How and when customer feedback influences organizational health

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Abstract

Purpose – The purpose of this paper is to explore how and when customers influence organizational climate and organizational health through their feedback. Based on affective events theory, the authors classify both positive and negative customer feedback (PCF and NCF) as affective work events. The authors expect that these events influence the positive affective climate of an organization and ultimately organizational health, and that the relationships are moderated by empowerment climate.

Design/methodology/approach – Structural equation modeling was utilized to analyze survey data obtained from a sample of 178 board members, 80 HR representatives, and 10,953 employees from 80 independent organizations.

Findings – The findings support the expected indirect effects. Furthermore, empowerment climate strengthened the impact of PCF on organizational health but does not affect the relationship between NCF and organizational health.

Research limitations/implications – The cross-sectional design is a potential limitation of the study.

Practical implications – Managers should be aware that customer feedback influences an organization's emotional climate and organizational health. Based on the results organizations might actively disseminate PCF and establish an empowerment climate. With regard to NCF, managers might consider the potential affective and health-related consequences for employees and organizations.

Social implications – Customers are able to contribute to an organization's positive affective climate and to organizational health if they provide positive feedback to organizations.

Originality/value – By providing first insights into the consequences of both PCF and NCF on organizational health, this study opens a new avenue for scientific inquiry of customer influences on employees at the organizational level.

Keywords Affective events theory, Affective climate, Customer feedback, Organizational health, Organizational-level research

Paper type Research paper

Introduction

Organizational health is crucial for companies to maintain their vitality, their productivity, and their competitiveness (Quick *et al.*, 2007; Cartwright and Cooper, 2014; Tetrick, 2002). Although a uniform definition of organizational health is still missing, we follow the mostly used conceptualization of organizational health as a combination of employee health and organizational performance (e.g. MacIntosh *et al.*, 2007). So far, research has acknowledged the huge impact of customers affecting employees' health, motivation, and behavior but knowledge has remained fragmented (Grandey and Diamond, 2010). Whereas job design researchers mainly see customers as a source of motivation and energy (e.g. Grant, 2007), emotional labor scholars understand customers as a source of stress detrimental for employees' health (e.g. Grandey, 2000). Yet, both positive as well as negative customer influences on employees might be more or less frequently present within an organization. As "clients have as much power to hurt staff with their comments as they do to reward them" (Maslach, 1978, p. 120), this study investigates customer influences in terms of both positive and negative customer feedback (PCF and NCF). While the quote of Maslach seems intuitive, empirical research is missing that examined the effects of both PCF and NCF on employees' affect and health.

Due to the fact that some companies have already established customer feedback management systems (Markey *et al.*, 2009), we take yet another step forward in the connection of customer feedback and employees' affect and health and move beyond the individual level to the organizational level. Customer feedback management systems help to actively disseminate and spread customer feedback in the organization (Wirtz *et al.*, 2010; Morgan *et al.*, 2005). Accordingly, employees across the organization may receive positive and NCF frequently. Although researchers considered customer feedback as an important factor for organizational learning (e.g. Wirtz *et al.*, 2010), to the best of our knowledge no study so far has inspected whether and how customer feedback, which spreads in the organization, influences the organization in terms of its affective climate and health. As researchers argued that healthy organizations need empowered employees (Wilson *et al.*, 2004; Newell, 1995), this study also explores whether and how empowerment climate influences the relationship between customer feedback and organizational health.

Hence, we aim at establishing the link between positive and NCF and organizational health by introducing positive affective climate as an important mediating mechanism to reveal whether customer influences extend to the organizational level. As research on the organizational level of analysis is more mature concerning positive affect rather than negative affect (e.g. Menges *et al.*, 2011), employees' collective reactions to customer feedback are considered in terms of an organization's positive affective climate. Based on affective events theory, we develop a conceptual model to explore the effects of customer feedback on organizational health and investigate moderating and mediating mechanisms of these linkages. The proposed relationships are tested with 178 board members, 80 human resources (HR) representatives, and 10,953 employees in 80 organizations.

