satisfaction has been found to be relatively stable over time (Steel and Rentsch, 1997), there is also evidence of a day-to-day variability in satisfaction levels (Bowling et al., 2005). For instance, Ilies and Judge (2002) found a within-individual relationship between mood and job satisfaction. Moreover, past research showed that different variables such as organizational justice or work–family conflict affect employees’ day-level job satisfaction (Gao et al., 2013; Loi et al., 2009) which in turn has the potential to impact individual work behaviors, including workplace deviance and organizational citizenship (Judge et al., 2006). Further, a few studies indicated that social conflicts at work are linked to job satisfaction (Guerra et al., 2005; Spector and Jex, 1998), whereas high levels of social support received from co-workers have shown to positively predict job satisfaction (Ducharme and Martin, 2000). However, these studies are rather an exception. Most importantly, the daily impact of SCCWs on JSCWs has not been examined so far. Yet, it is important to investigate different antecedents of job satisfaction, given the wide array of negative consequences of impaired job satisfaction (e.g. increased workplace deviance, decreased organizational citizenship behavior). Drawing on the theoretical considerations of AET and the JD-R model as well as on the empirical findings reviewed above, it was expected that there would be a negative association between SCCWs and JSCWs on a daily level. Thus, the following hypothesis is proposed:

\[ H1. \] Daily SCCWs at noon will be negatively related to daily JSCWs in the evening.

**The moderating role of emotion regulation**

In the literature, ER is the subject of a range of different models and theories (Lazarus, 1991; Walden and Smith, 1997). One of the most influential and well-established theoretical frameworks was developed by Gross (1998) who defines ER as “processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (p. 275). Further, Gross (1998) describes that “emotion regulatory processes may be automatic or controlled, conscious or unconscious, and may have their effects at one or more points in the emotion generative process” (p. 257). Gross (1998) provided a fine-grained conceptualization by suggesting ER to consist of five different dimensions: situation selection, situation modification, attention deployment, cognitive change and response modulation. In detail, situation selection “involves choosing to approach or avoid certain stimuli as a way to regulate felt emotions” (Diefendorff et al., 2008, p. 499), whereas situation modification “involves changing the situation so as to alter its emotional impact on oneself” (Diefendorff et al., 2008, p. 499). Attentional deployment refers to “focusing one’s attention away from the emotion-provoking event or target by using techniques such as distraction” and cognitive change comprises strategies to “focus on reappraising or reinterpreting situations so as to modify their subjective meaning” (Diefendorff et al., 2008, p. 499). Moreover, response modulation describes both faking unfelt emotions and concealing felt emotions. Generally, ER is considered as a stable construct and can be defined as an individual trait (Gross and John, 2003; John and Gross, 2007). However,
a few studies examined ER also as a situational or stress-related variable (Grandey et al., 2004; Totterdell and Holman, 2003).

In recent years, research on ER has grown considerably (Gross, 2013) and has also aroused interest in the organizational context (Niven et al., 2013; Totterdell and Holman, 2003). Moreover, a similar concept called emotional labor has become popular in the past decades. In particular, emotional labor describes “the management of feeling to create a publicly observable facial or bodily display” (Hochschild, 1983, p. 7) and comprises two distinct strategies: deep acting (i.e. changing emotions) and surface acting (i.e. changing expressions). Particularly, in the service sector, employees often have to engage in emotional labor (Ashforth and Humphrey, 1993; Grandey, 2003; Hochschild, 1983), such as expressing certain emotions while suppressing others (Grandey, 2000). This discrepancy between felt and expressed emotions is called emotional suppression and has been found to elicit an aversive psychological state and negative emotional experiences (Erickson and Wharton, 1997; Heuven et al., 2006). Beyond ER and emotional labor, emotional intelligence has further shown to play an essential role in the work context. As introduced by Mayer et al. (1999), emotional intelligence refers to “an ability to recognize the meanings of emotions and their relationships, and to reason and problem-solve on the basis of them” (p. 267). Especially on a team level, emotional intelligence is considered as an important factor, as it has been linked to team performance (Jordan et al., 2002; Jordan and Troth, 2004) or team trust (Barczak et al., 2010). Regarding research on workplace conflicts, emotional intelligence is negatively associated with task and relationship conflict (Ayoko et al., 2008) and constitutes an antecedent of conflict management styles (i.e. integrating and compromising styles; Shih and Susanto, 2010). Concluding, the abovementioned aspects and findings highlight the importance of emotions and emotional skills (e.g. emotional intelligence and ER) experienced and applied at the workplace.

