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Can personality traits and daily positive mood buffer the harmful effects of daily negative mood on task performance and service sabotage? A self-control perspective ☆

Nai-Wen Chi [a,*], Huo-Tsan Chang [b], Hsien-Lier Huang [b]

[a] Institution of Human Resource Management, National Sun Yat-Sen University, 70, Lienhai Rd., Kaohsiung 80424, Taiwan
[b] National Changhua University of Education, Graduate Institute of Human Resource Management, 2, Shi-Da Road, Changhua City 500, Taiwan

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ABSTRACT

Although researchers have suggested that employee daily negative mood leads to unfavorable performance outcomes, it remains unclear "when" daily negative mood is particularly or less harmful with respect to performance outcomes. Based on the self-control framework and the undoing hypothesis, we examined whether daily negative mood impairs employee daily task performance and increases service sabotage behaviors, as well as whether individual characteristics associated with self-control can buffer the detrimental impacts of daily negative mood. After testing our theoretical model using data from two field studies with different research settings and designs, we found that employee daily negative mood negatively predicts task performance, while employee conscientiousness and daily positive mood can weaken this association. In addition, employee daily negative mood positively predicted service sabotage, whereas emotional stability attenuated the positive relationship between daily negative mood and service sabotage. Theoretical and practical implications are also discussed.

1. Introduction

Mood at work refers to how employees feel or the affective states they experience when engaging in actual workplace activities (George & Jones, 1996; George & Zhou, 2007). Within an organizational setting, employees often experience various mood states while at work due to the wide range of events that occur (Chi, Tsai, & Tseng, 2013; Diefendorff, Richard, & Yang, 2008). Given that employees' mood at work influences their work attitudes and thoughts (Brief & Weiss, 2002; Weiss & Cropanzano, 1996), the ways in which employees' mood at work influences their performance and behaviors have become a critical issue in both practical and academic fields (Brief & Weiss, 2002; George, 2011; Ilies, Scott, & Judge, 2006; Miner & Glomb, 2010; Rothbard & Wilk, 2011).

Employee mood at work can be broadly categorized into positive and negative moods (George & Zhou, 2007; Tsai, Chen, & Liu, 2007). Researchers have generally found that employee *positive mood* (e.g., excited, enthusiastic, proud, or interested) predicts high levels of task performance and organizational citizenship behaviors (Ilies et al., 2006; Miner & Glomb, 2010; Rothbard & Wilk, 2011; Tsai et al., 2007). In contrast, recent studies have found that *negative mood* (e.g., distressed, hostile, nervous, or upset) leads to unfavorable performance outcomes, such as reducing task performance or increasing counterproductive work behaviors (Judge, Scott, & Ilies, 2006; Miner & Glomb, 2010; Rothbard & Wilk, 2011; Yang & Diefendorff, 2009). As such, both practitioners and researchers have proposed suggestions to alleviate negative mood (David & Congleton, 2013; Judge et al., 2006; Rothbard & Wilk, 2011; Schwartz, 2012; Yang & Diefendorff, 2009).

However, there are reasons to believe that the detrimental effects of negative mood can be weakened under certain circumstances. Empirically, the meta-analysis conducted by Shockley, Ispas, Rossi, and Levine (2012) showed that employee negative mood significantly predicts lower levels of task performance and higher levels of counterproductive work behaviors. However, the credibility intervals associated with the negative mood-performance outcome correlations were considerably large, suggesting the existence of the moderators of these relationships. Theoretically, several scholars have proposed that negative mood increases individuals' harmful and dysfunctional behaviors due to self-control failure; however, individual characteristics related to *self-control* can mitigate the aftereffects of negative mood (Baumeister, 2002; Baumeister & Vohs, 2007; Javaras et al., 2012;

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* Corresponding author.
E-mail addresses: nwchi@mail.nsysu.edu.tw, iversonchi@gmail.com (N.-W. Chi).

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Lian et al., 2014; Ode & Robinson, 2007; Tugade & Fredrickson, 2004). Thus, the self-control theory provides a useful framework to clarify which types of self-control related characteristics can buffer the detrimental effects of negative mood on performance outcomes. As negative mood is an essentially unavoidable part of employee daily work, additional research is needed to understand "when" employee negative mood is particularly or less harmful with respect to performance outcomes. Clarifying these issues can better guide organizational practice and managerial decision regarding "how" to mitigate such detrimental effects.

In order to advance our understanding of negative mood at work, the present study was designed to make the following four theoretical and methodological contributions. First, we applied the self-control perspective (Baumeister & Vohs, 2007; Tice, Bratslavsky, & Baumeister, 2001) as the overarching theory to explain *why* and *when* employee daily negative mood influences both positive and negative performance outcomes. Based on the self-control framework, we theorize that individual characteristics associated with self-control can buffer the detrimental effects of daily negative mood. At the individual-level, we included *conscientiousness* and *emotional stability*: the former influences the individual *motivations* for regulating goal-directed behaviors when experiencing negative mood (Ilies et al., 2006; Jensen-Campbell, Knack, Waldrip, & Campbell, 2007; McCrae & Löckenhoff, 2010), while the latter captures the individual *capacity* to handle emotions and cope with the negative consequences associated with negative mood (Barrick & Mount, 2000; Barrick, Mount, & Judge, 2001). At the within-person level, *daily positive mood* was chosen as a moderator because it builds individual daily cognitive, psychological, and physical *resources* to control and "undo" the aftereffects of daily negative mood[1] (Fredrickson et al., 2000; Tice, Baumeister, Shmueli, & Muraven, 2007).

Second, the self-control perspective suggests that employee daily negative mood at work not only impairs individual motivations and resources to concentrate on the task, but also reduces individual capacity to control impulsive and irrational behaviors (Lian et al., 2014; Tice et al., 2001). Thus, it is plausible that daily employee negative mood produces more negative behaviors directed toward the stakeholders (e.g., coworkers, organizations, or customers). Given that frontline employees' behaviors directly influence customer satisfaction as well as organizations' profitability (Liao & Chuang, 2004; Liao & Chuang, 2007), it is important to investigate whether employee daily negative mood triggers negative behaviors directed against *customers,* as well as ways to alleviate such effects. Therefore, in addition to daily task performance, we include *service sabotage* (i.e., employee behaviors that intentionally harm customer interests; Chi et al., 2013; Wang, Liao, Zhan, & Shi, 2011) in our model to fully capture the effects and boundary conditions of daily negative mood on positive/negative performance outcomes.

Third, as employee mood and behavior at work can vary widely on a daily basis (Ilies et al., 2006; Judge et al., 2006), it is more appropriate to test the negative mood-performance relationship at the within-person level (Miner & Glomb, 2010). However, the majority of the studies have examined the effects of negative mood on performance outcomes as well as the moderators on these effects at the between-person level (Shockley et al., 2012). Thus, it remains unclear whether employee between- and within-person levels factors can simultaneously mitigate the harmful effects of daily negative mood. To expand our understanding of the boundary conditions associated with the daily negative mood-performance relationships, we apply a multilevel research design to test the within-person level moderating effect of daily positive mood as well as the between-person level moderating effects of emotional stability and conscientiousness on the associations between daily negative mood, task performance, and service sabotage. The multilevel research design not only offers a more accurate picture of within-person mood on behaviors, but also takes the between-person variances into consideration (Shockley et al., 2012).

Finally, in order to enhance the generalizability and internal validity of the research findings (Schwab, 2005), we test the theoretical model using two studies with different research settings and designs: (a) Study 1 examines the proposed relationships by collecting daily negative mood and daily objective performance data (i.e., *task errors*) from bank tellers, allowing us to examine how daily negative mood influences the objective daily task performance; (b) Study 2 confirms and extends the findings of Study 1 by testing the proposed hypotheses with a larger and more diversified sample, as well as utilizing the time-lag design to collect daily mood and supervisor-rated performance data at different time points of a workday. Fig. 1 outlines the conceptual model of the proposed relationships.

2. Theory and hypotheses

2.1. Daily negative mood and daily performance outcomes: The self-control framework

In the present study, we employ the self-control framework (Tice et al., 2001) to explain the relationship between employee daily negative mood and performance outcomes, as well as potential moderators of these relationships. *Self-control is* the ability to control and regulate one's impulses, emotions, behaviors, and performances in order to achieve personal goals and interests (Muraven & Baumeister, 2000; Tice et al., 2001). The self-control perspective asserts that a negative mood leads to self-control failure because controlling the negative mood decreases the capacity, motivation, and resources needed for other self-control goals (Tice & Bratslavsky, 2000). Specifically, when people try to control or regulate a negative mood, other self-control goals are abandoned (e.g., achieving performance goals, displaying appropriate behaviors toward customers), leading to self-control failures (Tice & Bratslavsky, 2000). In turn, people are unable to focus on their performance goals or control their behaviors.