This study contributes to several research streams. First, this study bridges job design and emotional labor research by simultaneously assessing the influence of both PCF and NCF on employees. By doing so, we contribute to a more holistic understanding of the effects of customer feedback on employees. Therewith, this study also adds to a relatively new line of inquiry investigating the effects of customers on employees' attitudes and behaviors (van Jaarsveld *et al.*, 2010). Second, this study corroborates and extends prior research on extra-organizational antecedents of organizational climate (Kipfelsberger and Bruch, 2014), in this case on an organization's positive affective climate

(e.g. Menges *et al.*, 2011). So far, scholars have focussed on intra-organizational determinants of positive affective climate while the present study is among the first to consider external determinants, namely, positive and NCF. Third, this study is the first to bridge research on customer feedback with research on an organization's affective climate and organizational health. Therewith, we contribute to research on customer feedback management (Wirtz *et al.*, 2010; Morgan *et al.*, 2005; Homburg *et al.*, 2010) in at least two respects. On the one hand, this stream of literature has focussed on customer complaints while customer compliments have been often ignored. On the other hand, the affective and health-related consequences of customer feedback on organizations have not yet been investigated so far.

Theoretical background and hypotheses development

"Intense customer experiences have the power to serve as so-called affective events, that is, incidents that naturally generate strong emotions and energy" (Bruch and Vogel, 2011, p. 201). As indicated by that quote, employees' emotions are influenced by work events evoked by customers. A prominent theory emphasizing the influential role of work events is affective events theory, depicting how emotionally laden events at work elicit emotional reactions and how those reactions influence work attitudes and behavior (Weiss and Cropanzano, 1996). Based on that theory, research has shown that ten percent of employees' total positive emotions at work were caused by interactions or acts with customers and seven percent of employees' total negative emotions at work were caused by acts with customers (Basch and Fisher, 2000). Thus, there is empirical evidence that acts with customers serve as affective events at work. In line with this research, the present conceptual model treats positive and NCF as affective work events. In line with prior research which has raised the basic relationships of affective events theory to the collective level (Pirola-Merlo *et al.*, 2002), positive affective climate refers to the affective reaction to positive and NCF at the organizational level. The affect-driven organizational outcomes refer to organizational health, i.e. employee productivity, employee retention, and organizational emotional exhaustion. Further, we include empowerment climate as a potential moderator of the customer feedback-organizational health relationship. Figure 1 displays the conceptual model hypothesized in this study.

Customer feedback and positive affective climate

We propose that PCF is positively related with positive affective climate, and that NCF is negatively related with positive affective climate. PCF refers to employees' received PCF across the organization including customer compliments, praise, expressions of joy, gratitude, or satisfaction. Likewise, NCF refers to employees' received NCF across the organization including customer complaints, expressions of anger, frustration, or dissatisfaction. Importantly, there is empirical evidence that positive and negative feedback need to be considered as separate constructs because individuals perceive, recognize, and disseminate positive and negative feedback differently (e.g. Ilies *et al.*, 2007).

Based on affective events theory, the nature and type of affective experience following a work event depends on how the event is appraised in a two-stage process. Weiss and Cropanzano (1996) declare: "This process begins with an event which is initially evaluated for relevance to well-being in simple positive or negative terms" (p. 31). Typically, feedback interventions with a positive sign elicit positive moods, and feedback interventions with a negative sign elicit negative moods (Kluger and DeNisi, 1996). Accordingly, employees may interpret PCF primarily as a positive rather than a

Figure 1.
Conceptual model

negative event. In the secondary appraisal, PCF may evoke more specific emotions such as joy, pleasure, and enthusiasm among employees. Constituting an essential part of this theory, the frequency with which hassles or uplifts occur determines employees' emotions (Ashkanasy and Ashton-James, 2007). So, as PCF may accumulate within organizations, the affective climate of an organization might get influenced by customer feedback based on the frequency of PCF. "Work environments are seen as having an indirect influence on affective experience by making certain events, real or imagined, more or less likely" (Weiss and Cropanzano, 1996, p. 12). Hence, as members within an organization share the same organizational environment, we argue that PCF serving as positive work events and adding up within organizations positively influence the positive affective climate.

In contrast, we assume that NCF relates negatively to positive affective climate. NCF is very likely to be processed by employees as a negative event during the first appraisal stage. In the secondary appraisal stage, it is very likely that it evokes concrete negative emotions such as frustration, anger, or furiousness. Thus, similar to the line of reasoning for PCF, NCF may add up within organizations based on many negative affective events. While doing so, it is very likely that an organization's positive affective climate decreases. To summarize:

H1a. PCF is positively associated with positive affective climate.

