

Contextualizing Emotional Exhaustion and Positive Emotional Display: The Signaling Effects of Supervisors' Emotional Exhaustion and Service Climate

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In this study, we investigated how supervisors' emotional exhaustion and service climate jointly influence the relationship between subordinates' emotional exhaustion and their display of positive emotions at work. Using data from frontline sales employees and their immediate supervisors in a fashion retailer, we hypothesized and found that under the condition of a less positive service climate, subordinates' emotional exhaustion was more negatively related to their positive emotional display when supervisors' emotional exhaustion was higher rather than lower; this interaction effect of subordinates' and supervisors' emotional exhaustion was not significant in a more positive service climate. These results suggest that service climate and supervisors' emotional exhaustion provide emotionally exhausted employees with important information cues about the possible availability of compensatory resources they need to uphold their efforts to display service-focused emotions.

Keywords: emotional exhaustion, service climate, emotional display

Nowadays, the majority of the working population is employed in the service industry in developed as well as emerging economies (Central Intelligence Agency, n.d.). Delivering high-quality services normally involves frequent interactions with customers and coworkers, and this places complex emotional demands on employees. As a result, service workers, who are expected to express cheerful and friendly emotions and suppress negative emotions (Rafaeli & Sutton, 1987), are susceptible to emotional exhaustion characterized by the feeling that their emotional resources are becoming drained and that they lack energy (Cordes & Dougherty, 1993; Witt, Andrews, & Carlson, 2004). A body of research, which predominantly builds on the conservation of resources (COR) theory (Hobfoll, 1988, 1989), suggests that emotionally exhausted employees tend to protect or replenish their depleting resources by minimizing their efforts to display positive emotions and withdrawing from work (Cropanzano, Rupp, & Byrne, 2003; Halbesleben, 2006; Jackson, Schwab, & Schuler, 1986; Lee & Ashforth,

1996; Wright & Cropanzano, 1998). A comprehensive understanding of how emotional exhaustion affects positive emotional display is important because the expression of positive emotions has been shown to be closely associated with customers' perceptions of service quality, customer satisfaction, and loyalty (Pugh, 2001; Rogelberg, Barnes-Farrell, & Creamer, 1999; Tsai & Huang, 2002). What is critical for organizations is knowing how to help exhausted employees recover from resources depletion and maintain positive emotional display (Tice, Baumeister, Shmueli, & Muraven, 2007).

The advocates of the COR theory have proposed that the extent to which employees actually reduce their efforts and level of performance in response to the ongoing challenge of depleting resources may be dependent on their perceptions of the availability of resources that can compensate for and replenish the depleted ones (Hobfoll, 1989; Kay, Gaucher, Napier, Callan, & Laurin, 2008; Schwarz, 2002). In the current study, we view this premise of the COR theory from a social information processing perspective (Salancik & Pfeffer, 1978). On this basis, we put forward the argument that the immediate social environment provides important information cues that inform emotionally exhausted employees about the availability of compensatory resources and about what degree of effort and type of emotional display are appropriate.

Specifically, we investigate how supervisors' emotional exhaustion and service climate function as important information cues that regulate the relationship between retail store subordinates' emotional exhaustion and their display of positive emotions at work. Subordinates are highly dependent on their supervisors for resources (Kramer, 1995). If supervisors suffer from emotional exhaustion, emotionally exhausted subordinates may receive the signal that their worn-out supervisors are unable to provide them with the compensatory resources they need to sustain their positive emotional display. We propose that such a moderating effect of

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supervisors' emotional exhaustion on the exhaustion–display link may be dependent on the levels of service climate. Service climate pertains to employee perceptions of the extent to which delivering high-quality customer service is rewarded and supported by the organization (Schneider, White, & Paul, 1998). A positive service climate may help employees to internalize service quality norms and generate a strong motivational force (i.e., a personal resource; Liao, Toya, Lepak, & Hong, 2009) to uphold their efforts to deliver service-focused emotions even when they and their supervisors suffer from emotional exhaustion. Thus, this study contributes to the literature by showing the essential role of social contexts (Halbesleben & Buckley, 2004; Johns, 2006), which provide signals to employees about the availability of compensatory resources to mitigate the negative effects of emotional exhaustion on positive emotional display.

Emotional Exhaustion and Positive Emotional Display

Service employees are expected to express cheerful and friendly emotions and conceal negative emotions in order to bring about customer satisfaction and loyalty. However, the constant regulation and display of a positive emotional tone require substantial emotional effort (Hochschild, 1979; Rafaeli & Sutton, 1987), which causes service employees to be susceptible to feelings of being overwhelmed and exhausted by their work (Grandey, 2003; Wilk & Moynihan, 2005). Much research attention has focused on investigating how and when emotional labor, such as the frequency of positive emotional display and the duration of customer interaction, can lead to problems of emotional exhaustion (e.g., Maslach, 1982; Morris & Feldman, 1996). Yet, the exploration of the repercussions of emotional exhaustion for work performance is still in its infancy. Rafaeli and Sutton (1987) noted that emotionally exhausted employees may have difficulty in managing their emotions in service encounters. This notion has been supported by a longitudinal study showing a negative relationship between emotional exhaustion and service performance (Wright & Cropanzano, 1998). Likewise, Grandey (2003) showed that emotional exhaustion was negatively related to affective delivery (i.e., the display of positive emotions) and positively related to character breaking (i.e., the expression of negative emotions), though the relationship with affective delivery did not remain significant if path analyses were used.