Focusing on ER, there is considerable research highlighting its role regarding both organizational and health-related outcomes (Diefendorff et al., 2008; Matta et al., 2014). For instance, Diefendorff et al. (2008) emphasized that the experience of various affective negative events at work is significantly associated with the use of different ER strategies which help employees to regulate their negative emotions. Further, ER is associated with work–family relationship (Zhao et al., 2012), mental health (Hu et al., 2014) and performance (Goldberg and Grandey, 2007) as well as with general job satisfaction and turnover intention (Côté and Morgan, 2002). For this reason, it is necessary to broaden the understanding of the role which ER strategies play at the workplace and further to investigate whether ER can be interpreted as a personal resource which can buffer the daily negative effects of different organizational factors, such as job stress, conflicts or emotional job tasks.

Beside studies on the use of different ER strategies and associated outcomes, there is also research focusing on the question of why people engage in ER. For instance, Fischer et al. (2004) suggest impression management (i.e. ER to avoid being evaluated negatively), prosocial motives (i.e. ER to please or protect others) and influence (i.e. ER to influence the behavior of others) as motives of ER. Regarding the work context, Von Gilsa and Zapf (2013) discuss that – beside obeying display rules within the organization – there are different motives underlying employees’ use of ER strategies and that these motives constitute important antecedents of subsequent ER processes. More specifically, Von Gilsa et al. (2014) distinguish between three motive categories (i.e. pleasure, prevention and instrumental) and further show that these motives are also linked to different ER strategies (e.g. emotional deviance and automatic regulation).

Drawing on AET, it is clear that SCCWs constitute negative work events and that they are emotionally demanding. As further posited by Jehn (1997) and Jehn et al. (2008), all types
of conflict are generally associated with some level of negative affect. Considering the issue of emotions at the workplace, previous studies demonstrated that when conflicts occur, this may elicit emotional reactions such as a negative mood (Bodtker and Jameson, 2001; De Wit et al., 2012; Meister et al., 2012), which in turn is linked to lower job satisfaction (Ilies and Judge, 2002). Specifically, as suggested in AET (Weiss and Cropanzano, 1996), the experience of affective work events (e.g. SCCWs) may result in discrete emotional reactions which have the potential to influence affective-driven appraisal processes and cognitions, such as job satisfaction, in the long run. Moreover, personal variables, such as ER, might exert a moderating effect on the affective work events–job satisfaction association. According to these aspects, it seems likely that ER strategies might have an impact on how employees experience stressful situations, such as social workplace conflicts, and might also influence the extent to which one is satisfied with one’s co-workers after having experienced SCCWs during the work day. For this reason, in this study, ER was suggested to moderate the relationship between SCCWs and JSCWs.

In the current literature, only a few studies considered ER as a moderator in the relationship between negative workplace events and different occupational outcomes. For instance, Matta et al. (2014) demonstrated that the use of the reappraisal ER strategy moderates the relationship between significant work events and negative emotional reactions. In addition, there is evidence that ER acts as a moderator in the association of emotional demands at work and employees’ health and motivation, indicating that people with higher ER abilities have more motivation at work and increased well-being at home when they have to face high emotional demands at work (Donoso et al., 2015). As shown by Chi and Liang (2013), there is also evidence for ER as a moderator in the relationship between supervisors’ abusive supervision and employees’ emotional exhaustion. With regard to workplace conflicts, ER has shown to moderate the relationship between social conflicts and affectivity as well as task performance (Griffith et al., 2014).