H1b. NCF is negatively associated with positive affective climate.

Positive affective climate and organizational health

Organizational health addresses both issues of healthy individuals and healthy organizations (Quick *et al.*, 2007) and implies that an organization is able to optimize the effectiveness and the well-being of its employees (Lindstrom *et al.*, 2000). Accordingly, we consider organizational health in terms of employee productivity and employee retention reflecting an organization's effectiveness and in terms of organizational emotional exhaustion reflecting employees' well-being.

Employee productivity refers to the degree to which employees throughout the organization create output both efficiently and effectively (Guthrie, 2001). As individuals determine their own behaviors based on observation of others' behaviors (Bandura and McClelland, 1977), employees' productivity is interdependent and hence, considered as a collective construct at the organizational level. Employee retention reflects the continued employment of, in particular, valued employees (Coldwell *et al.*, 2008), and contributes to organizational effectiveness being an organizational-level construct. Emotional exhaustion refers to one's feelings of being emotionally overextended and exhausted by one's work (Maslach and Jackson, 1981). As recent studies have demonstrated that burnout affects not only single organizational members but also spreads within organizations through conscious and unconscious emotional contagion processes (Bakker *et al.*, 2006), it might be necessary to consider emotional exhaustion at a summative level. Accordingly, organizational emotional exhaustion reflects employees' aggregated feelings of being emotionally exhausted.

In the following, we argue that positive affective climate should be positively related to employee productivity and employee retention, and negatively to organizational emotional exhaustion. Beginning with employee productivity, affective events theory suggests that individuals develop positive work attitudes due to positive affective reactions to work events (Weiss and Cropanzano, 1996). As a positive affective climate is likely to evoke shared positive work-related attitudes, employees should jointly work more efficiently and effectively and therewith, employee productivity should increase. Referring to employee retention, research has found that people are more likely to stay in the organization if they are well embedded and connected to the "social web" of the organization (Mitchell *et al.*, 2001). Dutton (2003) stated that "where employees enjoy positive connections at work, their intention to stay at the organizations strengthens" (p. 14). Thus, organizational efforts to maximize retention are consistent with a concern for employees and a desire to make the organizational environment as "sticky" as possible in order to keep employees (Cardy and Lengnick-Hall, 2011). Positive affective climate could serve as such "sticky" organizational environment as employees might enjoy the collective experience of inspiration, excitement, and enthusiasm at work. Accordingly, employee retention should be strengthened. Finally, concerning organizational emotional exhaustion, research on the individual level found that individuals who held a positive position toward life and work were significantly less likely to experience emotional exhaustion (Deery *et al.*, 2002). Raising the individual level findings to the organizational level, we assume that if there is a high positive affective climate within organizations, it is likely that all employees experience less emotional exhaustion. Employees being embedded in an organization's positive affective climate should benefit from this organizational resource which might collectively protect them from emotional exhaustion. In sum, we expect the following:

- H2. Positive affective climate is (a) positively associated with employee productivity, (b) positively associated with employee retention, and (c) negatively associated with organizational emotional exhaustion.

The mediating role of positive affective climate

Next, we propose that positive affective climate mediates the relationship between customer feedback and organizational health. One of the main predictions of affective events theory is that affective reactions mediate the relationships between work events and outcomes (Weiss and Beal, 2005). Hence, as the theoretical framework of this study is grounded on affective events theory, we considered work events as proximal causes

of affective experiences in the first step. In the second step, we provided reasons for the linkages of affective reactions to organizational outcomes. Specifically, we predicted that the affective reaction to positive (negative) customer feedback is positively (negatively) associated with positive affective climate (*H1a* and *H1b*). Second, *H2 (a)-(c)* predicted that positive affective climate influences organizational health. Together, these hypotheses specify a model in which positive affective climate as the affective reaction to customer feedback mediates the connection between positive (negative) customer feedback and organizational health. Accordingly, we anticipate:

- H3.* Positive affective climate mediates the relationship between PCF and (a) employee productivity, (b) employee retention, and (c) organizational emotional exhaustion.
- H4.* Positive affective climate mediates the relationship between NCF and (a) employee productivity, (b) employee retention, and (c) organizational emotional exhaustion.