Since we define positive emotional display as the extent to which employees show positive emotions and conceal negative ones in order to deliver quality experiences in service encounters, we focus on two elements of emotional display that encompass the expression of cheerful and friendly emotions and the suppression of negative ones. Moreover, we study positive emotional display at work in a general sense because previous studies have shown that employees' display of positive emotions toward both customers and coworkers denotes positive service attitudes and strong team unity, which enhance service delivery (cf. Schneider et al., 1998).

The COR theory provides valuable insights into the adverse effects of emotional exhaustion on affective work behaviors (Halbesleben & Bowler, 2007; Wright & Cropanzano, 1998). It posits that individuals are likely to experience emotional exhaustion when they have inadequate resources to cope with work demands. Resources are defined as "objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as

means for achievement or protection of resources" (Hobfoll, 1989, p. 516). In the face of an actual or perceived threat of resource loss, employees become motivated to find ways in which they can protect or replenish their depleting emotional resources (e.g., Halbesleben, 2006; Lee & Ashforth, 1996). A prevalent coping strategy is to withdraw from the overwhelming work demands, thus reducing effort and performance levels. By adopting such a withdrawal strategy, service employees are likely to invest fewer resources into emotional labor. Thus, they are no longer able to sincerely express warm and pleasant feelings and suppress negative reactions constantly and consistently (Grandey, 2003). Hence, we predict the following:

Hypothesis 1: Emotional exhaustion is negatively related to positive emotional display.

Supervisors' Emotional Exhaustion as a Boundary Condition

Although employees tend to protect their resources by putting less effort into their work and lowering their level of service performance in response to feelings of emotional exhaustion, this tendency may be dependent on the extent to which they expect to be able to obtain other resources that can compensate for resource depletion. That is, lost resources can be recovered or restored by compensatory resources (e.g., sleep, rest, recognition, care, and social–emotional and instrumental support), which can recharge individuals' exhausted energy or uplift a positive mood to override the negative effects of emotional exhaustion (Dormann & Zapf, 1999; Muraven, Tice, & Baumeister, 1998). Experimental studies have provided support for this argument by showing that watching a comedy video or receiving a surprise gift from others can stimulate positive emotions and empower an exhausted individual to perform tasks (Tice et al., 2007). In work settings, employees who get emotionally exhausted become motivated to consider the availability of resources in their working environment that can compensate for their depleting resources. We argue that compensatory resources in the workplace may be obtained by receiving care and compassion from others, being cheered up by someone, being understood and listened to, and finding ways to release stress (cf. Halbesleben, 2006; Karasek, Triantis, & Chaudhry, 1982). These compensatory resources may energize employees to curtail the depletion of their resources and offset their emotional withdrawal from work (Kahn, 1993; Tice et al., 2007; Tyler & Burns, 2008).

This particular premise of the COR theory concurs with the fundamental premise of social information processing theory. This theory states that individuals, as adaptive organisms, adapt their behaviors to their social context by focusing their attention on the informational and social environment they engage in; hence, "the social environment provides cues which individuals use to construct and interpret events" (Salancik & Pfeffer, 1978, p. 226). In a work context, supervisors have the power to control and influence subordinates' resources, time, and interactions. In contrast, as subordinates are relatively powerless and dependent on their supervisors, they routinely confront vulnerabilities in the leader–member relationship (Kramer, 1995). The asymmetrical power relationship between subordinates and supervisors tends to turn the former's attention to the latter's situation in an effort to predict

their own fate (Fiske, 1993). In this regard, dependent subordinates are likely to attend to the information clue from their supervisor and interpret how it will affect themselves (Fiske, 1993). A supervisor's emotional exhaustion is likely to play an important role in this social information process because it is highly communicative in nature (e.g., Bakker, Van Emmerik, & Euwema, 2006; Halbesleben & Buckley, 2006) and often accompanied with a high level of activation and arousal (Wright & Cropanzano, 1998). Hence, we contend that the state of emotional exhaustion of supervisors may function as a powerful information signal exerting considerable influence on subordinates' perception of available compensatory resources, which may determine how subordinates respond to their own emotional exhaustion.

Specifically, when subordinates experience emotional exhaustion, they tend to seek signs of the availability of compensatory emotional resources by observing their supervisors' energy states and behaviors. Supervisors who suffer from emotional exhaustion themselves are likely to explicitly and implicitly signal that they cannot provide subordinates with the consideration and support they need to refill their depleted resources. To support this argument, both field and experimental studies have shown evidence that people will reduce their responsiveness, sensitivity, availability, and positive initiations to others when they feel emotionally depleted (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Repetti, 1989). Therefore, emotionally exhausted supervisors may become more passive about dealing with their subordinates' problems. This may increase the threat of further resource loss for subordinates, making their own emotional exhaustion states even more salient and critical. In order to avoid continuous loss of resources, employees in such a situation can be expected to further persist in redirecting their remaining resources and adopting withdrawal strategies, thereby exacerbating the adverse implications of their emotional exhaustion for the expression of positive emotions in service encounters. In contrast, supervisors with lower levels of emotional exhaustion are apt to convey signals to subordinates that compensatory resources might be obtained from them. Observing such signals from supervisors is likely to mitigate the threat of further resource loss for subordinates and may even provide them with prospects for replenishing depleted resources. Therefore, we expect supervisors' emotional exhaustion to operate as a boundary condition on the relationship between subordinates' emotional exhaustion and positive emotional display.

Hypothesis 2: The relationship between subordinates' emotional exhaustion and their positive emotional display becomes more negative as the supervisors' emotional exhaustion increases.