Since ER has been suggested to powerfully shape which emotions individuals experience in a given situation (Eisenberg et al., 2000; Gross, 1999), an emotion-regulation approach would be useful regarding the investigation of daily social conflicts at the workplace. In light of this aspect, the theoretical suggestions of AET and the abovementioned empirical findings, dispositional ER was expected to exert a moderating influence in the relationship between SCCWs and JSCWs. Thus, the following hypothesis is proposed:

H2. Dispositional ER will moderate the negative association between daily SCCWs at noon and daily JSCWs in the evening, such that the association is less negative when dispositional ER is high rather than low.

Method
Overview
This study was conducted as a daily diary survey. Within- and between-person data were collected in civil service agencies in Germany. Data collection consisted of one general survey and daily surveys which were completed across five consecutive work days and three times per day (i.e. at the beginning of the work day, at noon and after the work day). The general survey was completed one week before the beginning of the daily surveys. Data on SCCWs were collected at noon, whereas daily JSCWs were assessed in the evening after the work day. Both dispositional ER and control variables (i.e. age, sex, education and organizational tenure) were measured in the general questionnaire.
Procedure and sample
Data collection took place in 18 public service organizations in Southern Germany. As a first step, managers of civil service agencies were contacted and asked for permission to recruit their employees as study participants. Second, employees received general information about goals and procedure of the study. Participants were contacted via intranet or email and they were able to answer via email or fax regarding their agreement on participation. After registration, participants received a survey package, which included detailed instructions on when and how to complete the questionnaires. Subsequently, participants filled out the general questionnaire and continued with the daily surveys one week later. All control variables were assessed in the general survey. During five consecutive work days, participants were asked to answer the daily questions in the morning, at noon and in the evening, respectively. Further, participants were requested to write down the exact time when they completed each questionnaire. In addition, participants were asked to generate an identification code to facilitate matching of participants’ questionnaires. As a last step, the completed questionnaires were sent back to the research team in a pre-stamped envelope. Both the participation in a lottery and an anonymized feedback rapport on the study results had been offered as incentives to increase compliance. The study was introduced as research on “work and well-being” and participation was voluntary. Confidential and anonymous use of data was guaranteed.

The initial sample consisted of 138 full-time public-sector employees working in different organizations in Southern Germany, including institutions such as citizens registration or youth welfare offices, for instance. More specifically, the majority of participants worked in the customer service and pursued activities regarding different customer affairs and administrative tasks. In all, 101 employees sent back questionnaires. Response rate resulted in 71.19 per cent. Three of these employees did not fill out the questionnaires in the requested time frames (i.e. in the morning, at noon and in the evening), resulting in a final sample of 98 employees. The number of completed surveys for SCCWs was 446 (out of a maximum of 485) at noon and 482 (out of a maximum of 485) for JSCWs at the end of the work day. The data set for dispositional ER, which was assessed in the general survey, consisted of 98 participants. In general, the final sample comprised 928 daily observations (out of a maximum of 970), and overall observations resulted in a very high rate of 95.67 per cent.

About two thirds (67.3 per cent) of the participants were female. Participants had an average age of 39.78 years (SD = 10.76) with a range from 20 to 60 years. Forty-eight per cent of the participants held a university degree or comparable education, followed by participants with an apprenticeship (35.7 per cent) or with a master craftsman/technical college degree (16.3 per cent). Participants had, on average, 15.20 years of job experience (SD = 10.59) and had worked for their current company for 11.30 years (SD = 9.34). Overall, 29.6 per cent of the participants reported holding a supervisory position. Regarding working hours, the average contractual working time was 39.63 (SD = 2.75) per week. With regard to living and family circumstances, the majority of participants reported to live with a partner (63.2 per cent), followed by participants who reported living alone (30.7 per cent). Overall, 38.8 per cent of the participants had children.

Measures
Items from scales that were originally developed in English were translated into German and translated back to English by native speakers to ensure that content and meaning remained unchanged during the translation process.
Daily survey data

Social conflicts with co-workers at work. Daily SCCWs were measured with an adapted version of the customer-related social stressor scale developed by Dormann and Zapf (2004). The adapted scale included 16 items which had been used before to measure customer conflicts (Dudenhöffer and Dormann, 2013; Volmer et al., 2012) and conflicts with supervisors (Volmer, 2015). In this study, the word “customer” was replaced by the word “co-workers”. Participants were asked to assess their daily SCCWs on a five-point Likert scale ranging from 1 (not at all) to 5 (entirely). Sample items included “This noon, I had to deal with co-workers who did not understand that I have to comply with certain rules”, “[...] I had to deal with co-workers who criticized me” and “[...] I had to deal with co-workers who demanded special treatment”. Cronbach’s alpha ranged from 0.88 to 0.92 across the five daily measurement occasions (mean $\alpha = 0.91$).