The moderating role of empowerment climate

Finally, we propose empowerment climate as a moderator which strengthens the positive relationship between PCF and positive affective climate, and weakens the negative relationship between NCF and positive affective climate. Psychological empowerment climate is defined as shared psychological perceptions of empowerment related to meaningfulness, competence, self-determination, and impact (Wallace *et al.*, 2011). Together, these four cognitions reflect a climate in which employees collectively wish and feel able to shape their work role and context.

When empowerment climate is high, we expect that PCF has a stronger effect on positive affective climate. In organizations with high empowerment climate, members across the entire organization are more likely to believe and experience that they are responsible for work outcomes (Wallace *et al.*, 2011). Accordingly, when members of an organization with a high empowerment climate receive PCF, they should attribute the positive information to their own responsibility and work role which in turn should foster the positive affective climate. Furthermore, research suggests that high levels of autonomy combined with high levels of competence and accountability – which is the case for organizations high on empowerment climate – enable the collective capacity of members to cope with threats and negative information (Mishra and Spreitzer, 1998). Accordingly, an organization with a high empowerment climate should have higher coping capacities which might improve the emotional handling of NCF. As a consequence, the harmful influence of NCF on positive affective climate should be attenuated. Thus, we expect that:

- H5a.* The relationship between PCF and positive affective climate is stronger for organizations high on empowerment climate than for organizations low on empowerment climate.
- H5b.* The relationship between NCF and positive affective climate is weaker for organizations high on empowerment climate than for organizations low on empowerment climate.

Assuming empowerment climate moderates the association between customer feedback and positive affective climate, it is also likely that empowerment climate will conditionally influence the strength of the indirect relationship between customer feedback and employee productivity, employee retention, and organizational emotional exhaustion; thereby, demonstrating a pattern of mediated moderation between the study variables. As prior research has already shown that empowerment reinforces the influence of several antecedents on job satisfaction, turnover, and organizational

performance (Pieterse *et al.*, 2010), and as we predict a strong (weak) relationship between customer feedback and organizational health when empowerment climate is high (low), we expect the following:

- H6. Empowerment climate increases the indirect positive effect of PCF on (a) employee productivity, (b) employee retention, and (c) organizational emotional exhaustion (through positive affective climate).
- H7. Empowerment climate decreases the indirect negative effect of NCF on (a) employee productivity, (b) employee retention, and (c) organizational emotional exhaustion (through positive affective climate).

Methods

Data collection and sampling

As part of a larger study, we gathered data in 96 German companies via questionnaires. Each company received a detailed benchmark report in return for its participation. In line with the recommendations of Podsakoff *et al.* (2003) on reducing the risk for common source biases, research variables were collected from five different groups of respondents (i.e. three different groups of employees, board members, and HR representatives). Thereby, all members of the participating organizations received an e-mail with an invitation to participate in the study with a link to the questionnaire. Upon entering the online questionnaire, employees were randomly distributed via an algorithm programmed in the questionnaire to separate employee questionnaires. Positive and NCF as well as empowerment climate were measured in the first employee questionnaire; positive affective climate was measured in the second employee questionnaire; emotional exhaustion was measured in the third employee questionnaire; employee productivity and employee retention were measured in the board members' questionnaire. In addition, HR representatives served as key informants and provided information on general characteristics of the organization, such as the number of employees, organization's affiliation to an industry, and degree of formalization.

Given the theory and research design, we could only use organizations from which we had data from employees, board members, and HR informants. In total, 16 organizations failed to meet all these inclusion criteria because of missing data in board members' questionnaires. Thus, the final data sample consisted of 80 organizations, containing the responses of 10,953 employees. The algorithm had equally distributed the 10,953 employees among the first questionnaire measuring positive and NCF ($n = 3,620$), the second one measuring positive affective climate ($n = 3,711$), and the third one measuring organizational emotional exhaustion ($n = 3,622$). Additionally, a total of 178 board members and 80 HR representatives participated in the survey. Of the 80 organizations, 55 percent operated in the service industry, 28 percent in the manufacturing industry, 11 percent in the trade industry, and 6 percent in the finance industry. The average organizational size in the final sample was 336.75 employees ($SD = 550.98$), ranging from 17 to 3,897 employees, and the average employee response rate per organization was 63 percent.