Tice et al. (2001) and Muraven and Baumeister (2000) have proposed several theoretical mechanisms to explain why negative mood impairs self-control: (a) *the motivation mechanism,* which suggests that negative mood impairs individuals' motivation to regulate goal-oriented behaviors and put forth the efforts to pursue future goals. For example, employees who experience negative mood become less motivated to direct behaviors toward the realization of distal goals, which in turn results in them giving up the pursuit of positive outcomes and performance goals; (b) *the resource mechanism*, which suggests that individuals possess limited regulatory resources for self-control (e.g., strength and energy), and that negative mood depletes their resources needed to regulate behaviors to attain their goals (Muraven & Baumeister, 2000; Muraven & Slessareva, 2003). For example, when employees are in a negative mood, they have to expend their

[1] Although individual positive affectivity might trigger the "undoing" process to buffer the detrimental effects of daily negative mood as well, we decided to include daily positive mood in our model for two main reasons. First, Fredrickson, Mancuso, Branigan, and Tugade (2000) proposed the "undoing" hypothesis and theorized that within-person positive mood can undo and correct for the aftereffects of negative mood, rather than positive affectivity. Thus, it is more appropriate to match our level of analysis with the level of theory. Second, most researchers have tested the undoing hypothesis at the within-person level (e.g., Dimotakis, Scott, & Koopman, 2011; Fredrickson & Levenson, 1998; Fredrickson et al., 2000); we followed their approach to examine whether daily positive mood can buffer the harmful effects of daily negative mood on daily performance outcomes.

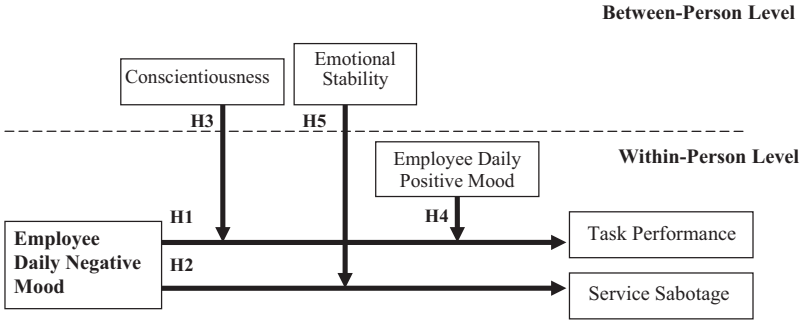

Fig. 1. Conceptual framework of the present study (Studies 1 and 2).

strength or energy to deal with the associated negative feelings (Vohs, Baumeister & Ciarocco, 2005; Vohs & Faber, 2007). The depletion of self-control resources keeps employees from engaging behaviors that are beneficial and constructive in the future, thus reducing their performance levels (Goldberg & Grandey, 2007); (c) *the capacity mechanism*,[2] which suggests that the negative mood reduces individuals' capacity to override their own desires, impulsive behaviors and irrational thoughts that may interfere with goal-directed behaviors (Hagger et al., 2010; Rosenbaum, 1998). As such, individuals who experience negative mood are less capable of controlling their behaviors or acting rationally, which increase their intentions to engage in impetuous and aggressive behaviors (Denson, Pederson, Friese, Hahm, & Roberts, 2011; Tice et al., 2001). For example, employees in a negative mood often become impulsive and unable to inhibit irrational thoughts, leading to more destructive work behaviors (e.g., counterproductive work behaviors; Judge et al., 2006; Yang & Diefendorff, 2009). Given that employees have to develop motivations and devote resources to pursue high performance goals (Goldberg & Grandey, 2007; Muraven & Slessareva, 2003) while maintaining their capacity to regulate impulsive and negative behaviors toward customers (Chi et al., 2013; Wang et al., 2011), we expect that employees' daily negative mood will be associated with lower levels of task performance due to *the depletion of self-control motivations and resources*, and also lead to higher levels of service sabotage due to *the impairment of self-control capacity*.

Applying the self-control framework to the workplace, employees' daily negative mood reduces their motivation for self-control, making them less able to regulate goal-directed behaviors and reducing the time and effort devoted to performing tasks (Muraven & Slessareva, 2003; Tice et al., 2001). Therefore, when employees experience negative mood during the workday, they become less motivated to regulate their effort and behaviors with respect to achieving performance goals, which can lead to a decrease in task performance.

In addition, when employees must devote additional resources to regulate their negative mood, the processes of regulating the negative mood also drains or disrupts the allocation of their resources (e.g., attention and energy) to concentrate on cognitive tasks, thereby decreasing both task accuracy and quality (Goldberg & Grandey, 2007; Miner & Glomb, 2010; Muraven & Baumeister, 2000; Muraven & Slessareva, 2003). Furthermore, negative mood narrows individuals' cognition and leads individuals to focus on a limited set of thought-action repertoires (Fredrickson, 2001), which can reduce individual performance in cognitive tasks. Previous studies have found that daily negative mood was negatively related to daily productivity (Rothbard & Wilk, 2011) and cognitive task performance (Koy & Yeo, 2008). As a result, we propose that employee daily negative mood should lead to lower levels of task performance.

Hypothesis 1. Employee daily negative mood negatively predicts daily task performance.

Service sabotage refers to employees' deliberate behaviors that damage customer interests (Skarlicki, van Jaarsveld, & Walker, 2008; Wang et al., 2011). In the sabotage literature, researchers have theorized that employees who experience negative mood are more likely to engage in service sabotage to release their negative feelings (Wang et al., 2011). Based on the self-control framework, people who experience negative mood are likely to behave irrationally and aggressively owing to decreases in their self-control capacity (Denson et al., 2011; Lian et al., 2014). Thus, employees' negative mood increases the tendency of displaying inappropriate and aggressive behaviors toward customers (e.g., behaving negatively toward customers or deliberately mistreating customers) because negative mood reduces the capacity to both control misbehaviors and inhibit aggressions (Chi et al., 2013; Wang et al., 2011). These assertions suggest that employee daily negative mood should be positively associated with service sabotage behaviors. Chi et al. (2013) also found that employees' hostility (one aspect of negative mood) positively predicted service sabotage. Therefore, the following hypothesis is proposed:

Hypothesis 2. Employee daily negative mood positively predicts daily service sabotage behaviors.

2.2. The relationship between daily negative mood and task performance: The moderating roles of conscientiousness

In addition to the direct influence of negative mood on self-control failures, the self-control framework also highlights the importance of individual characteristics in controlling the aftereffects of negative mood (Baumeister & Vohs, 2007; Hagger et al., 2010; Fredrickson et al., 2000; Rosenbaum, 1998; Tice et al., 2001). Specifically, *individual differences in self-control tendencies* can increase individuals' self-control motivation, resources, and capacity when experiencing a negative mood, reducing the self-control failures and increasing behavioral regulation toward

[2] Although some researchers have suggested that individuals' self-control capacity depends on their self-control resources (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven & Baumeister, 2000; Tice et al., 2001), we maintain that self-control capacity and resources are distinct mechanisms. Self-control capacity is determined by individual differences as well as individual training and development regarding self-control skills (e.g., behavioral or emotional regulation) (Hagger, Wood, Stiff, & Chatzisarantis, 2010; Lian et al., 2014; Rosenbaum, 1998). However, self-control resources depend on an individual's daily strength/energy, and individuals can use a period of recovery or recuperation to replenish their daily resources (Tice et al., 2007). Thus, self-control capacity is relatively stable and less volatile than self-control resources.

the pursuit of performance goals (Lian et al., 2014; Tice et al., 2007). Given daily negative mood not only impairs employees' self-control motivations and resources to perform task (Goldberg & Grandey, 2007; Tice et al., 2001) but also reduces employees' self-control capacity to inhibit appropriate behaviors (Chi et al., 2013); we expect that the moderators pertaining to self-control motivation and resources (i.e., conscientiousness, daily positive mood) can weaken the harmful effects of daily negative mood on task performance, whereas the moderator regarding self-control capacity (i.e., emotional stability) can buffer the detrimental effects of daily negative mood on service sabotage. We discuss each hypothesized relationship below.

Individuals with high *conscientiousness* are achievement-oriented, hardworking, responsible, and persistent, resulting in stronger motivation to achieve difficult goals (Barrick & Mount, 2000; Barrick, Mount, & Strauss, 1993; George & Zhou, 2001). Thus, conscientious employees persist in completing tasks even when they experience negative mood (Jensen-Campbell et al., 2007; McCrae & Löckenhoff, 2010).

Drawing on the self-control framework (Tice et al., 2001), high conscientiousness individuals should have stronger motivation with respect to self-control (Jensen-Campbell et al., 2007; McCrae & Löckenhoff, 2010): when conscientious employees experience negative mood at work, they have stronger motivation to meet performance requirements regardless of their momentary affect (Ilies et al., 2006). In turn, they tend to devote greater efforts and motivations to their tasks and engage in goal-oriented behaviors to achieve performance goals, thereby reducing the harmful effect of daily negative mood on task performance.