Job satisfaction with co-workers. Daily JSCWs was measured with one item from a scale employed by Dudenhöffer and Dormann (2015). Participants were instructed to rate their JSCWs on a five-point Likert scale which ranged from 1 (not satisfied at all) to 5 (very satisfied). The single-item was “At this moment, how satisfied are you with your co-workers’ behavior?”.

General survey data

Dispositional emotion regulation. Dispositional ER was assessed with the 14-item selection from Diefendorff et al. (2008). Participants indicated how frequently they used ER strategies in general on a five-point Likert scale (1 = not at all to 5 = entirely). A sample item included “Seek out individuals that make me feel good”, “Pretend I am in a good mood” and “Remind myself that I can’t control everything”. Cronbach’s alpha was 0.60.

Control variables. Gender (1 = women, 2 = men), age, education (1 = no professional training, 2 = apprenticeship completed, 3 = master craftsman/technical college degree, 4 = university degree) and organizational tenure (years of employment within the current company) were controlled for, as there is evidence that each of these variables may affect job satisfaction (Spector, 1997; Wright and Bonett, 2007).

Results

Data analysis

The data had a two-level hierarchical structure: Days were nested within persons. Within-person measures across days (i.e. SCCWs and daily JSCWs) constitute the within-individual level of analysis (Level 1), whereas dispositional ER as well as the controls are at the between-individual level of analysis (Level 2). Hierarchical linear modeling (HLM Version 7.01; Raudenbush et al., 2011) was used to test the hypothesized within-person and cross-level moderating effects. Day-level predictor variables were centered at the respective person mean. This form of “group mean” centering effectively controls for the potentially confounding effects of between-person differences on the within-person relationships (Enders and Tofghi, 2007; Hofmann et al., 2000). Person-level predictor variables were centered at the grand mean.

Preliminary results

Prior to testing hypotheses, it was necessary to examine whether HLM modeling was appropriate. Therefore, the amount of within-individual variance in the criterion variable was examined by running a null model to predict JSCWs. In HLM, the null model is a regression of the dependent variable at the within-person level of analysis with no Level 1 or
Level 2 predictors. Results indicated that 49.65 per cent of the total variability in daily JSCWs was attributable to within-person variance across days, whereas 50.35 per cent of the total variance was attributable to between-person variation. Thus, the amount of within-person variability was nontrivial, suggesting that it was appropriate to utilize HLM.

To test hypotheses, restricted maximum likelihood estimation was employed (Hox, 2002). Means, standard deviations and zero-order correlations among study variables are reported in Table I.

### Test of hypotheses

First, multilevel analyses for the dependent variable (i.e. daily JSCWs) were conducted. Therefore, four different HLM models were compared: null-model, Model 1, Model 2 and Model 3. In the null model, the intercept was the only predictor. In Model 1, person-level control variables were entered (i.e. sex, age, education and organizational tenure). H1 predicted a negative daily within-person association between SCCWs and JSCWs. Hence, SCCWs were added as predictor in Model 2. In consensus with H2, which predicted that ER exerted a cross-level moderating effect on the within-person relationship between SCCWs and JSCWs, both the cross-level direct effect of ER and the cross-level interaction effect involving ER and SCCWs were entered simultaneously in Model 3.