Measures

All questionnaires were administered in German. We used a double-blind back-translation procedure to ensure content similarity with the original English scales (Brislin, 1986). For the hypotheses tests, the level of analysis was a single organizational-level

model. Hence, we calculated intra-class correlation coefficients (ICC_1 and ICC_2). For the ICC_1 , values that are based on a significant one-way ANOVA are generally acceptable. For the ICC_2 , values of more than 0.60 are considered sufficient (Bliese, 2000).

Customer feedback. We assessed customer feedback in the first employee questionnaire by two separate items from Kinicki *et al.* (2004). The two items are: first, "I frequently receive positive feedback from our customers," and second, "I frequently receive negative feedback from our customers." Employees indicated their received customer feedback on seven-point response scales (1 = strongly disagree and 7 = strongly agree). We obtained support for aggregating both variables to the organizational level ($ICC_1 = 0.05$, $ICC_2 = 0.91$ for PCF; $ICC_1 = 0.17$, $ICC_2 = 0.97$ for NCF). While the ICC_1 for PCF is relatively small, it still represents a small to medium effect of organizational membership (LeBreton and Senter, 2008). Hence, we aggregated this construct to the organizational level because even one percent of the variance which can be attributed to organizational membership might be able to explain substantial effects at the organizational level (Bliese, 2000).

Positive affective climate. Positive affective climate was captured in the second employee questionnaire by the five-item scale of Cole *et al.* (2012) on five-point frequency scales (1 = never and 5 = always). We employed a referent-shift consensus model (Chan, 1998). A sample item is "Employees feel excited in their job" ($\alpha = 0.96$). We obtained support for aggregating this variable to the organizational level ($ICC_1 = 0.12$, $ICC_2 = 0.87$).

Empowerment climate. Empowerment climate was captured in the first employee questionnaire by the 12-item scale of Spreitzer (1995) on seven-point response scales (1 = strongly disagree and 7 = strongly agree). A sample item is "My impact on what happens in my company is large" ($\alpha = 0.89$). In line with prior research on empowerment climate (Wallace *et al.*, 2011), we aggregated this variable to the organizational level ($ICC_1 = 0.06$, $ICC_2 = 0.73$).

Organizational health. We captured employee productivity and employee retention in the board members' questionnaire, asking board members for an overall assessment of employee productivity and employee retention within their organization, as compared with other organizations in the same industry, on seven-point scales (1 = weak and 7 = strong). We aggregated these variable to the organizational level ($ICC_1 = 0.42$, $ICC_2 = 0.70$ for employee productivity; $ICC_1 = 0.55$, $ICC_2 = 0.80$ for employee retention). Further, we captured organizational emotional exhaustion with five items from the emotional exhaustion subscale of the Maslach Burnout Inventory (Maslach and Jackson, 1981). Employees provided their answers on seven-point response scales (1 = strongly disagree and 7 = strongly agree). A sample item is "I feel emotionally drained from my work" ($\alpha = 0.96$). We obtained support for aggregating this variable to the organizational level ($ICC_1 = 0.06$, $ICC_2 = 0.74$).

Control variables. In addition to the aforementioned variables, we included several control variables in the analyses. Organizational size was measured by asking the HR representative for the total number of employees in the organizations (converted to full-time equivalents). We log-transformed this variable to reduce skewness. Formalization was captured by five items assessing the use of rules in the organization. We also controlled for organizations' affiliation with one of the four broad classes of industries: services, manufacturing, trade, and finance. Participant organizations were assigned four dummy-coded variables indicating their affiliation with each of the industry categories.

Results

Descriptive statistics and measurement model

Table I presents means, standard deviations, and bivariate correlations of all study variables. Confirmatory factor analysis indicated acceptable fit to the data ($\chi^2(112) = 204.27$, $p < 0.01$; CFI = 0.93; IFI = 0.94; SRMR = 0.06). We tested for competing factor models with χ^2 difference tests. First, a six-factor model in which positive affective climate and empowerment climate items loaded on one common factor had a significantly worse fit ($\Delta\chi^2(6) = 101.95$; $p < 0.01$). Second, a one-factor model with all items loading on one common factor was worse fitting ($\Delta\chi^2(10) = 387.50$; $p < 0.01$). Together, these results support the expected factor structure of the variables.