The Role of Service Climate

The aforementioned social information processing perspective also informs the social influence of climate defined in terms of the shared perceptions of how employees should relate to their work environment and what attitudes and behaviors are appropriate (Salancik & Pfeffer, 1978). Climate is the ambience surrounding employees, providing cues, norms, and expectations, that constrains the process of rationalization or justification of their work behaviors. This implies that climate not only plays a key role in promoting appropriate work behaviors even when employees feel

emotionally exhausted but that it also has the potency to override interfering signals sent by other sources in the work environment (Salancik & Pfeffer, 1978).

Service climate refers to employees' shared perceptions of the practices, procedures, and behaviors concerning quality customer service (Schneider, 1990). These perceptions inform employees about what will get rewarded, what will be supported, and what is expected of them in delivering customer service (Schneider et al., 1998). A service climate rests upon the availability of supportive resources and facilitative conditions in the form of training, managerial practices, supportive colleagues, assistance in removing obstacles to service delivery, and recognition through human resources policies and practices (Schneider & Bowen, 1993). These practices of promoting service quality help to foster the display rules and norms about which emotions should be expressed and which should be suppressed (Ashforth, 1993; Morris & Feldman, 1996; Rafaeli & Sutton, 1987). Thus, as a service climate signals what service-focused affective behaviors are expected and rewarded, we hypothesize that this ambience surrounding employees will promote the actual display of positive emotions. This hypothesis is in accordance with previous conceptual and empirical work proposing and showing that a positive service climate generally results in better service-focused work behaviors, higher service quality, increased customer satisfaction, and more sales (e.g., Schneider, 1990). Indeed, Tsai (2001) has found that the psychological climate for service friendliness is related to positive emotional display. We extend this work by examining the effects of the general climate for quality service on positive emotional display.

Hypothesis 3: Service climate is positively related to subordinates' positive emotional display.

In addition to this direct effect, the social influence of service climate also has the potential to moderate the relationship between emotional exhaustion and positive emotional display because service climate provides signals to employees about the expected group goals and behavioral norms. Specifically, to the extent that employees perceive that delivering quality service is recognized and rewarded, maintaining the expression of positive emotions in service encounters may become a salient goal for them (Liao et al., 2009). Goals are a key to motivation in the sense that they bring about the arousal, direction, intensity, and persistence of voluntary actions (Mitchell, 1997). According to the COR theory, motivation is an energy resource that is valuable in facilitating the acquisition of other kinds of desirable resources (Hobfoll, 1989). As such, a positive service climate may provide emotionally exhausted employees with the drive to maintain the delivery of positive emotions in order to obtain the recognition and rewards that can recharge their depleted emotional resources. In addition, through the process of internalizing and identifying with the shared perceptions and norms of high-quality service, employees generate a type of internal motivational force (Liao et al., 2009) that can serve as a compensatory energy resource needed to recharge their depleted resources for further resource investment in delivering positive emotional display (cf. Grandey, 2003).

Hypothesis 4: The relationship between subordinates' emotional exhaustion and positive emotional display becomes less negative in a more positive service climate.

As argued earlier, service climate may offset the influence of supervisors' emotional exhaustion on subordinates. A positive service climate can motivate subordinates to keep investing effort to deliver positive emotions, thereby not only allowing them to overcome their own feelings of emotional exhaustion but also overriding the signals received from their emotionally exhausted supervisors. In other words, a more positive service climate is likely to buffer the effects of supervisors' emotional exhaustion on the link between subordinates' emotional exhaustion and positive emotional display. By contrast, in the case of a less positive service climate, where there are no clear group goals and motivational forces to guide and drive employees' behaviors, emotionally exhausted employees are more likely to pay attention to signals about the availability of emotional resources from significant others such as their supervisors. Consequently, under the condition of a positive service climate, supervisors' emotional exhaustion is less likely to have an effect on the link between subordinates' emotional exhaustion and positive emotional display. Under the condition of a less positive service climate, however, low levels of supervisors' emotional exhaustion will attenuate and high levels of supervisors' emotional exhaustion will amplify the negative relationship between subordinates' emotional exhaustion and positive emotional display. Therefore, we formulate the following hypothesis:

Hypothesis 5: Service climate will be related to the interaction of subordinates' and supervisors' emotional exhaustion, such that subordinates' positive emotional display will be higher under a more positive service climate irrespective of the levels of emotional exhaustion of subordinates and supervisors and lower under a less positive service climate only when both subordinates' and supervisors' emotional exhaustion are higher.

Method

Sample and Procedure

We tested the hypotheses using data from a sample of frontline sales employees as well as their immediate supervisors in a well-known and established fashion retailer in the Asia-Pacific region. The service in these stores can be characterized as short duration service encounters in which lifestyle apparel is sold.¹ The data were collected as part of a more general survey on job-related stress and attitudes, service delivery, and job performance.²

We administered the questionnaires to the frontline sales employees and their supervisors separately. The respondents were personally approached by us to brief them on the purposes of the study and to explain the procedures for implementing the survey. Participation in the survey was voluntary and confidentiality was ensured. All of the 252 frontline sales employees and the 63 store supervisors of the 63 chain stores in Shenzhen, China and in Hong Kong were invited to participate in the study. The data from 41 respondents were discarded because they were not complete.³ Likewise, those teams with less than three respondents were taken

out. The average team size of each store was four members. The effective response rates were 83% for the subordinates' survey and 88% for the supervisors' survey. The final sample consisted of 211 subordinates belonging to 56 teams. For the supervisor sample, 82.1% were female and 96.8% had received a high school education or above. The mean age and organizational tenure of the supervisors were 30 and 9.7 years, respectively. For the subordinate sample, 81.3% of the participants were female and 83.1% had received a high school education or above. The mean age and organizational tenure of the subordinates were 24.1 and 2.9 years, respectively. The average length of the supervisor-subordinate relationship was 7.2 months.