Table II shows results from HLM analyses, including standardized parameter estimates, model fit information (i.e. deviance values) and differences between the deviance values of models to be compared. Model 1 did not show a significant improvement over the null model ($\Delta – \text{Deviance} = 15.30, p \geq 0.500$). Further, control variables did not significantly predict JSCWs. Model 2, which included SCCWs as predictor, fit the data better than Model 1 ($\Delta – \text{Deviance} = 92.13, p < 0.001$). Results indicated that the within-person effect of daily SCCWs on daily JSCWs was significant and negative ($\gamma = -0.352, t(96) = -2.60, p = 0.011$). Consistent with H1, analyses supported that day-level SCCWs negatively predicted daily JSCWs. The cross-level moderating effect of dispositional ER on the daily within-person association between SCCWs at noon and JSCWs at the end of the work day was also significant ($\gamma = 0.671, t(95) = 2.11, p = 0.038$), yielding support for H2. As shown in Figure 2, the relationship between daily SCCWs and daily JSCWs was plotted at two different levels of dispositional ER to facilitate interpretation (i.e. 25th/75th percentiles). Consistent with the predictions of this study, results demonstrated that at low levels of dispositional ER, the negative

### Table II

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td><strong>Person-level measures</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
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<tr>
<td>1 Sex&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.33</td>
<td>0.47</td>
<td>-</td>
<td>0.19</td>
<td>0.00</td>
<td>0.20</td>
<td>0.03</td>
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<tr>
<td>2 Age</td>
<td>39.78</td>
<td>10.76</td>
<td>-</td>
<td>0.10</td>
<td>0.58***</td>
<td>0.23*</td>
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<td>3 Education&lt;sup&gt;c&lt;/sup&gt;</td>
<td>3.12</td>
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<td>-</td>
<td>-0.20</td>
<td>0.07</td>
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<tr>
<td>4 Organizational tenure</td>
<td>11.30</td>
<td>9.34</td>
<td>-</td>
<td>0.12</td>
<td></td>
<td></td>
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<tr>
<td>5 Dispositional ER</td>
<td>3.00</td>
<td>0.42</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Day-level measures</strong>&lt;sup&gt;d&lt;/sup&gt;</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6 Daily conflicts with co-workers&lt;sup&gt;e&lt;/sup&gt;</td>
<td>1.44</td>
<td>0.54</td>
<td>(0.91)</td>
<td></td>
<td>-0.42***</td>
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<tr>
<td>7 Daily job satisfaction&lt;sup&gt;f&lt;/sup&gt;</td>
<td>4.00</td>
<td>0.95</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Notes: <sup>a</sup>N<sub>persons</sub> = 98; <sup>b</sup>Sex is coded as 1 = female, 2 = male; <sup>c</sup>Education is coded as 1 = no professional training, 2 = apprenticeship completed, 3 = master craftsman/technical college degree, 4 = university degree; <sup>d</sup>N<sub>days</sub> = 447; <sup>e</sup>Conflicts with co-workers were assessed at noon; <sup>f</sup>Daily job satisfaction with co-workers; *p < 0.05, ***p < 0.001

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223 Moderating role of emotion regulation
<table>
<thead>
<tr>
<th>Variable</th>
<th>Null model</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
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<td></td>
<td>Coefficient</td>
<td>$t$</td>
<td>Coefficient</td>
<td>$t$</td>
</tr>
<tr>
<td>Intercept</td>
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<td>53.44***</td>
<td>3.9869 (0.07)</td>
<td>54.89***</td>
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<td>Sex$^a$</td>
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<td>-0.52</td>
<td>-0.116 (0.17)</td>
<td>-0.69</td>
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<td>Age</td>
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<td>-0.41</td>
<td>-0.002 (0.01)</td>
<td>-0.19</td>
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<tr>
<td>Education$^b$</td>
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<td>1.23</td>
<td>0.067 (0.09)</td>
<td>0.76</td>
</tr>
<tr>
<td>Organizational tenure</td>
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<td>-0.76</td>
<td>-0.012 (0.01)</td>
<td>-0.93</td>
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<td>Daily conflicts with co-workers$^c$</td>
<td>-0.352 (0.14)</td>
<td>-2.60*</td>
<td>-0.365 (0.13)</td>
<td>-2.76**</td>
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<tr>
<td>Dispositional ER</td>
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<tr>
<td>Daily job satisfaction × ER</td>
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</tr>
<tr>
<td>Deviance (RML)</td>
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<td>1,176.62</td>
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<tr>
<td>ΔDeviance</td>
<td>15.30</td>
<td></td>
<td>92.13***</td>
<td></td>
</tr>
<tr>
<td>Number of estimated parameters</td>
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<td>2</td>
<td></td>
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<tr>
<td>L1 residual variance</td>
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<td></td>
<td>0.4525</td>
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<tr>
<td>L2 residual variance</td>
<td>0.4588</td>
<td></td>
<td>0.4524</td>
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</tbody>
</table>