Structural model

After having established the validity of the measurement model, we proceeded to examining the structural paths of the hypothesized model. Commonly applied cut-off criteria for CFI and IFI are values above 0.90 and for SRMR at or below 0.08 (Hu and Bentler, 1999; Marsh *et al.*, 2004). The results of the full mediation model indicate good fit ($\chi^2(205) = 360.83$, CFI = 0.90, IFI = 0.91, SRMR = 0.07). We present the direct and indirect effects of the structural model in the following (see also Table II).

Direct effects. The path between PCF and positive affective climate was significant and positive ($\beta = 0.30$, $p < 0.01$), supporting *H1a*. Likewise, the path between NCF and positive affective climate was significant and negative ($\beta = -0.33$, $p < 0.01$), supporting *H1b*. Further, the paths between positive affective climate and employee productivity ($\beta = 0.44$, $p < 0.01$), employee retention ($\beta = 0.31$, $p < 0.01$), and organizational emotional exhaustion ($\beta = -0.49$, $p < 0.01$) were significant, in support of *H2(a-c)*.

Indirect effects. We used bootstrapping procedures with 1,000 samples to test for the indirect effects as recommended by Preacher and Kelley (2011). In support of *H3(a-c)*, we found significant indirect positive effects of PCF on employee productivity ($\beta = 0.13$; 95 percent CI_(bc) = 0.05-0.26) and employee retention ($\beta = 0.09$; 95 percent CI_(bc) = 0.03-0.19), and an indirect negative linkage between PCF and organizational emotional exhaustion ($\beta = -0.15$; 95 percent CI_(bc) = -0.30 to -0.05). Furthermore, supporting *H4(a-c)*, results indicated significant indirect negative effects of NCF on employee productivity ($\beta = -0.14$; 95 percent CI_(bc) = -0.27 to -0.03) and employee retention ($\beta = -0.10$; 95 percent CI_(bc) = -0.23 to -0.06), and an indirect positive linkage between NCF and organizational emotional exhaustion ($\beta = 0.16$; 95 percent CI_(bc) = 0.06-0.37).

Moderating effects. In support of *H5a*, we found a positive interaction between PCF and empowerment climate on positive affective climate ($\beta = 0.23$, $p < 0.01$). Simple slopes analysis (see Figure 2) suggested that when empowerment climate is high (mean+1SD), the effect of PCF on positive affective climate is positive ($\beta = 0.53$, $p < 0.01$), whereas when empowerment climate is low (mean-1SD), the effect is not significant. We did not find support for *H5b*, as the interaction between NCF and empowerment climate on positive affective climate is not significant.

Conditional indirect effects. We found indirect positive effects of the interaction between PCF and empowerment climate on employee productivity ($\beta = 0.10$; 95 percent CI_(bc) = 0.01-0.22) and employee retention ($\beta = 0.07$; 95 percent CI_(bc) = 0.01-0.16), and an indirect negative effect on organizational emotional exhaustion ($\beta = -0.11$; 95 percent CI_(bc) = -0.27 to -0.01), in support of *H6(a-c)*. Simple slopes analyses revealed that when empowerment climate is high, the effects of PCF on employee productivity

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Positive customer feedback	4.28	0.80												
2. Negative customer feedback	1.92	0.35	-0.43											
3. Empowerment climate	5.55	0.30	0.27	-0.43										
4. Positive affective climate	3.30	0.38	0.53	0.51	0.49									
5. Employee productivity	5.23	0.82	0.17	-0.15	0.16	0.38								
6. Employee retention	5.30	1.06	0.14	-0.26	0.27	0.36	0.28							
7. Organizational emotional exhaustion	2.98	0.56	-0.35	0.49	-0.55	-0.60	-0.26	-0.29						
8. Formalization	4.28	0.64	-0.09	0.12	-0.24	-0.15	-0.10	-0.25	-0.01					
9. Organizational size (log)	5.16	1.24	-0.25	0.36	-0.26	-0.28	-0.13	-0.33	0.36	0.31				
10. Service industry	0.55	0.50	0.48	-0.06	-0.18	0.27	-0.06	-0.06	0.02	-0.06	-0.08			
11. Trade industry	0.11	0.32	0.09	-0.02	0.11	-0.09	0.11	-0.02	-0.13	0.00	0.09	-0.39		
12. Manufacturing industry	0.28	0.45	-0.58	0.11	0.09	-0.18	0.02	0.03	0.04	0.05	0.03	-0.63	-0.22	
13. Finance industry	0.06	0.24	-0.05	-0.09	-0.06	0.01	0.03	0.05	-0.01	0.19	0.05	-0.29	-0.09	-0.16