In contrast, low conscientiousness employees have lower goal-achievement motivation at work (Barrick & Mount, 2000), and are less motivated to regulate their behaviors to attain performance requirements when they experience negative mood at work. In addition, employees with low conscientiousness are more likely to be influenced by their transient mood (Ilies et al., 2006). Thus, negative mood can further impair the self-control motivation required to ensure task accuracy and efficiency among low conscientiousness employees (Jensen-Campbell et al., 2002), thereby reducing their task performance. Thus, we propose:

Hypothesis 3. Conscientiousness weakens the negative relationship between employee daily negative mood and task performance: This association is attenuated for high conscientiousness employees, but strengthened for low conscientiousness ones.

2.3. The relationship between daily negative mood and task performance: The moderating role of daily positive mood

In addition to employee conscientiousness, we expect that employee daily positive mood can moderate the harmful effect of daily negative mood on task performance,[3] as positive mood is closely related to the resources associated with self-control (Tice et al., 2007). This assertion can be further explained based on *the "undoing effect" hypothesis of positive mood* (Fredrickson & Levenson, 1998; Fredrickson et al., 2000).

In the self-control literature, Tice et al. (2007) have integrated the "undoing" hypothesis into the self-control framework, and argued that positive mood can increase the resources related to self-control and counteract the resource depletion associated with negative mood. The undoing hypothesis suggests that positive mood functions as a resource for individuals to control the aftereffects of negative mood (Fredrickson et al., 2000). That is, positive mood can "correct" or "undo" the detrimental impacts of negative mood by fueling individuals' psychological resilience (e.g., strength and energy) (Fredrickson, 2001). By expanding individuals' momentary thoughts and actions, positive mood loosens the negative thoughts that are activated by negative mood (Tugade & Fredrickson, 2004). In addition, experiencing positive mood fuels individuals' psychological resilience by increasing their physical energy and psychological well-being, which in turn helps individuals to "bounce back" from the experience of negative mood (Fredrickson, 2001). Several empirical findings support these arguments regarding the undoing hypothesis (Dimotakis et al., 2011; Fredrickson et al., 2000). For example, Tugade and Fredrickson found that the experience of positive mood can lead students to achieve efficient emotional regulation by accelerating cardiovascular recovery (e.g., heart rate, blood pressure) from a negative affective experience. Similarly, Dimotakis et al. indicated that employees' daily positive mood can mitigate the negative association between daily negative mood and job satisfaction.

According to the self-control framework and the undoing hypothesis, daily positive mood can increase employees' *resources* required to mitigate the detrimental impacts of daily negative mood by building employees' cognitive resources (e.g., flexible thoughts, creative ideas), psychological resources (e.g., recalling positive memories) and physical resources (e.g., high energy). Therefore, when employees experience high levels of daily positive mood, their daily negative mood becomes less harmful with respect to task performance. However, employees are unable to bounce back from the resource depletion associated with the daily negative mood if they do not experience positive mood during the working day. Based on the above, we propose the following:

Hypothesis 4. Daily positive mood weakens the negative relationship between employee daily negative mood and task performance: This association is attenuated for employees with high daily positive mood, but strengthened for employees with low daily positive mood.

2.4. The relationship between daily negative mood and service sabotage: The moderating role of emotional stability

Individual differences in emotional regulation skills can influence one's individual capacity to control the detrimental effects of negative emotions (Hagger et al., 2010; Rosenbaum, 1998). *Emotional stability* is one personality trait that reflects an individual difference pertaining to regulating the behavioral consequences associated with negative emotions (Barrick & Mount, 1991; Barrick & Mount, 2000; Barrick et al., 2001; Berry, Ones, & Sackett, 2007). Individuals high in emotional stability are relaxed, confident, calm and more effective in regulating irrational behaviors when experiencing negative emotions (John & Gross, 2007); in contrast, low emotional stability individuals (i.e., neurotic people) tend to be anxious, nervous, depressed, overemotional, and less capable of regulating impulsive behaviors when experiencing negative emotions (Barrick et al., 2001).

As emotional stability reflects the capacity to deal with negative emotions and control impulses (DeYoung, 2010), the negative mood is less disturbing and less likely to enhance impetuous behaviors among emotionally stable people. Thus, according to the self-control framework (Tice et al., 2001), we expect employees with high emotional stability to demonstrate a better self-control

[3] The undoing effect of positive mood can occur naturally within the working day. For example, employees might start off the day in a negative mood and then experience a positive mood after lunch. The positive mood after lunch can counteract the resource depletion caused by the negative mood (Tice et al., 2007). On the other hand, employees might experience a positive mood in the morning but then feel negative after lunch. The positive mood can build more cognitive, physical, and psychological resources for employees, which help them to "bounce back" from the negative mood after lunch.

capacity for buffering the positive effect of daily negative mood on service sabotage.

In addition, emotionally stable individuals have more confidence to deal with stressful work, have a more positive view of themselves, and do not let negative emotions guide their thoughts and behaviors (Barrick & Mount, 2000). In turn, emotionally stable employees are less likely to be distracted by a negative mood, and are capable of coping with impulsive intentions when experiencing negative mood at work (Barrick & Mount, 1991; John & Gross, 2007), mitigating the effect of daily negative mood on service sabotage. However, neurotic (low emotional stability) employees are less effective in terms of inhibiting the effects of negative emotions on dysfunctional behaviors (Barrick & Mount, 2000), suggesting that daily negative mood will be more likely to lead to inappropriate service behaviors for neurotic employees. Therefore, we propose:

Hypothesis 5. Emotional stability weakens the positive relationship between employee daily negative mood and service sabotage: This association is attenuated for high emotional stability employees, but strengthened for low emotional stability ones.

3. Overview of studies

We developed two studies to test our proposed hypotheses (see Fig. 1). In Study 1, we tested the proposed hypotheses using a multi-source daily research design with service employees within the same industry (two banks). In order to enhance the internal validity and the generalizability of our findings, we tested the proposed hypotheses again by conducting another multi-source daily study with a time-lag design (i.e., Study 2), and collected the data from service employees across various occupations and industries.

4. Study 1: Method

4.1. Sample and procedures

In the present study, daily survey data was collected from 54 bank tellers from 10 different branches of two middle-sized banks in Taiwan. With the support of top executives, we were able to collect daily data from multiple sources: survey data from the bank tellers, and performance data from the performance database. Each bank's top executives helped us to recruit bank tellers from each branch to participate in the study, and provided contact information for the recruited tellers.

The data was collected in multiple phases and sources (i.e., bank tellers and performance database). In the first phase, we contacted 60 bank tellers and invited them to participate in this study; upon their acceptance, we introduced the research purpose and process to them. Then we asked them to provide demographic information and fill in a questionnaire regarding personality traits. In the second phase, we employed an experience sampling method (Ilies & Judge, 2002) in which the participating bank tellers and the branch managers were asked by email to complete a daily survey at the end of each workday[4] (around 5:00 PM). Each teller reported their daily mood and any incidents of service sabotage, while the branch managers provided daily performance data on the teller regarding *task errors* (*task performance*) and *total clients served* (*a control variable*) via the bank database. The daily data was collected across two subsequent weeks (10 working days), as a two-week period is considered to be a stable and generalizable time frame to capture information on individuals' daily lives (Dimotakis et al., 2011; Wheeler & Reis, 1991) and has been utilized in previous daily studies (e.g., Ilies & Judge, 2004; To, Fisher, Ashkanasy, & Rowe, 2012; Wang et al., 2011).

In total, we obtained 457 sets of matched daily surveys (the maximum number of daily surveys was 600; the within-person level response rate was 72%) from 54 bank tellers (the between-person level response rate was 90%). The bank tellers were mostly female (87%) and ranged from 22 to 50 years old (M = 29.2; SD = 5.10). They had been employed at their bank for an average of six years (SD = 5.60).

4.2. Measures

Following Brislin (1980), the original version of the questionnaire was translated into Chinese. Two bilingual experts then translated back from Chinese to English. Finally, three organizational-behavior scholars reviewed the translation for appropriateness.

4.2.1. Daily negative and positive moods

Daily negative and positive moods were measured using Bono, Foldes, Vinson, and Muros' (2007) six-item scale, including three items measuring negative mood (i.e., anger, anxiety and irritation) and three items measuring positive mood (i.e., happiness, enthusiasm and optimism). Bank tellers were asked to evaluate their negative and positive moods *during each working day* on a 5-point Likert scale (1 = *not at all* to 5 = *extremely*). The Cronbach's alphas for daily negative and positive moods were .86 and .89, respectively.

4.2.2. Task performance

In order to measure service workers' daily task performance, we tracked one critical archival daily performance measure for bank tellers: *task errors*. During each shift, bank tellers log into the banks' transaction recording system and record each client's transaction information. This task requires attentional focus to avoid making errors. When bank tellers make mistakes while keying in the information, they have to correct the errors immediately via the system. The system records all task errors that bank tellers make during each working day (mean = .38, SD = .86); this measure can be regarded as the critical aspect of task performance, because service reliability is an important predictor of service quality. In order to access the archival performance data, branch managers provided each bank teller's daily performance data regarding task errors. In order to make the results more comparable across Studies 1 and 2, we reverse coded the number of task errors to represent daily task performance (i.e., fewer daily task errors = higher daily task performance).