**Notes:** $N_{persons} = 97-98; N_{days} = 446-482$. Coefficients are standardized estimates of regression coefficients. Standard errors appear in parentheses. Significance of ΔDeviance values was assessed by $\chi^2$ tests with degrees of freedom equal to the difference in the number of parameters estimated in the competing models. RML = restricted maximum likelihood estimation; L1 = level 1; L2 = level 2; $^a$Sex is coded as 1 = female, 2 = male; $^b$Education is coded as 1 = no professional training, 2 = apprenticeship completed, 3 = master craftsman/technical college degree, 4 = university degree; $^c$Conflicts with co-workers were assessed at noon; $^* p < 0.05, ** p < 0.01, *** p < 0.001$
relationship between daily SCCWs and daily JSCWs was stronger than it was at high levels of ER.

Discussion
The goal of this study was to examine the relationship between SCCWs and JSCWs on a daily basis and therefore to broaden the understanding of daily effects of negative social interactions at the workplace on employees’ work-related attitudes. It was proposed that daily SCCWs negatively predict daily JSCWs. Further, dispositional ER was suggested to moderate the relationship between both variables, indicating that employees who experience SCCWs and have a high level of ER are more satisfied with their co-workers than employees with low levels of ER. In line with hypotheses, daily SCCWs negatively predicted JSCWs. This finding highlights that on days when employees experienced SCCWs, they reported lower levels of JSCWs in the evening. Moreover, study results demonstrated that dispositional ER served as a significant moderator in the relationship between daily SCCWs and JSCWs.

Theoretical contributions
Findings from this study extended previous research on workplace conflicts in several ways. First, this study highlights the role of co-workers in an organizational context and demonstrates how social interactions with colleagues can influence employees’ JSCWs. Regarding the popularity of team-based structures in organizations (Labich, 1996) and the aspect that it is almost impossible to avoid social interactions at the workplace, it is reasonable to assume that SCCWs affect employees’ JSCWs. Multilevel results from this study support this proposition and highlight the importance of daily conflicts with co-workers and their detrimental effect on the extent to which employees are satisfied with

Figure 2.
The moderating effect of dispositional ER on the daily within-person relationship between SCCWs at noon and JSCWs in the evening.
their colleagues at the end of the work day. Second, by using a within-person design, this study broadened the understanding of the daily effects of social conflicts at the workplace. Results indicated that SCCWs at noon have the potential to negatively influence employees’ JSCWs in the evening after the work day. According to this finding, this study provides a differentiated conceptualization of social conflicts at work and job satisfaction on a more dynamic basis than cross-sectional studies. More specifically and due to the importance of job satisfaction regarding employees’ well-being but also team and organizational functioning, this study contributes to organizational research by considering SCCWs as an important and daily antecedent of JSCWs. For this reason, this study can be considered as a further step in the field of social conflicts at the workplace and broadens the dynamic understanding of important individual and organizational antecedents and outcomes. Third, as it is important to determine factors which strengthen or weaken the examined effects, this study made a significant contribution to the literature by investigating dispositional ER as a moderator in the daily SCCWs–JSCWs association. Because ER has shown to be an important construct (Gross, 2013), that has also found entrance into the industrial and organizational psychology in recent years (Niven et al., 2013), this study focused on ER as a moderating influence on the association of SCCWs and JSCWs, indicating that ER can buffer the negative effect of social conflicts on employees’ work-related attitudes. Previous studies demonstrated that ER moderates the relationship between social conflicts and affectivity as well as task performance (Griffith et al., 2014), but in general, there is only little evidence for ER as a moderator in the conflict context at the workplace. Findings from this study showed that employees who experienced SCCWs and reported to possess high ER abilities were less affected by the negative effects of social conflicts than employees with lower ER abilities. Thus, employees with high ER reported higher satisfaction with their co-workers than employees with low ER did after having experienced social conflicts with their co-workers during the work day. Accordingly, this study offers important insight into factors that can ameliorate the negative effects of social workplace conflicts. Finally, this study theoretically advances existing research by aligning conflict research with organizational and personality research.