Measures

Supervisors rated their own level of emotional exhaustion (moderator variable) and positive emotional display of subordinates (dependent variable). On the other hand, subordinates rated their own level of emotional exhaustion (independent variable), service climate (moderator variable), and other descriptive information. All measures used in the current analysis were developed originally in English and were translated to Chinese using the double-blind back-translation procedure (Brislin, Lonner, & Thorndike, 1973).

Maslach, Jackson, and Leiter's (1996) nine-item scale was used to assess supervisors' and subordinates' feelings of emotional exhaustion. A sample item is "I feel emotionally drained from my work" (1 = *totally disagree*; 5 = *totally agree*). The Cronbach's alpha coefficients for supervisors' and subordinates' emotional exhaustion were .80 and .75, respectively. Subordinates' positive emotional display was assessed using a six-item scale developed by Diefendorff and Richard (2003). A sample item is "Remains positive at work even when he/she may be feeling otherwise" (1 = *strongly disagree*; 7 = *strongly agree*; $\alpha = .88$). Service climate

¹ The duties for both frontline sales employees and their supervisors include service encounters, providing information to customers, handling payment procedures and merchandise, and daily shop operations. In addition, shop supervisors should also handle the daily roster of their subordinates, assign job rotation, and help their subordinates whenever they encounter any problem at work. Both subordinates and supervisors should frequently interact with customers during service encounters. Although the personnel of the whole company have been undergoing extensive training in customer service, levels of service climate may still vary across stores. Research has suggested that service climate and display norms are largely determined by the individual characteristics of the employees in a particular store (Diefendorff & Richard, 2003; Morris & Feldman, 1996), customers with specific backgrounds and needs (Ashforth, 1993; Witt et al., 2004), how the stores are managed by regional or district managers (Wilk & Moynihan, 2005; Zapf, 2002), and the role and task variety in the job duties required in specific stores (Morris & Feldman, 1996; Wharton & Erickson, 1993).

² Some of these survey data were used in a study by Janssen, Lam, and Huang (in press) that documented moderating effects of distributive justice and positive affect on the relationship between emotional exhaustion and job performance.

³ As the missing data were random, we used mean substitutions to retain all data and rerun the analyses. There were no significant changes in our findings, $\Delta\chi^2(1) = 6.12, p < .05$; $B = .26, p < .01$, and the patterns of interactions were the same.

was measured using a seven-item scale developed by Schneider and colleagues (1998). A sample item is "How would you rate your store's efforts in measuring and tracking the quality of service to customers?" (1 = *very poor*; 7 = *outstanding*; $\alpha = .88$). We calculated a single service climate score for each store by aggregating individual subordinates' ratings. There was sufficient statistical support for this aggregation. One-way analyses of variance revealed a significant store effect ($F = 1.54, p < .05$). Furthermore, the intraclass correlation coefficients ($ICC_1 = .12, ICC_2 = .35$) and the median within-group agreement, $r_{wg} = .95$ ($SD = .03$, range = .85–.99) exceeded the values typically recommended for team-level constructs reported in the literature (e.g., Bliese, 2000; Schneider et al., 1998).

Control Variables

Gender (0 = male, 1 = female) was controlled because women may be more emotionally expressive than men (Morris & Feldman, 1996). Moreover, the effects of the current positive and negative affective states (Watson, Clark, & Tellegan, 1988), store size (number of sales employees in each store provided by the company), and district (0 = Hong Kong, 1 = Shenzhen) were controlled.

Analyses

The data of the current study are multilevel in nature as they include constructs at the individual level (subordinates' emotional exhaustion and positive emotional display) and at the group level (supervisors' emotional exhaustion and service climate). In addition, the data have a hierarchical structure with the subordinates nested within stores. Therefore, MLwiN, a computer package for analyzing multilevel models (Goldstein et al., 1998), was used to test the hypotheses.

Results

Preliminary Analyses

Given that the dependent variable (positive emotional display) assessed both expression of positive emotions and suppression of negative emotions, we conducted a confirmatory factor analysis. The results showed that there was no significant improvement of model fit, $\Delta\chi^2(8) = .10, ns$, in the two-factor model (comparative fit index = .97, adjusted goodness-of-fit index = .88, Tucker–Lewis index = .95, root-mean-square error of approximation = .11) compared to the one-factor model (comparative fit index = .97, adjusted goodness-of-fit index = .89, Tucker–Lewis index = .96, root-mean-square error of approximation = .10). Therefore, we used the six-item scale of positive emotional display as one factor in our analyses.⁴

Tests of Hypotheses

Table 1 presents the means, standard deviations, and zero-order Pearson product-moment correlations of all variables. As presented in Table 2 (Step 2), subordinates' emotional exhaustion was not related to positive emotional display ($B = -.08, ns$); therefore, Hypothesis 1 was not supported. Only service climate was shown

to be significantly associated with positive emotional display ($B = .19, p < .05$) in this step, lending support to Hypothesis 3. Furthermore, Table 2 (Step 3) shows that none of the two-way interaction terms were significant, indicating that the relationship between subordinates' emotional exhaustion and positive emotional display was moderated by neither supervisors' emotional exhaustion (Hypothesis 2) nor service climate (Hypothesis 4). These two hypotheses were not supported.