4.2.3. Service sabotage

The existing service sabotage scales were mainly created for customer service representatives in a call-center context (e.g., Skarlicki et al., 2008; Wang et al., 2011); thus, these types of items (e.g., "Purposefully transferred a customer to the wrong department"; "Purposefully disconnected a call"; "Hung up on the customer") might be inappropriate to capture service sabotage behaviors that occurred within a face-to-face service context.

As a result, we developed a six-item service sabotage scale by combining three items from Chi et al. (2013) (i.e., "behaving negatively towards customers"; "intentionally hurrying customers when you want to"; and "mistreating customers deliberately") and three items from Harris and Ogbonna (2006) (i.e.,

[4] Although measuring daily negative mood at the end of a working day might easily be influenced by recent events that occurred just prior to completing the survey, previous research has shown that negative mood at the end of a working day is highly correlated to the daily negative mood obtained at other time periods (e.g., r = .69, see Bledow, Rosing, & Frese, 2013; r = .80, see Scott & Barnes, 2011). Thus, we believe that measuring daily negative mood at the end of a working day can meaningfully capture the experience of negative mood within a working day.

"intentionally slowing down service when you want to"; "ignoring service rules to make things easier for you"; and "trying to take revenge on rude customers"). Service workers were asked to indicate how often they engaged in these types of behaviors during each working day using a 5-point frequency scale (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, and 5 = *always*). A principal-axis exploratory factor analysis with promax rotation revealed the six items loaded on one factor, explaining 73 percent of the variance in the items. Thus, it was deemed appropriate to combine the six items into one single factor. Moreover, the Cronbach's alpha for this scale was .91, suggesting a good internal consistency among the six items.

4.2.4. Conscientiousness and emotional stability

Service workers' personality traits were measured using Saucier's (1994) Mini-Marker scale, including eight adjectives for conscientiousness (e.g., "efficient"; "organized"; and "careless (reverse-coded)") and emotional stability (e.g., "relaxed"; "temperamental (reverse-coded)"; and "fretful (reverse-coded)"). Service workers were asked to indicate the degree to which these adjectives describe them (1 = *extremely inaccurate*, 8 = *extremely accurate*). The Cronbach's alphas for conscientiousness and emotional stability were .90 and .80, respectively.

4.2.5. Control variables

We included several control variables to rule out potential alternative explanations. At the within-person level, since branch busyness might influence service workers' daily moods or service behaviors (Rafaeli & Sutton, 1990), we controlled for the *total number of client served* within a working day. As the bank system also records the total number of clients served by each bank teller during each workday (mean = 79.04; SD = 45.05), we also asked branch managers to provide this data and included it in the analyses.

At the between-person level, we controlled for service workers' *gender* (1 = *male*; 2 = *female*), since gender can influence the relationships between daily moods and work behaviors (Scott & Barnes, 2011). In addition, Wang et al. (2011) suggested that *tenure* affects employees' experience and knowledge of how to deal with different types of customers. As such, tenure might also influence service workers' performance outcomes. Therefore, the main effect of employee tenure was also controlled for in the analyses. Furthermore, because we asked employees to report on their engagement in service sabotage behaviors, it is plausible that the responses might be biased by their *social desirability* tendency (Podsakoff & Organ, 1986). Thus, we measured employees' social desirability using five negatively worded items from Strahan and Gerbasi's (1972) scale using a true/false anchor, where scores ranged from 0 to 5, with higher scores indicating a higher level of social desirability.

Finally, we included all three interactions (i.e., emotional stability and daily negative mood, conscientiousness and daily negative mood, and daily positive and negative moods) in the statistical analyses when predicting task performance and service sabotage to account for alternative findings when testing the proposed hypotheses.

4.2.6. Data analysis

In order to test our multilevel model, we conducted hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992) analyses to examine the proposed hypotheses. When using HLM, we followed Enders and Tofighi's (2007) suggestions for centering the Level-1 and Level-2 predictors. For analyses focused on cross-level moderation, we *group-mean centered* the Level-1 predictors (i.e., daily negative mood). In addition, in order to partial out the main effects of the Level-2 predictors, these predictors were *grand-mean centered*. In addition, when examining the Level-1 moderating effect, we computed the interaction terms based on the standardized predictors and moderators and the Level-1 interaction terms were left un-centered when they were included in the hierarchical linear modeling model. Finally, in order to partial out the branch-level effect, we followed Liao, Joshi, and Chuang's (2004) approach to estimate and control the branch effect at Level 3. Specifically, we did not include any branch-level variables at Level-3 (i.e., branch-level) and left the effects nested in the branch-level to be freely estimated.

5. Study 1: Results

The means, standard deviations, reliabilities, and between-person and within-person correlations among the study variables are presented in Table 1.

5.1. Between- and within-person variances

Before testing the hypotheses, we estimated the between- and within-person variances for the Level-1 variables. In order to examine the between- and within-person variances regarding daily negative mood, daily positive mood, service sabotage and task performance, we specified null models that included these variables as the outcome variables and included no predictors at all levels. The results are presented in Table 2.

As displayed in Table 2, the Intraclass correlation (ICC) (1) value was .61 for daily negative mood, and 39 percent of the variance in

Table 1
Descriptives and bivariate correlations among the Study 1 variables.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Daily positive mood	2.62	.84	**(.89)**	.16	.24	.13	−.18	.11	.03	.27*	.19	.21
2 Daily negative mood	1.80	.82	.04	**(.86)**	.61**	.12	−.28*	−.18	−.41**	.09	−.39**	−.20
3 Service sabotage	1.52	.62	.20*	.49**	**(.91)**	−.17	−.25*	−.10	−.22	.02	−.23	−.17
4 Task performance	.62	.86	.23**	.01	.11*	–	−.11	−.10	.04	.25*	.05	.11
5 Total clients served	80.3	45.01	−.09	−.12*	−.16**	−.06	–	.10	.24*	−.18	.06	.11
6 Gender	1.85	.36						–	.08	−.04	−.01	.10
7 Tenure[1]	71.50	67.20							–	.28**	.42**	.40**
8 Conscientiousness	6.00	.90								**(.90)**	.13	.28*
9 Emotional stability	5.53	1.00									**(.80)**	.53**
10 Social desirability	3.66	.56										**(.63)**

Note 1: in months.
Cronbach's alpha coefficients are presented in boldface on the main diagonal.
Coefficients above the main diagonal are between-person correlations based on 54 bank tellers.
Coefficients below the main diagonal are within-person correlations based on 457 daily surveys across 54 bank tellers.
* $p < .05$.
** $p < .01$ (two-tailed).

Table 2
Parameter estimates and variance components of level-1 variables (Study 1).

Variable	Intercept (γ_{00})	Within-person variance (ρ^2)	Between-person variance (τ_{00})	ICC (1) value	Percentage of within-person variance (%)
Daily negative mood	1.80*	.25	.40*	.61*	39
Daily positive mood	2.62*	.30	.41*	.58*	42
Task performance	.38*	.46	.20*	.31*	69
Service sabotage	1.52*	.10	.28*	.73*	27

Note: γ_{00} = pooled intercept that represents average level of variable across persons.
ρ^2 = within-person variance in the variable. τ_{00} = between-person variance in the variable.
ICC (1) value was computed as: $\tau_{00}/(\tau_{00} + \rho^2)$.
Percentage of within-person variance was computed as: $\rho^2/(\tau_{00} + \rho^2)$.
* $p < .05$.

daily negative mood was within-person. In addition, the ICC (1) value for daily positive mood was .58, and 42 percent of the variance resided at the within-person level. In terms of the performance outcomes, the ICC (1) values were .31 and .73 for task performance and service sabotage, respectively. Furthermore, 69 percent of the variance in task performance was within-person, whereas 27 percent of the variance in service sabotage was within-person. Overall, the above values suggest significant between- and within-person variances among the Level-1 variables. Thus, it is reasonable to test the proposed within- and between-person level hypotheses.

5.2. Hypothesis testing

5.2.1. The relationships between daily negative mood and performance outcomes

The results of the three-level (i.e., daily, employee, and branch) HLM analyses are presented in Table 3. We estimated random effects for all variables in the model. As can be seen in Models 1 and 3 of Table 3, daily negative mood negatively predicted task performance ($\gamma = -.12$, $p < .01$) and positively predicted service sabotage ($\gamma = .18$, $p < .01$), after controlling for the effects of the Level-1 and Level-2 control variables. Thus, Hypotheses 1 and 2 were both supported.

Table 3
Results of HLM on task performance and service sabotage (Study 1).