Notes: $|r| \geq 0.24$ is significant at $p < 0.05$ and $|r| \geq 0.29$ is significant at $p < 0.01$. log = common logarithm. Variables relating to industry were dummy-coded with 1 = affiliated to that industry and 0 = not affiliated to that industry

Table I.
Means, standard
deviations, and
correlations of
study variables

Table II.
Results of the
structural model

Variables	Positive affective climate	Employee productivity	Employee retention	Organizational emotional exhaustion
Positive customer feedback (<i>H1a</i>)	0.30**	–	–	–
Negative customer feedback (<i>H1b</i>)	–0.33**	–	–	–
Positive affective climate (<i>H2(a)-(c)</i>)	–	0.44 (0.27, 0.60)**	0.31 (0.11, 0.48)**	–0.49 (–0.71, –0.22)**
Indirect effect of positive customer feedback (via positive affective climate) (<i>H3(a)-(c)</i>)	–	0.13 (0.05, 0.26)**	0.09 (0.03, 0.19)**	–0.15 (–0.30, –0.05)**
Indirect effect of negative customer feedback (via positive affective climate) (<i>H4(a)-(c)</i>)	–	–0.14 (–0.27, –0.03)**	–0.10 (–0.23, –0.06)**	0.16 (0.06, 0.37)**
Positive customer feedback × empowerment climate (<i>H5a</i>)	0.23**	–	–	–
Negative customer feedback × empowerment climate (<i>H5b</i>)	0.07	–	–	–
Indirect effect of positive customer feedback × empowerment climate (via positive affective climate) (<i>H6(a)-(c)</i>)	–	0.10 (0.01, 0.22)*	0.07 (0.01, 0.16)*	–0.11 (–0.27, –0.01)*
Indirect effect of negative customer feedback × empowerment climate (via positive affective climate) (<i>H7(a)-(c)</i>)	–	0.03 (–0.07, 0.11)	0.02 (–0.05, 0.08)	–0.04 (–0.13, 0.06)
Notes: Standardized coefficients are reported. In total, 0.95 percent bias-corrected bootstrapped confidence intervals based on 1,000 samples are in parentheses. We included organizational size, industry, and formalization as controls. * $p < 0.05$; ** $p < 0.01$ (two-tailed tests)

Figure 2.
Moderating effect of
empowerment
climate on positive
affective climate

($\beta = 0.23$, $p < 0.01$) and on employee retention ($\beta = 0.16$, $p < 0.01$) are positive and on organizational emotional exhaustion is negative ($\beta = -0.26$, $p < 0.01$), whereas when empowerment climate is low, the same effects are not significant. We did not find support for *H7(a-c)*, as the interaction between NCF and empowerment climate is not significantly related to employee productivity ($\beta = 0.03$; 95 percent $CI_{(bc)} = -0.07-0.11$), employee retention ($\beta = 0.02$; 95 percent $CI_{(bc)} = -0.05$ to -0.08), and organizational emotional exhaustion ($\beta = -0.04$; 95 percent $CI_{(bc)} = -0.13-0.06$).

Robustness tests

We also examined four alternative models, including first, a direct-effects model which only allowed for a direct relationship between customer feedback and organizational health, second, a partial mediation model that was based on the hypothesized model and included the direct effects from both PCF and NCF to organizational health, third, a no-controls model that included all hypothesized structural relations of the mediation model while the paths to the control variables were set to zero, and fourth, a reversed causality model that reversed the direction of influence for the customer feedback – positive affective climate and the positive affective climate – organizational health relationship. None of the four alternative models had a superior fit compared to the full mediation model.

Discussion

Summary of findings and theoretical contributions

This study examined the influence of both PCF and NCF on organizational climate and organizational health. The results support the hypothesized moderated mediation model demonstrating that PCF increases organizational health through positive affective climate and that NCF decreases organizational health through positive affective climate. Furthermore, we found that empowerment climate strengthened the linkage of PCF on organizational health in case of high empowerment climate but does not affect the relationship between NCF and organizational health.