Table 2 (Step 4) provides support for Hypothesis 5 (three-way interaction), which predicts that service climate and supervisors' emotional exhaustion jointly moderate the relationship between subordinates' emotional exhaustion and positive emotional display, $\Delta\chi^2(1) = 6.13, p < .05; B = .26, p < .01$. The simple slope tests (cf. Aiken & West, 1991) revealed that in the case of a more positive service climate, subordinates' emotional exhaustion was not significantly related to positive emotional display irrespective of supervisors' emotional exhaustion (see Table 3 and Figure 1a). In contrast, Figure 1b and Table 3 show that subordinates' emotional exhaustion was strongly and negatively related to positive emotional display when supervisors' emotional exhaustion was high and service climate was less positive. Furthermore, when supervisors' emotional exhaustion was low and service climate was less positive, the relationship between subordinates' emotional exhaustion and positive emotional display was not significant. The level of positive emotional display was lowest when both subordinates' emotional exhaustion and supervisors' emotional exhaustion were high, while service climate was less positive. These findings supported Hypothesis 5.

Discussion

In the present study, we examined how two social contextual factors, namely, supervisors' emotional exhaustion and service climate, jointly moderated the relationship between employees' emotional exhaustion and their positive emotional display. It was found that in a less positive climate for service, subordinates' and supervisors' emotional exhaustion interacted to affect subordinates' positive emotional display. In this particular context, subordinates' emotional exhaustion was more negatively related to positive emotional display when their immediate supervisors experienced higher rather than lower levels of emotional exhaustion. In a more positive service climate, however, subordinates' and supervisors' emotional exhaustion did not interact to affect subordinates' positive emotional display. The results did not support the notion that subordinates' emotional exhaustion had direct effects on positive emotional display nor that it had two-way interaction effects on positive emotional display; that

⁴ We conducted additional multilevel analyses to check the consistency of the three-way interaction results on both types of emotional display. Regression results revealed that service climate was significantly associated with expression of positive emotions ($B = .20, p < .05$) but not related to suppression of negative emotions ($B = .14, ns$). More importantly, the relevant three-way interaction accounted for a significant additional amount of variance in both expression of positive emotions, $B = .19, p < .05; \Delta\chi^2(1) = 3.9, p < .05$, and suppression of negative emotions, $B = .35, p < .01; \Delta\chi^2(1) = 9.39, p < .01$. The plots of these interactions showed the same pattern of relationships that we have hypothesized for the general positive emotional display.

Table 1
Means, Standard Deviations, and Correlations Among the Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
Control											
1. Subordinates' gender	0.81	0.39	—								
2. Subordinates' positive affect	3.33	0.56	-.07	—							
3. Subordinates' negative affect	2.28	0.68	.01	.01	—						
4. Store size	14.50	17.22	.01	-.03	-.07	—					
5. District	0.52	0.50	.12	-.09	-.07	.02	—				
Individual											
6. Subordinates' emotional exhaustion	2.80	0.93	.11	-.26***	.41***	.13*	-.19**	—			
7. Subordinates' positive emotional display	4.73	1.01	.02	.16*	-.16*	.15*	-.03	-.14*	—		
Group											
8. Supervisors' emotional exhaustion	2.17	0.53	-.06	-.03	-.05	-.14*	-.24***	.01	-.14*	—	
9. Service climate	4.50	0.47	-.01	.37***	-.08	-.09	-.13*	-.22***	.25***	-.18**	—

Note. *n* (individual) = 211. *n* (group) = 56.

p* < .05. *p* < .01. ****p* < .001.

is, subordinates' emotional exhaustion did not interact with either supervisors' emotional exhaustion or service climate. Thus, our findings indicate that the interaction between subordinates' and supervisors' emotional exhaustion was being driven by less positive service climates.

The present results highlight the fact that service climate is important for positive emotional display. That is, in addition to directly promoting the display of positive emotions, a positive service climate seems to make employees immune to the potentially adverse impacts of their own and supervisors' emotional exhaustion (e.g., Schmeichel & Vohs, 2009). This finding suggests that a positive service climate facilitates employees to internalize service quality norms and to generate a strong motivational force to persist and uphold their efforts to deliver positive emotions. However, without such a positive climate, employees are more likely to rely on

their supervisors' state of emotional exhaustion in responding to their own feelings of emotional exhaustion and determining the appropriate level of effort to put into positive emotional display (Martin & Stoner, 1996). This may explain why a less positive service climate drove the interaction between subordinates' and supervisors' emotional exhaustion. Such an explanation is in line with the COR theory, which suggests that employees who face a threat of resource depletion tend to seek compensatory resources, thus becoming more sensitive to the signals conveyed by supervisors' emotional exhaustion.