Independent variable	Task performance		Service sabotage	
	Model 1	Model 2	Model 3	Model 4
Level 1: Within-person				
Intercept	−.34**	−.34**	1.54**	1.53**
Total clients served	−.03	−.02	−.01	−.01
Daily positive mood (PA)	.23**	.23**	−.03	−.03
Daily negative mood (NA)	−.12**	−.11**	.18**	.17**
PA * NA	.05*	.05*	−.04	−.03
Level 2: Between-person				
Social desirability	.06	.06	−.04	−.03
Gender	−.14	−.14	−.10	−.10
Tenure	.01	.00	−.01	−.00
Conscientiousness	.13	.13	−.10	−.07
Emotional stability	−.05	−.03	−.06	−.07
Cross-level interactions				
Conscientiousness * NA		.20**		.05
Emotional stability * NA		−.01		−.07*
Level 3: Branch (no predictor was added)				

Note 1: Level-1 $N = 457$; Level-2 $N = 54$; Level-3 $N = 10$.
Note 2: All level 1 predictors were group-mean centered.
Note 3: Branch-level effect is controlled in the model with no predictors entered at Level 3.
Note 4: The results were unchanged if we excluded the total clients served from the model or included interaction terms into the model separately.
* $p < .05$.
** $p < .01$ (two-tailed).

5.2.2. The moderating effect of conscientiousness on the daily negative mood-task performance relationship

Before testing the cross-level moderating effects of the Level-2 predictors, we estimated the random effects for the slopes of the daily negative mood-performance outcome relationships. The results indicate that significant random effect variances exist for all slopes of the daily negative mood-performance outcome relationships, indicating that these within-person relationships had different magnitudes across different bank tellers.

As revealed in Models 2 and 4 of Table 3, conscientiousness positively moderated the negative mood-task performance relationship ($\gamma = .20$, $p < .01$). In order to clarify the form of the interaction, we followed Preacher, Curran, and Bauer's (2006) procedures and plotted the negative mood-task performance relationship under high (1 SD above the mean) and low (1 SD below the mean) levels of conscientiousness (see Fig. 2). Fig. 2 shows that daily negative mood was strongly and negatively related to task performance when employees' conscientiousness was low ($\gamma = -.34$, $p < .01$). However, this relationship was attenuated for high conscientiousness employees ($\gamma = -.09$, *n.s.*). Therefore, Hypothesis 3 was supported.

5.2.3. The moderating effect of daily positive mood on the daily negative mood-task performance relationship

According to the results in Models 2 and 4 of Table 3, daily positive mood positively moderated the negative mood-task performance relationship ($\gamma = .05$, $p < .05$). To clarify the moderating effect of positive mood, we also plotted the negative mood-task performance relationship under high (1 SD above the mean) and low (1 SD below the mean) levels of positive mood (see Fig. 3). As shown in Fig. 3, daily negative mood strongly and negatively predicted task performance ($\gamma = -.21$, $p < .01$) when employee daily positive mood was low. However, this negative relationship was weakened for employees with high positive mood ($\gamma = -.05$, *n.s.*). Thus, Hypothesis 4 was also supported.

5.2.4. The moderating effect of emotional stability on the daily negative mood-service sabotage relationship

As shown in Models 2 and 4 of Table 3, after controlling for the effects of the Level-1 and Level-2 predictors as well as the Level-3 effects, emotional stability negatively moderated the association between daily negative mood and service sabotage ($\gamma = -.07$, $p < .05$). We applied Preacher et al.'s (2006) approach to plot the forms of interactions (see Fig. 4) and conducted simple slope tests. As revealed in Fig. 4, employee daily negative mood was strongly and positively associated with service sabotage behaviors ($\gamma = .27$, $p < .01$) when their emotional stability was low (1 SD

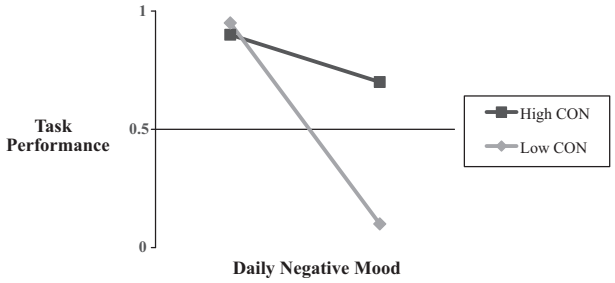

Fig. 2. Cross-level interaction of level-2 conscientiousness (CON) on level-1 daily negative moods-task performance relationship (Study 1).

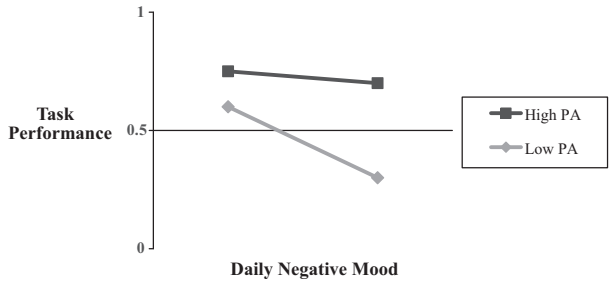

Fig. 3. Interactive effect between daily positive mood (PA) and daily negative mood on task performance (Study 1).

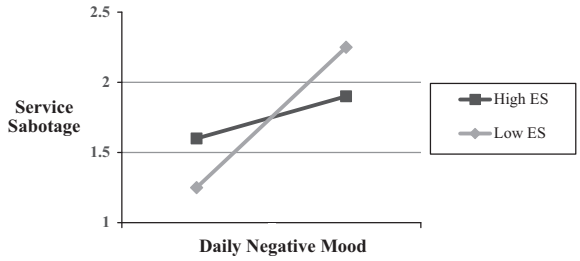

Fig. 4. Cross-level interaction of level-2 emotional stability (ES) on level-1 daily negative moods-service sabotage relationship (Study 1).

below the mean). However, this association was attenuated for emotionally stable employees (1 SD above the mean) ($\gamma = .15$, $p < .05$), supporting Hypothesis 5.

6. Study 1: Discussion

In Study 1, using daily survey results from bank tellers and bank database information, we examined the associations between daily negative mood and performance outcomes, as well as the moderating roles of personality traits and daily positive mood. Consistent with the self-control perspective, the results show that daily negative mood negatively predicted task performance (more task errors) and positively predicted service sabotage, indicating that negative mood can impair employees' self-control processes at work. In addition, the results show that emotional stability negatively moderated the negative mood-sabotage relationship. Furthermore, conscientiousness and daily positive mood attenuated the negative relationship between daily negative mood and task performance.

Although the Study 1 results supported the proposed hypotheses, several limitations exist. First, because the daily negative mood and performance outcomes were all measured at the end of each workday, the causality between daily negative mood and performance outcomes was unclear. Second, in Study 1, we only collected data from 54 participants. Although it is an acceptable between-person level sample size when using the experience sampling method (e.g., Beal & Ghandour, 2011; Ilies et al., 2006; To et al., 2012), the relatively small between-person level sample size reduces the statistical power to detect cross-level moderating effects (Mathieu, Aguinis, Culpepper, & Chen, 2012). Finally, the tasks, necessary skills and abilities of bank tellers are slightly different from other types of service employees. Therefore, it is unclear whether the findings obtained in Study 1 can be generalized to different service occupations or industries. To address these limitations, we conducted Study 2, which consisted of a larger sample size (i.e., 92 frontline service workers) from various service occupations and organizations. In addition, the daily negative mood and performance outcomes data were collected at different time points within the workday to reduce potential issues associated with reverse causality.

7. Study 2: Method

7.1. Sample and procedures

In Study 2, we obtained 913 sets of matched daily surveys from 92 frontline service workers from 53 service organizations in Taiwan. In order to increase the generalizability of our findings, the service organizations varied widely, including insurance (16%), restaurants (14%), financial services (13%), hospitality (11%), healthcare (8%), teaching (12%), public service (10%), and others (16%). We sent invitations to 60 human resource practitioners who worked in different service industries and 53 of them agreed to serve as the designated coordinator for their organization. Each coordinator helped us to recruit one to two frontline service workers from their organization, and provided contact information for them. Although we did not apply the random sampling method, we asked the coordinators to avoid recruiting only positive or negative employees to reduce the potential issues associated with sampling bias.[5] In total, 92 frontline service workers agreed to participate in our study.

In order to enhance the internal validity, we collected data from different sources (i.e., service workers and their supervisors) and at multiple points in time. First, after receiving the contact information for the 92 frontline service workers, we sent each participant an email that introduced the study purpose and process. Then we asked them to complete a survey on their demographic information, personality traits (i.e., conscientiousness and emotional stability), and social desirability (control variable). Each service worker was also asked to provide the email address of a supervisor who had the opportunity to observe that service worker interacting with customers: this supervisor would be asked to rate their daily task performance. Second, we employed an experience sampling method to collect the data regarding frontline service workers' daily moods and performance outcomes. Before the lunch break of each working day (i.e. before 12:00 PM), we sent participants an email or a short message (using smartphone software such as Facebook or LINE) asking them to recall and report on their positive and negative moods in the morning including via a

[5] The results in Table 4 indicated that the means of daily positive and negative moods are moderate and similar to the results of Study 1, suggesting that the participants were not too positive or negative in their daily moods. In addition, as shown in Table 5, there are significant between-person variances in terms of daily task performance and service sabotage (ICC (1) values are .46 and .26, respectively), suggesting daily performance outcomes varied significantly across different frontline service workers. Thus, we believe that sampling bias did not adversely influence our results.

hyperlinked survey. Furthermore, each participant's supervisor was asked to complete the afternoon survey by email by the end of the workday (around 5:00 PM). The supervisors were asked to rate each participant's daily task performance and service sabotage.