**Practical implications**

Discussing the practical implications of this study, it is noteworthy that in contemporary organizations group-based work becomes very important and has also been found to be the organizational structure of choice (Morgeson et al., 2005). If employees work in teams and particularly spend most of their work day together, it is obvious that sooner or later SCCWs are likely to occur. However, from an organizational point of view, this should not be underestimated. Diverse empirical findings demonstrate that social conflicts at the workplace are linked to individuals’ physiological well-being (e.g. burnout and fatigue; De Dreu et al., 2003, 2004) as well as to psychological factors (e.g. turnover intention and organizational commitment; Frone, 2000). Further, there is evidence that social conflict is negatively associated with team satisfaction and effectiveness (De Dreu and Weigart, 2003), whereas social cohesion, in contrast, serves as an important indicator of a successful team functioning (Van Vianen and De Dreu, 2001). According to these aspects and the finding of this study, organizations should be aware of the negative effects that SCCWs can elicit. Further, they should consider that the impaired physiological or psychological health of their employees as well as their employees’ work-related attitudes and behaviors are likely to affect the whole organizational functioning as well, especially if several employees are affected by SCCWs. For instance and in line with AET, job satisfaction in turn has shown to predict organizational commitment and job performance (Fu and Deshpande, 2006).
2014) as well as motivation (Gaki et al., 2013) and turnover (Brawley and Pury, 2016). To prevent the detrimental effects of SCCWs (e.g. decreased job satisfaction), the most important step for organizations is to raise awareness of the impact which social conflicts can have on employees’ well-being, attitudes and behaviors. Then, encouraging social support and cohesion among team members might help to avert social conflict, for instance, by fostering trust among team members (Simons and Peterson, 2000). The importance of social support at the workplace as well as key functions in social support interventions can be derived, for instance, from Linnan et al. (2013). Further, the promotion of norms of openness (John, 1997) or the alignment of team members’ goals and rewards as a cooperative instead of a competitive way of team spirit (Johnson et al., 2006) should be a helpful approach to avoid social conflicts at the workplace. Also, job design analysis might help to reduce work stressors, such as conflicts between co-workers.

Considering ER as an important moderator, which has shown to buffer the negative effects of SCCWs on employees’ JSCWs in this study, organizations could engage in providing trainings for their employees which focus on useful ER strategies. This in turn might help employees to effectively manage a situation of social conflict and may result in higher job satisfaction and other critical outcomes, such as performance and psychological well-being. Also, on a team level, ER might play an important role, as emotional skills (e.g. emotional intelligence) within workgroups have been linked to important team variables, such as team trust, team creativity and team performance (Barczak et al., 2010; Jordan et al., 2002). In line with this, it might be possible that the communication of effective team ER (e.g. when conflicts between co-workers occur and affect the subsequent team functioning) – for instance, through team ER trainings – might mitigate the detrimental effects of social conflicts on important individual and organizational outcomes. Moreover, it could also be effective to provide trainings which help employees to focus on the positive aspects of a situation (cf. Grandey and Diamond, 2010), indicating that conflicts have also shown to enhance individual achievement, learning and productivity (De Dreu and Van de Vliert, 1997) and do not have to affect employees’ job satisfaction necessarily. In light of these aspects, it seems reasonable to support employees who are prone to experience SCCWs and further possess inadequate or limited ER strategies by providing ER trainings within the organization (cf. Buruck et al., 2016).