Limitations and Future Research

As in any other research, the present study is not without limitations. First, we cannot draw firm conclusions about causation from a cross-sectional study. For example, positive emotional

Table 2
Results of Hierarchical Multilevel Analyses

Variable	Positive emotional display				Increase in model fit	Change of explained variance
	Entry		Final			
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>		
Step 1						
Subordinates' gender	.01	.15	−.04	.15		
Subordinates' positive affect	.18	.12	.05	.12		
Subordinates' negative affect	−.17 [†]	.09	−.13	.10		
Store size	.01	.01	.00	.01		
District	−.14	.19	−.14	.18	$\Delta\chi^2(5) = 7.39$	$\Delta R^2 = .06$
Step 2						
Supervisor EE	−.14	.10	−.09	.09		
Subordinate EE	−.08	.08	−.05	.08		
Service climate	.19*	.09	.23**	.09	$\Delta\chi^2(3) = 9.04^*$	$\Delta R^2 = .06$
Step 3						
Supervisor EE × Subordinate EE	−.09	.08	−.10	.08		
Supervisor EE × Service Climate	.10	.13	.10	.11		
Subordinate EE × Service Climate	.00	.07	.09	.08	$\Delta\chi^2(3) = 2.44$	$\Delta R^2 = .01$
Step 4						
Subordinate EE × Supervisor EE × Service Climate	.26**	.10	.26**	.10	$\Delta\chi^2(1) = 6.13^*$	$\Delta R^2 = .06$

Note. *n* (individual) = 211. *n* (group) = 56. EE = emotional exhaustion.

[†]*p* < .10. **p* < .05. ***p* < .01.

Table 3
Tests of the Simple Slopes of the Three-Way Interactions of Subordinates' Emotional Exhaustion, Supervisors' Emotional Exhaustion, and Service Climate on Positive Emotional Display

Supervisors' emotional exhaustion	Service climate	Positive emotional display	
		<i>B</i>	<i>SE</i>
High	Less positive	-.49**	.18
High	More positive	.19	.22
Low	Less positive	.22	.16
Low	More positive	-.13	.11

Note. *n* (individual) = 211. *n* (group) = 56.

***p* < .01.

display and related emotion regulation may lead to emotional or resource exhaustion (e.g., Baumeister et al., 1998; Brotheridge & Grandey, 2002; Goldberg & Grandey, 2007). However, previous longitudinal research has persuasively shown that emotional exhaustion is a cause of deteriorating performance (e.g., Wright & Cropanzano, 1998). More importantly, the three-way interactive effect of the present study suggests that a reversed causal path (i.e., lower rather than higher levels of positive emotional display can produce higher levels of emotional exhaustion in subordinates) is not plausible. Nevertheless, longitudinal studies are needed in future research to provide firm evidence of causation. Second, the generalizability of our findings might be a concern. For instance, positive emotional display may vary across cultures (Hofstede, 1997). Certainly, scholars may benefit from replicating the present investigation in different organizations, industries, and cultures. Third, we did not have very emotionally exhausted supervisors in our sample, thus rendering our hypotheses tests more conservative. Future research may find it fruitful to capture a wide range of emotional exhaustion.

Our results indicate that when service climate is less positive, supervisors' state of emotional exhaustion may indicate a signal of unavailability of compensatory resources. As such, employees' perception of the availability of resources may be a potential mediating factor through which subordinates respond to their emotional exhaustion problems and to those of their supervisors. Thus, it would be interesting to include employees' perceptions of resource availability (e.g., supervisors' emotional exhaustion may communicate an absence of resources, while service climate may communicate a presence of resources) in future research to further advance researchers' understanding of how subordinates' and supervisors' emotional exhaustion interact to influence subordinates' perceptions of the threatening situation and their subsequent work behaviors.

Furthermore, it is possible that employees with higher levels of emotional exhaustion may tend to have lower perceptions of the store's efforts to provide high-quality service and may thus become negative at affective service delivery. However, a high level of employees' emotional exhaustion is not necessarily accompanied with a less positive service climate and less positive emotional display. As shown in Figure 1a, employees with a high level of emotional exhaustion are still more likely to display positive emotions under a more positive service climate. Certainly, we

cannot completely rule out this alternative explanation of our results. To address this issue, future research should use a non-perception-based measure of service climate.

Another potential confounding factor that may have influenced our results is the busyness of the store (Rafaeli & Sutton, 1990; Sutton & Rafaeli, 1988). Highly busy stores are more likely to have exhausted employees and supervisors, less positive service climate, less friendly and positive display, but higher sales performance. It would be worthwhile for future research to scrutinize how store busyness and efficiency may influence the moderating role of positive service climate in the exhaustion–display and display–sales performance relationships.