The daily data was collected across two subsequent weeks (10 working days), as a two-week period is a stable and generalizable time frame to capture information on individuals' daily lives (Dimotakis et al., 2011; Wheeler & Reis, 1991) and has been applied in previous daily studies (e.g., Ilies & Judge, 2004; To et al., 2012; Wang et al., 2011). Service workers and supervisors who completed the surveys for all 10 working days received a gift worth USD $10.00.

In total, 913 valid sets of matched morning and afternoon surveys were submitted by the 92 frontline service workers and their supervisors. The service workers were mostly female (67%) and ranged from 24 to 52 years old (M = 30.85; SD = 8.70). They had been employed at their organization for an average of five years (SD = 6.50).

7.2. Measures

In Study 2, we followed the same procedure to conduct the back-translation (Brislin, 1980). In addition, we slightly modified the anchors for daily task performance and service sabotage to better fit the context of Study 2. Detailed information is provided below.

7.2.1. Daily negative and positive moods

Study 2 used the same scale as Study 1 to measure service workers' daily moods. They were asked to evaluate their negative and positive moods *in the morning of each working day* on a 5-point Likert scale (1 = *not at all* to 5 = *extremely*). As we collected the daily mood data before the lunch break (before 12:00 PM), we asked the respondents to recall and evaluate their positive and negative moods *in the morning*. The Cronbach's alphas for daily negative and positive moods were .79 and .92, respectively.

7.2.2. Task performance

In order to measure service workers' daily task performance, we adapted four items from Williams and Anderson's (1991) scale (i.e., "this employee fulfills responsibilities specified in the job description", "this employee performs tasks that are expected of him/her", "this employee adequately completes assigned duties", and "this employee meets the formal performance requirements of the job"). Supervisors were asked to indicate whether service workers performed task-related behaviors *in the afternoon of each working day* using a dichotomous response option (0 = "no", 1 = "yes") because this is easy to complete and generates less social desirable responses than other formats (Wang et al., 2011). The Kuder-Richardson 20 coefficient was .81 for this scale.

7.2.3. Service sabotage

We also used the same 6-item measure from Study 1 to capture service workers' service sabotage behaviors. Supervisors were asked to indicate whether service workers engaged in each type of sabotage behavior *in the afternoon of each working day* using a dichotomous response option (0 = "no", 1 = "yes"). We chose to use yes/no response options to measure service sabotage for several reasons. First, given that supervisors have to rate service workers' sabotage and task performance across 10 working days, a yes/no checklist was deemed to be easy to complete, and also likely to reduce potential social desirability issues than other formats (Wang et al., 2011). Second, given service sabotage behaviors have a very low base rate and each behavior is less likely to happen more than once during the afternoon, rating these negative behaviors using a frequency anchor might be less meaningful. Finally, several related studies have applied the yes/no option to measure low-base-rate daily negative behaviors (e.g., Dalal, Lam, Weiss, Welch, & Hulin, 2009; Miner & Glomb, 2010; Wang et al., 2011). Thus, the yes/no response option was deemed to be appropriate in our study. As we used dichotomous options for the service sabotage measure, it was more appropriate to use the Kuder-Richardson 20 coefficient to calculate the reliability. The Kuder-Richardson 20 coefficient was .76 for this scale.

7.2.4. Conscientiousness and emotional stability

Service workers' personality traits were measured using Goldberg's (1999) International Personality Item Pool (IPIP), including 10 items for conscientiousness (e.g., "I pay attention to details"; "I am always prepared") and emotional stability (e.g., "I am relaxed most of the time"; "I get stressed out easily (reverse-coded)"). Service workers were asked to indicate the degree to which these behaviors describe them (1 = *strongly disagree*, 5 = *strongly agree*). The Cronbach's alphas for conscientiousness and emotional stability were .77 and .83, respectively.

7.2.5. Control variables

As in Study 1, we controlled for service workers' *gender, tenure, and social desirability tendency* in the analyses to rule out alternative explanations for our findings. Again, in order to take the alternative findings into consideration, we included all three interactions in the HLM models when testing the proposed hypotheses.

7.2.6. Data analysis

In Study 2, we followed the same procedure as in Study 1 to test the proposed moderating effects on the daily-level negative mood-performance relationship. Moreover, since 92 service workers were nested within 53 service organizations, we followed Liao et al.'s (2004) approach to control for the effect of organizations at Level 3 by including no variables at the organization-level, and left the effects nested in the organization-level to be freely estimated.

8. Study 2: Results

The descriptive statistics and between-person and within-person correlations among the Study 2 variables are reported in Table 4. As shown in Table 4, daily negative mood positively predicted service sabotage (r = .33, p < .01) and negatively predicted daily task performance (r = −.19, p < .01).

8.1. Between- and within-person variances

In Study 2, we also estimated the between- and within-person variances of the Level-1 variables. In order to examine the between- and within-person variances regarding daily negative mood, daily positive mood, service sabotage, and task performance, we specified null models that included these variables as the outcome variables, and included no predictors at all levels. The results are reported in Table 5.

Table 5 indicates that the ICC (1) values were .55 and .66 for daily negative mood and positive mood, respectively. In addition, 45 percent of the variance in daily negative mood was within-person, whereas 34 percent of the variance in daily positive mood resides at the within-person level. As for the performance outcomes, the ICC (1) value was .46 for task performance, suggesting 54 percent of the variance in task performance was within-person. Finally, the ICC (1) value was .26 for service sabotage, which indicates that 74 percent of the variance resides at the within-person level. The above findings suggest that the

Table 4
Descriptives and bivariate correlations among the Study 2 variables.

	Mean	SD	1	2	3	4	5	6	7	8	9
1 Daily positive mood	2.69	1.03	**(.92)**	.08	−.10	.38**	.10	−.09	.23*	.24*	.13
2 Daily negative mood	1.74	.73	−.02	**(.79)**	.39**	−.11	.05	−.23*	−.03	−.36**	.03
3 Service sabotage	.08	.21	−.12**	.33**	**(.76)**	−.26**	−.02	−.14	−.06	−.24*	.03
4 Task performance	.81	.36	.36**	−.19**	−.20**	**(.81)**	.06	.20*	.27**	.33**	−.12
5 Gender	1.36	.48					–	.05	.19	−.14	−.03
6 Tenure[1]	58.38	78.04						–	.07	−.05	−.01
7 Conscientiousness	3.40	.61							**(.77)**	.38**	−.06
8 Emotional stability	2.84	.61								**(.83)**	−.17
9 Social desirability	.51	.14									–

Note 1: in months.
Cronbach's alpha coefficients are presented in boldface on the main diagonal.
Coefficients above the main diagonal are between-person correlations based on 92 bank tellers.
Coefficients below the main diagonal are within-person correlations based on 913 daily surveys across 92 bank tellers.
* $p < .05$.
** $p < .01$ (two-tailed).

Table 5
Parameter estimates and variance components of level-1 variables (Study 2).

Variable	Intercept (γ_{00})	Within-person variance (ρ^2)	Between-person variance (τ_{00})	ICC (1) value	Percentage of within-person variance (%)
Daily negative mood	1.74*	.24	.29*	.55*	45
Daily positive mood	2.69*	.34	.67*	.66*	34
Task performance	.81*	.06	.05*	.46*	54
Service sabotage	.08*	.03	.01*	.26*	74

Note: γ_{00} = pooled intercept that represents average level of variable across persons.
ρ^2 = within-person variance in the variable. τ_{00} = between-person variance in the variable.
ICC (1) value was computed as: $\tau_{00}/(\tau_{00} + \rho^2)$.
Percentage of within-person variance was computed as: $\rho^2/(\tau_{00} + \rho^2)$.
* $p < .05$.

between- and within-person variances of the Level-1 variables are significant and meaningful. Therefore, we proceeded with hypothesis testing.

8.2. Hypotheses testing

8.2.1. The relationships between daily negative mood and performance outcomes

The results of the three-level (i.e., within-person, between-person, and organization-level) HLM analyses appear in Table 6. The random effects of all variables are estimated in the model. According to Models 1 and 3 of Table 6, daily negative mood was negatively related to daily task performance ($\gamma = -.10$, $p < .01$) and positively related to service sabotage ($\gamma = .08$, $p < .01$), after controlling for the effects of the Level-1 and Level-2 control variables. Hence, Hypotheses 1 and 2 were both supported.