Social implications
Given that employees differ in their personal interests, values, opinions and goals, it seems nearly impossible to avoid social conflicts between co-workers, especially when working in teams. Regarding important employee-related outcomes, this study demonstrated that the daily experience of SCCWs exerts a detrimental effect on employees’ JSCWs. However, not all participants of this study who have experienced SCCWs during their work day were affected by low JSCWs in the same way. On the basis of these findings, also some important social implications should be noted. In the first place and as reviewed above, employees and organizations should be aware of the abovementioned detrimental effects of SCCWs on employees’ JSCWs and the fact that low job satisfaction in turn may result in decreased well-being as well as in quitting or antisocial behavior in the long run. As social conflicts at the workplace have shown to be costly, to cause job-related stress, and to have a strong impact on employees’ information processing (De Dreu and Weingart, 2003; Dijkstra et al., 2005; Greer et al., 2008), employees and especially managers should try to create a cooperative working atmosphere to avoid conflict provoking situations and therefore to enhance employees’ performance and to increase their job satisfaction as well as their health and well-being. Such a cooperative working atmosphere might be, for instance, characterized by
trust among team members as well as by respectful communications between co-workers and might constitute an atmosphere, in which employees feel comfortable. Second, in case of negative social interactions at the workplace, it is important to solve conflicts directly or only a few hours after their initial occurrence to counteract their negative effects on employees’ JSCWs in the long run. For instance, this might be implemented by offering conflict resolution possibilities by professionals, such as psychologists and conflict mediators. Third, another important aspect is to foster employees’ social and emotional skills, such as emotional intelligence or ER. Hence, if employees are able to monitor and regulate their emotions, to discriminate among them and to use this for guiding thinking and actions, conflicts may either occur less often or may not affect one’s JSCWs in the long run because employees with high emotional abilities might regulate their emotions more effectively. Moreover, the improvement of social competencies (e.g. communicating respectfully, empathy) might either help to prevent conflicts or to deal with conflicts more adequately. Drawing on these aspects, this study provides important implications for both research and practice.

Limitations and future research directions
Besides several strengths of this study, a few limitations should be noted. First, as the sample consisted of civil service agents in Germany, generalizability to other cultures and nations as well as to other occupational fields might be limited. Second, no causal inferences can be drawn on the multilevel correlational results and the possibility of reverse causation cannot be excluded. In this study SCCWs were expected to affect JSCWs, but it seems also likely to reveal a reversed effect of study variables, indicating that low satisfaction with one’s co-workers might elicit SCCWs in the first place. Third, this study solely focused on ER as a moderator in the SCCW–JSCWs association. Regarding factors which are linked to employees’ job satisfaction (e.g. self-esteem, self-efficacy, locus of control and emotional stability; Judge and Bono, 2001), future research should concentrate on both dispositional (e.g. personality traits) and environmental factors (e.g. work–family conflict) which are likely to moderate the SCCWs–JSCWs association. Further, the scale used to assess ER in this study does not disentangle specific ER strategies, but rather reflects individual differences in the tendency to engage in a broad range of different strategies to regulate one’s emotional state (Diefendorff et al., 2008). Future research should therefore examine the impact of distinct strategies (e.g. reappraisal and suppression; Gross and John, 2003) on the social conflicts–satisfaction association. Fourth, this study only focused on JSCWs as an outcome variable. For future studies, it is recommendable to consider other critical outcomes which may be affected by social conflicts (e.g. work reflection, exhaustion, work-family conflict). Moreover, it would be useful to examine the effects of social conflicts on further outcomes (e.g. organizational citizenship behavior) on a daily basis, suggesting that these variables might not represent stable constructs but are likely to fluctuate over time. In addition, future research should examine whether daily social conflicts have incremental validity above and beyond other daily contextual and affective predictors of JSCWs. Finally, future studies might contribute to broaden the understanding of conflicts in the workplace by distinguishing between different types of conflicts (e.g. task and relationship conflict) and by disentangling their specific or incremental effects on employees’ job satisfaction.

Conclusion
This study adds to the literature by providing a differentiated approach to daily workplace conflict and its effect on employees’ job satisfaction. In consideration of conflicts with co-workers and individuals’ dispositional ER as a cross-level moderator, the study extends
existing workplace conflict research particularly by investigating the effects of SCCWs on JSCWs on a daily level. With regard to future research, this study might stimulate future work to focus on other important individual and organizational outcomes as well as on additional moderators in the context of workplace conflict. Finally, study results provide important practical implications regarding ER as a key target variable in order to facilitate employees' daily conflict management.

References


**Corresponding author**
Judith Volmer can be contacted at: judith.volmer@uni-bamberg.de