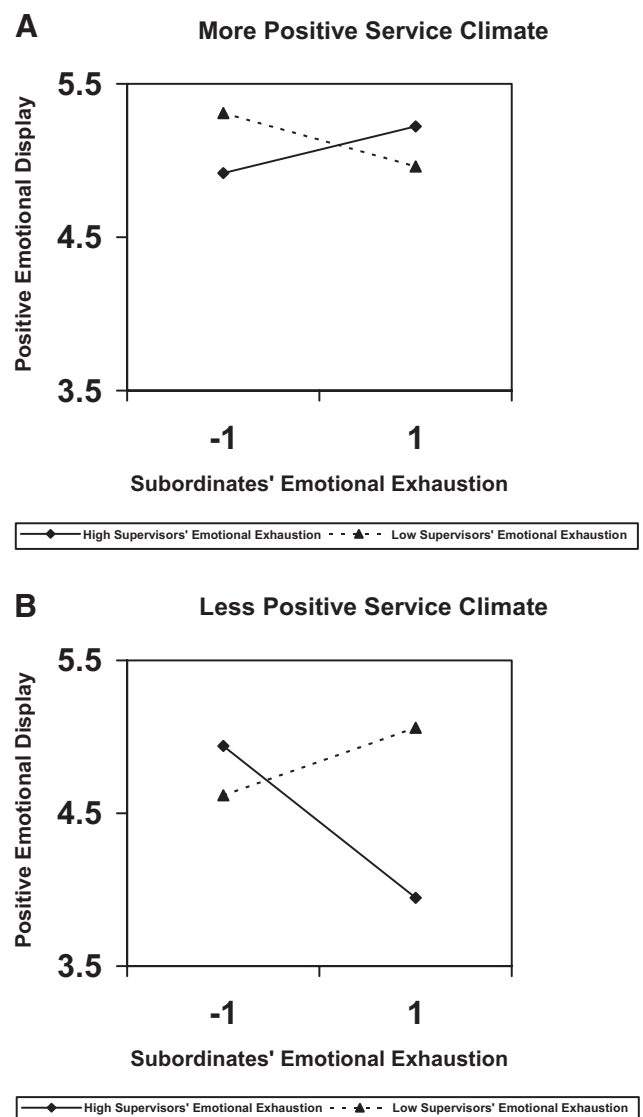


Figure 1. Three-way interaction effects of subordinates' emotional exhaustion, supervisors' emotional exhaustion, and service climate on positive emotional display. Shown are a more positive service climate (A) and a less positive service climate (B).

Theoretical Implications

Previous research has delved mainly into the adverse consequences of employees' emotional exhaustion and how supervisors can help employees cope with them (e.g., Ganster, Fusilier, & Mayes, 1986). In this study, we take a step further and consider the possible outcome if both subordinates and supervisors experience emotional exhaustion simultaneously. Our findings suggest that supervisors' states of emotional exhaustion are important sources of information about the availability of emotional resources in the workplace, particularly when the team has a less positive service climate. At this point, the emotional exhaustion of supervisors may send the signal that subordinates cannot obtain compensatory emotional resources from their supervisors. As a consequence, emotionally exhausted employees will be inclined to withhold their efforts to display positive emotions at work in order to prevent themselves from further resource depletion. To the best of our knowledge, this study is the first to examine how the emotional exhaustion of subordinates and supervisors and the social context in which they operate jointly influence subordinates' positive emotional display. Thus, we make a unique contribution to the emotion literature by providing a fine-grained understanding of the impact of the social context on how service employees display emotions in response to emotional exhaustion.

The COR theory suggests that employees are motivated to seek compensatory emotional resources to replenish their depleting ones. We contribute to the COR theory and climate research by identifying service climate as a major external source of compensatory emotional resources. Through signaling what service-focused affective behaviors are recognized and rewarded, a positive service climate motivates employees to deliver appropriate positive emotions to obtain recognition and rewards. This mechanism is in line with the premise of COR theory that motivation is an energy resource that is valuable in facilitating the acquisition of other kinds of desirable resources (Hobfoll, 1989). Moreover, the motivational forces induced by a positive climate seem to enable employees to remain resilient to the potentially adverse impacts of their own and supervisors' emotional exhaustion.

Managerial Implications

It is not uncommon for service employees and their supervisors to experience emotional exhaustion simultaneously from time to time. Our findings suggest that one way to prevent employees from the potentially negative impact of this problem is to establish a positive service climate. To create a climate for service, organizations can select service workers with personality traits that fit the type of service work, provide training to employees to deal with customers in different locations, implement customer-friendly policies and procedures across stores, and develop performance appraisal systems that can measure and reward adherence to policies (Morris & Feldman, 1996; Salvaggio et al., 2007; Sutton, 1991). This study highlights the important role of a positive service climate in not only directly promoting the display of positive service-focused emotions but also preventing employees from the potentially adverse impacts of their own and supervisors' emotional exhaustion.

References

- Aiken, L. S., & West, S. G. (Eds.). (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ashforth, B. E. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18, 88–115.
- Bakker, A. B., Van Emmerik, H., & Euwema, M. C. (2006). Crossover of burnout and engagement in work teams. *Work and Occupations*, 33, 464–489.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252–1265.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349–381). San Francisco, CA: Jossey-Bass.
- Brislin, R., Lonner, W. J., & Thorndike, R. (1973). *Cross-cultural research methods*. New York, NY: Wiley.
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work." *Journal of Vocational Behavior*, 60, 17–39.
- Central Intelligence Agency. (n.d.). *The world factbook*. Retrieved June 30, 2009, from <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, 18, 621–656.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88, 160–169.
- Diefendorff, J. M., & Richard, E. M. (2003). Antecedents and consequences of emotional display rule perceptions. *Journal of Applied Psychology*, 88, 284–294.
- Dormann, C., & Zapf, D. (1999). Social support, social stressors at work, and depressive symptoms: Testing for main and moderating effects with structural equations in a three-wave longitudinal study. *Journal of Applied Psychology*, 84, 874–884.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, 48, 621–628.
- Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology*, 71, 102–110.
- Goldberg, L. S., & Grandey, A. A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, 12, 301–318.
- Goldstein, H., Rasbash, J., Plewis, I., Draper, D., Browne, W., Yang, M., . . . & Healy, M. (1998). *A user's guide to MLwiN* [Computer software and manual]. London, England: University of London.
- Grandey, A. A. (2003). When "the show must go on": Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46, 86–96.
- Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, 91, 1134–1145.
- Halbesleben, J. R. B., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92, 93–106.
- Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management*, 30, 859–879.
- Halbesleben, J. R. B., & Buckley, M. R. (2006). Social comparison and burnout: The role of relative burnout and received social support. *Anxiety, Stress, and Coping*, 19, 259–278.
- Hobfoll, S. E. (1988). *The ecology of stress*. New York, NY: Hemisphere.

- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524.
- Hochschild, A. R. (1979). Emotion work, feeling rules, and social structure. *The American Journal of Sociology*, 85, 551–575.
- Hofstede, G. (1997). *Cultures and organizations: Software of the mind* (Rev. ed.). New York, NY: McGraw-Hill.
- Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout phenomenon. *Journal of Applied Psychology*, 71, 630–640.
- Janssen, O., Lam, C. K., & Huang, X. (in press). Emotional exhaustion and job performance: The moderating roles of distributive justice and positive affect. *Journal of Organizational Behavior*.
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31, 386–408.
- Kahn, W. A. (1993). Caring for the caregivers: Patterns of organizational caregiving. *Administrative Science Quarterly*, 38, 539–563.
- Karasek, R. A., Triantis, K. P., & Chaudhry, S. S. (1982). Coworker and supervisor support as moderators of associations between task characteristics and mental strain. *Journal of Occupational Behavior*, 3, 181–200.
- Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, 95, 18–35.
- Kramer, R. M. (1995). Divergent realities and convergent disappointments in the hierarchic relation: Trust and the intuitive auditor at work. In R. M. Kramer & R. M. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 216–245). Thousand Oaks, CA: Sage.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123–133.
- Liao, H., Toya, K., Lepak, D. P., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology*, 94, 371–391.
- Martin, L. L., & Stoner, P. (1996). Mood as input: What we think about how we feel determines how we think. In L. L. Martin & A. Tesser (Eds.), *Striving and feelings: Interactions among goals, affect, and self-regulations* (pp. 279–301). Mahwah, NJ: Erlbaum.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Mitchell, T. R. (1997). Matching motivational strategies with organizational contexts. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 19, pp. 57–149). Greenwich, CT: JAI Press.
- Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986–1010.
- Muraven, M., Tice, D. M., & Baumeister, R. F. (1998). Self-control as a limited resource: Regulatory depletion patterns. *Journal of Personality and Social Psychology*, 74, 774–789.
- Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *Academy of Management Journal*, 44, 1018–1028.
- Rafaeli, A., & Sutton, R. I. (1987). Expression of emotion as part of the work role. *Academy of Management Review*, 12, 23–37.
- Rafaeli, A., & Sutton, R. I. (1990). Busy stores and demanding customers: How do they affect the display of positive emotion? *Academy of Management Journal*, 33, 623–637.
- Repetti, R. L. (1989). Effects of daily workload on subsequent behavior during marital interaction: The roles of social withdrawal and spouse support. *Journal of Personality and Social Psychology*, 57, 651–659.
- Rogelberg, S. G., Barnes-Farrell, J. L., & Creamer, V. (1999). Customer service behavior: The interaction of service predisposition and job characteristics. *Journal of Business and Psychology*, 13, 421–435.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224–253.
- Salvaggio, A. N., Schneider, B., Nishii, L. H., Mayer, D. M., Ramesh, A., & Lyon, J. S. (2007). Manager personality, manager service quality orientation, and service climate: Test of a model. *Journal of Applied Psychology*, 92, 1741–1750.
- Schmeichel, B. J., & Vohs, K. (2009). Self-affirmation and self-control: Affirming core values counteracts ego depletion. *Journal of Applied Psychology*, 96, 770–782.
- Schneider, B. (1990). The climate for service. In B. Schneider (Ed.), *Organizational climate and culture* (1st ed., pp. 383–412). San Francisco, CA: Jossey-Bass.
- Schneider, B., & Bowen, D. E. (1993). The service organization: Human resources management is crucial. *Organizational Dynamics*, 21, 39–52.
- Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Tests of a causal model. *Journal of Applied Psychology*, 83, 150–163.
- Schwarz, N. (2002). Situated cognition and the wisdom of feelings: Cognitive tuning. In L. Feldman Barrett & P. Salovey (Eds.), *The wisdom in feelings* (pp. 144–166). New York, NY: Guilford Press.
- Sutton, R. I. (1991). Maintaining norms about expressed emotions: The case of bill collectors. *Administrative Science Quarterly*, 36, 245–268.
- Sutton, R. I., & Rafaeli, A. (1988). Untangling the relationships between displayed emotions and organizational sales: The case of convenience stores. *Academy of Management Journal*, 31, 461–487.
- Tice, D. M., Baumeister, R. F., Shmueli, D., & Muraven, M. (2007). Restoring the self: Positive affect helps improve self-regulation following ego depletion. *Journal of Experimental Social Psychology*, 43, 379–384.
- Tsai, W. C. (2001). Determinants and consequences of employee displayed positive emotions. *Journal of Management*, 27, 497–512.
- Tsai, W. C., & Huang, Y. M. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology*, 87, 1001–1008.
- Tyler, J. M., & Burns, K. C. (2008). After depletion: The replenishment of the self's regulatory resources. *Self & Identity*, 7, 305–321.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Wharton, A. S., & Erickson, R. J. (1993). Managing emotions on the job and at home: Understanding the consequences of multiple emotional roles. *Academy of Management Review*, 18, 457–486.
- Wilk, S. L., & Moynihan, L. M. (2005). Display rule “regulators”: The relationship between supervisors and worker emotional exhaustion. *Journal of Applied Psychology*, 90, 917–927.
- Witt, L. A., Andrews, M. C., & Carlson, D. S. (2004). When conscientiousness isn't enough: Emotional exhaustion and performance among call center customer service representatives. *Journal of Management*, 30, 149–160.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83, 486–493.
- Zapf, D. (2002). Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, 12, 237–268.

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