8.2.2. The moderating effect of conscientiousness on the daily negative mood-task performance relationship

Before testing the cross-level moderating effects of Level-2 personality traits, we also examined the random effects for the slopes of the relationships between daily negative mood and performance outcomes. The results show that these relationships varied significantly across different service workers, suggesting that these within-person relationships had different magnitudes across the service workers.

Moreover, as shown in Models 2 and 4 of Table 6, conscientiousness positively moderated the relationship between daily negative mood and task performance ($\gamma = .10$, $p < .01$). We also applied Preacher et al.'s (2006) procedures to clarify the form of interaction (see Fig. 5) and the simple slopes. Fig. 5 shows that daily negative mood was negatively associated with task performance when employees' conscientiousness was low ($\gamma = -.30$, $p < .01$). However, this negative relationship was weakened for high conscientiousness employees ($\gamma = -.11$, *n.s.*), supporting Hypothesis 3.

Table 6
Results of HLM on task performance and service sabotage (Study 2).

Independent variable	Task performance		Service sabotage	
	Model 1	Model 2	Model 3	Model 4
Level 1: Within-person				
Intercept	.09**	.08**	.08**	.07**
Daily positive mood (PA)	.11**	.11**	−.03**	−.03**
Daily negative mood (NA)	−.10**	−.10**	.08**	.08**
PA * NA	.05**	.04**	−.02	−.01
Level 2: Between-person				
Social desirability	−.10	−.07	.03	.05
Gender	.01	.00	−.01	−.01
Tenure	.01**	.01*	−.00	−.00
Conscientiousness	.05*	.04*	.01	.04
Emotional stability	.03	.03	−.03	.02
Cross-level interactions				
Conscientiousness * NA		.10**		02
Emotional stability * NA		−.03		.−.07*
Level 3: Organization (no predictor was added)				

Note 1: Level-1 $N = 913$; Level-2 $N = 92$; Level-3 $N = 53$.
Note 2: All level 1 predictors were group-mean centered.
Note 3: Organization-level effect is controlled in the model with no predictors entered at Level 3.
Note 4: The results were unchanged if we included interaction terms into the model separately.
* $p < .05$.
** $p < .01$ (two-tailed).

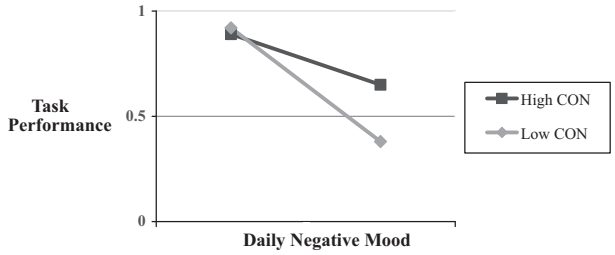

Fig. 5. Cross-level interaction of level-2 conscientiousness (CON) on level-1 daily negative moods-task performance relationship (Study 2).

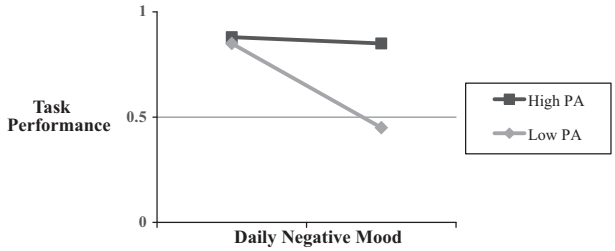

Fig. 6. Interactive effect between daily positive mood (PA) and daily negative mood on task performance (Study 2).

8.2.3. The moderating effect of daily positive mood on the daily negative mood-task performance relationship

According to Models 2 and 4 of Table 6, daily positive mood positively moderated the relationship between daily negative mood and task performance ($\gamma = .04$, $p < .01$). We also plotted the negative mood-task performance relationship under high (1 SD above the mean) and low (1 SD below the mean) levels of positive mood to clarify the moderating effect of positive mood (see Fig. 6). Based on the interaction forms shown in Fig. 6, daily negative mood strongly and negatively predicted task performance ($\gamma = -.24$, $p < .01$) when employees experienced low levels of daily positive mood. However, such negative relationship was weakened for employees with high positive mood. Thus, Hypothesis 4 was supported.

8.2.4. The moderating effect of emotional stability on the daily negative mood-service sabotage relationship

As shown in Models 2 and 4 of Table 6, after including the Level-1 and Level-2 predictors as well as the Level-3 effects in the model, emotional stability moderated the relationship between daily negative mood and service sabotage ($\gamma = -.07$, $p < .05$). To clarify the form of the cross-level interaction, we applied Preacher et al.'s (2006) approach to plot the forms of interaction (see Fig. 7) and conduct the simple slope tests. As depicted in Fig. 7, daily negative mood was positively related to service sabotage behaviors ($\gamma = .20$, $p < .01$) when emotional stability was low (1 SD below the mean). However, this relationship was weaker for service workers with high emotional stability (1 SD above the mean) ($\gamma = .12$, $p < .05$). As such, Hypothesis 5 was again supported.

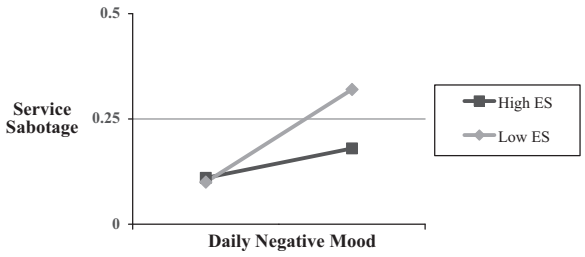

Fig. 7. Cross-level interaction of level-2 emotional stability (ES) on level-1 daily negative moods-service sabotage relationship (Study 2).

9. Study 2: Discussion

In order to enhance the generalizability and internal validity of our results, we reexamined the Study 1 findings by utilizing a larger and more diversified sample, as well as collecting the daily data at different time points from multiple sources. Overall, the Study 2 findings replicated those obtained in Study 1. We found that daily negative mood negatively predicted supervisor-rated daily task performance and positively predicted supervisor-rated service sabotage, consistent with the self-control framework and the findings of Study 1. Moreover, we found that emotional stability weakened the positive association between daily negative mood and supervisor-rated service sabotage, while conscientiousness and daily positive mood attenuated the negative relationship between daily negative mood and supervisor-rated task performance. The fact that most findings were consistent with prior findings lends confidence to the generalizability and internal validity of our results across the two studies.

10. General discussion

In this section, we briefly discuss the theoretical and practical implications of this study.

10.1. Theoretical implications

The present study advances the mood at work literature in several important ways. First, recent evidence has shown that employees who experience high levels of negative mood within a working day are more likely to perform worse on their tasks (Miner & Glomb, 2010; Rothbard & Wilk, 2011; Shockley et al., 2012). By utilizing the experience sampling method and two studies with different samples and research designs, employee daily negative mood still increases daily task errors (Study 1) and decreases supervisor ratings of daily task performance (Study 2), even when employee daily positive mood and two performance-related traits (i.e., conscientiousness and emotional stability; Barrick & Mount, 2000) are taken into consideration, which extend past findings and ensures the generalizability of our findings.

Second, although recent studies have found that daily negative mood is associated with high levels of counterproductive work behaviors toward the organization or coworkers (Dalal et al., 2009; Ilies et al., 2006; Scott & Barnes, 2011; Shockley et al., 2012; Yang & Diefendorff, 2009), fewer studies have attempted to examine the detrimental effect of employee daily negative mood on customers. As expected, we found that employee daily negative mood also positively predicted both self-rated service sabotage (Study 1) and supervisor-rated service sabotage (Study 2) across different service occupations (i.e., bank tellers and other types of service workers), service types (e.g., service encounters versus service relationships) and organizations (e.g., banks, hospitals, healthcare centers, restaurants, or insurance companies). Thus, the present study not only examined the daily negative mood-counterproductive work behavior relationship within customer service interactions, but also shows that employees who experience negative mood are more likely to engage in harmful behaviors toward customers (e.g., deliberately mistreat customers or intentionally provide poor service to customers) across different service contexts.

Third, drawing on the self-control model (Baumeister & Vohs, 2007; Tice et al., 2001), we examined how individual characteristics associated with self-control motivation, resources, and capacity buffer the impairment of daily negative mood on performance outcomes. As expected, conscientiousness weakens the negative association between daily negative mood and task performance. Although negative mood impairs task performance by reducing the motivation to regulate goal-directed behaviors (Tice et al., 2001), employees with high conscientiousness have stronger goal-directed motivations and are less likely to be influenced by the momentary moods (Ilies et al., 2006; Jensen-Campbell et al., 2002). Thus, conscientious employees are able to mitigate the harmful effect of daily negative mood on task performance. However, it is surprising that that conscientiousness had no effect on service sabotage in either of the two studies. There are several possible explanations for this unexpected finding. First, daily service sabotage is closely related to employees' daily interactions with customers (Wang et al., 2011). Thus, the daily fluctuation in service sabotage might mainly depend on employee daily events or momentary moods, whereas the stable traits might predominantly explain the overall tendency to engage in service sabotage (Wang et al., 2011). Based on this line of reasoning, the personality traits (e.g., conscientiousness, emotional stability) would account for overall frequencies of service sabotage behaviors over a certain time period (e.g., the past 6–12 months; Skarlicki et al., 2008), rather than the momentary sabotage behaviors. Second, based on Harris and Ogbonna's (2009) categorization, there are four different motives to engage in service sabotage: relieving boredom (i.e., Thrill Seekers), shirking one's duties (i.e., Apathetics), taking revenge on customers (i.e., Customer Revengers), and stealing money to satisfy their needs (i.e., Money Grabbers). It is plausible that conscientious employees are more likely to inhibit certain types of motives (e.g., shirking one's duties or stealing money), but not others (e.g., relieving boredom or taking revenge on customers). Future researchers can follow Harris and Ogbonna's (2009) categorization to differentiate the motives and forms of service sabotage to examine whether employee personality traits and mood states can predict different forms of service sabotage behaviors.

In addition, our findings also support the view of the "undoing hypothesis" that positive mood can fuel self-control resources and buffer the resource depletion associated with negative mood (Dimotakis et al., 2011; Fredrickson & Levenson, 1998; Tice et al., 2007). To our knowledge, the present study is one of few that tests the undoing hypothesis in the workplace and focuses on performance outcomes. Although daily negative mood drains employee cognitive, psychological, and physical resources to engage in goal-directed behaviors (Tice et al., 2001), daily positive mood can increase employees' self-control resources to counteract the detrimental effects of negative mood on task performance (Fredrickson, 2001; Tice et al., 2007).

On the other hand, the strength of the negative mood-service sabotage relationship depends on employee emotional stability. Negative mood fuels service sabotage by decreasing the self-regulation capacity against aggressive behaviors and enhancing the impulses to engage in harmful behaviors (Chi et al., 2013; Denson et al., 2011). As emotional stability is associated with the self-control capacity for negative emotions and impulses (DeYoung, 2010), emotionally stable employees are capable of regulating aggression when they experience negative mood (Barrick & Mount, 2000; John & Gross, 2007), reducing the frequency of service sabotage. Thus, emotional stability may be a particularly important trait to consider with regards to inhibiting the negative mood-service sabotage linkage.

Taken together, the present findings are consistent with our self-control framework: daily negative mood impairs performance behaviors, and individual self-control characteristics can mitigate the harmful effects of daily negative mood. By integrating the self-control framework into the mood at work literature and testing our model using two studies with different research settings, the present study extends the nomological network on daily negative mood by examining its associations with wider performance outcomes as well as clarifying "when" and "for whom" the detrimental effects of daily negative mood on performance outcomes can be mitigated.

10.2. Practical implications

Our findings show that employee daily negative mood leads to lower task performance and more service sabotage behaviors. Given that employees naturally experience negative mood in their daily work, the present findings provide several implications for organizations to weaken the detrimental impacts of employee negative mood. First, we find that conscientious employees are able to buffer the negative effects of daily negative mood on task performance, which indicates that these employees are more likely to stay focused on their tasks and regulate their behaviors toward performance goals in spite of their negative mood experience (Jensen-Campbell et al., 2002). Moreover, emotionally stable employees are able to weaken the frequency of service sabotage associated with daily negative mood, which means that employees with high emotional stability can control their impulses and aggressive behaviors associated with negative mood (Barrick & Mount, 2000). Since daily negative mood is a naturally occurring and unavoidable daily experience, service organizations can consider using multiple selection tools to identify applicants with high emotional stability and conscientiousness, such as personality tests or situational interviews (Gatewood, Feild, & Barrick, 2011), to minimize the harmful effects of daily negative mood.

Second, the present findings also show that daily positive mood can "undo" the detrimental effects of daily negative mood on task performance. It is plausible that employees with high daily positive mood have additional inner resources that help them to bounce back from their negative mood (Fredrickson, 2001), thereby mitigating the negative effects of negative mood on task performance. Again, given that negative mood occurs naturally within employee's daily lives, organizations can create a favorable and supportive work context that promotes employee daily positive mood. For example, the creations of a favorable and comfortable physical environment in which service interactions take place may increase employees' positive affective experiences at work (Brief & Weiss, 2002). In addition, organizations can provide a supportive work context to increase employees' positive mood at work. For instance, organizations can implement employee assistance programs that provide them with necessary job-related assistance, improve the wellness facilities, and offer flexible work hours (Maertz, Griffeth, Campbell, & Allen, 2007). Furthermore, organizations can facilitate employees' informal interactions with coworkers by launching activities such dinner parties and morale building activities (Chi et al., 2013). Finally, organizations should provide more extensive training on emotion management to develop employees' skills to reappraise difficult service situations or use cognitive change to adjust their mood states (Chi et al., 2013; Grandey, 2000). These courses would help service workers to effectively bounce back from negative mood or enhance positive mood at work.

10.3. Limitations and future research

Some limitations should be noted regarding the current findings. First, in Study 1, the daily negative mood, service sabotage, and task performance data were all collected at the end of a

working day. Therefore, we cannot rule out the possibility of reciprocal causality in Study 1. However, we collected the data regarding daily negative mood and performance outcomes using a time-lag design in Study 2 and replicated the findings obtained in Study 1. This helps to alleviate concerns about reverse causality. Future researchers can re-examine the negative mood-performance outcome links by employing an experimental research design (e.g., manipulate employee negative moods first, and then rate their reactions regarding subsequent behaviors and performance) to ensure the internal validity of the negative mood-performance association. Moreover, future researchers can collect mood and performance data at multiple time points within a working day (e.g., Dalal et al., 2009; Glomb, Bhave, Miner, & Wall, 2011) to investigate the concurrent and lagged effects of daily negative mood on task performance and service sabotage.

Second, although we collected the daily negative mood and objective task performance data from different sources in Study 1, the negative mood-service sabotage relationship result may have been influenced by common method variance (CMV; Podsakoff & Organ, 1986). However, as Evans (1985) suggested, CMV only inflates the main effects and attenuates the moderating effects on the main relationships. Moreover, we also statistically controlled for potential sources of CMV in the hierarchical linear model by including employees' social desirability and daily positive mood (Podsakoff & Organ, 1986), and still obtained significant findings. Furthermore, after collecting the data regarding daily negative mood and service sabotage from different sources (i.e., supervisor-ratings) at different time points in Study 2, the findings remained unchanged. Based on the above evidence, we believe that CMV did not adversely influence our findings.

Third, we have examined the daily negative mood-performance relationship within the service industry. Although previous studies also tested such daily relationships within the service context (e.g., call centers; Miner & Glomb, 2010; Rothbard & Wilk, 2011), this approach limits the external validity of our findings. However, as we collected the performance data via commonly used formats and rating sources (i.e., objective data/self-reports/supervisor ratings) in other industries, we believe that our findings can be generalized to other industries. Future researchers can consider testing the current findings using a more diversified research sample across more varied industries and occupations.

Fourth, we asked supervisors to evaluate employees' daily task performance and sabotage by using a yes/no option in Study 2. Although this approach helps the supervisors to complete the responses easily and reduces the potential for socially desirable responses (Dalal et al., 2009; Wang et al., 2011), the yes/no option also restricts the variance of responses (Gamst, Meyers, Burke, & Guarino, 2015) and attenuates the relationships between daily negative mood and task performance/service sabotage in Study 2. However, we still obtained significant findings consistent with our expectations. Thus, the use of the dichotomous option to measure performance outcomes should not have adversely influenced our findings. Nevertheless, future studies might use more objective measures (e.g., daily performance records or customer service monitoring records) to measure employee daily performance outcomes.

Finally, although we have applied the self-control framework as the overarching theory for the proposed hypotheses, we did not include the self-control capacity, motivation, or resources in our model. Future researchers can explicitly measure employee self-control capacity, motivation, or resources (e.g., Christian & Ellis, 2011; Lian et al., 2014) and develop a moderated mediation model to test whether daily negative mood reduces task performance through impairing self-control motivations and resources, or increases service sabotage via reducing self-control capacity; they may also explore whether emotional stability, conscientiousness and daily positive mood buffer the negative mood-performance outcome associations via different self-control mechanisms.

11. Conclusion

Consistent with the self-control framework, our study found that daily negative mood impairs employees' task performance and increases service sabotage. In addition, we also found that individual characteristics associated with self-control motivations, resources, and capacity can moderate these effects. Specifically, employees with high conscientiousness and daily positive mood can weaken the negative relationship between daily negative mood and task performance, whereas emotionally stable employees can buffer the positive association between daily negative mood and service sabotage. Overall, the present study explicates the circumstances under which the harmful effects of daily negative mood can be alleviated.

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