Contrary to expectations, no moderating effect of empowerment climate was observed on the NCF-organizational health relationship. We had argued that the increased scope of employee responsibilities which goes along with the empowerment climate may enable employees to control NCF and cope with it. However, it also appears to be possible that highly empowered employees are harmed more by NCF due to their increased responsibilities than less empowered employees. As this latter consideration is contradictory to our hypothesis, it might explain why empowerment climate did not attenuate the effect of NCF on positive affective climate.

The present results contribute to the literature by corroborating and extending prior research in several ways. First, as our results provide empirical evidence that customers exert influence on employees' attitudes and behaviors in both positive and negative ways, we were able to bridge relational job design and emotional labor research (Grandey and Diamond, 2010). Accordingly, both streams of research might consider customers as sources of motivation and stress for employees simultaneously acknowledging the differential consequences of customers for employees and organizations.

Second, one of innovative contribution lies in treating customer feedback as affective events that influence the emotional climate in an organization. By doing so, we add to research on customers as extra-organizational determinants of organizational climate (Kipfelsberger and Bruch, 2014), in this case an organization's positive affective climate (e.g. Menges *et al.*, 2011). As this study considered organizational members across all organizational functions and departments, we showed that customer feedback is able to influence organizational health because both PCF and NCF change the emotional climate of an organization serving as affective events for employees. Further, we revealed empowerment climate as an important contingency which reinforces the positive consequences of PCF on organizational health.

Third, we add to research on customer feedback management. As PCF increased organizational health, this study highlights the positive influences of customer compliments on the organization. This is a rather new and important finding considering that PCF is mainly neglected in most customer feedback management processes (e.g. Homburg *et al.*, 2010). Additionally, based on the results that NCF influences positive affective climate as well as organizational health negatively, we challenge the dominant assumption that customer complaints are a firm's best friends (Larivet and Brouard, 2010). According to the present results, we would restate this point of view into "customer compliments are a firm's best friends".

Practical implications

Managers should be aware that customer feedback influences an organization's emotional climate and organizational health. Until now, most customer complaint systems do not explicitly take the negative affective reactions of employees into account when receiving and handling NCF. As the present findings indicate that NCF is detrimental for the organizational climate and health, organizations might carefully consider the affective and health-related consequences for the organization and its employees when disseminating NCF. On the other hand, we recommend to managers providing access to PCF to as many employees as possible and actively stimulating the dissemination of PCF. For instance, a customer compliment database may help to save and spread PCF. Based on the study results we recommend that managers actively ask employees how frequent they receive positive and NCF, e.g. via surveys. Managers who discover that organizational members receive NCF on a regular basis might take appropriate intervening measures early. While doing so, managers might be able to actively diminish the negative consequences of

customer complaints on a firm's affective climate and, as a consequence, contribute to sustaining organizational health in the long term. Finally, relying upon our finding that empowerment climate reinforced the positive influence of PCF on organizational health, we recommend empowering employees throughout the organization. Organizations with empowered employees are able to benefit from PCF, as employees feel more directly addressed by customer feedback due to their increased impact, control, and responsibilities. As an empowerment climate did not attenuate the collective affective responses to NCF, managers might actively support employees to deal with NCF.

Limitations and directions for future research

As with all research, there are some limitations to the present study that call for attention in interpreting the results. Although the present investigation included organizations across industries, all studied companies had less than 4,000 employees. Hence, researchers could strive to obtain study samples that comprise larger organizations in order to further generalize the present findings. Moreover, the data source was cross-sectional which makes it impossible to unambiguously interpret the results as indicating causality. However, based on the theoretical arguments and empirical tests outlined before, the directions of causality in this study are likely. Future research might try to replicate the suggested causal relationships via a longitudinal or (quasi-) experimental study design. Beyond addressing study limitations, this investigation suggests several other directions for future research. Future studies might investigate the dynamics of positive and NCF in organizations. Network analyses, for example, could take the patterns of dissemination, attenuation, or amplification of customer feedback across organizational units into account and capture more precisely how customer feedback influences the positive affective climate and health within units and organizations. Importantly, future research might further investigate contingencies of the linkages between customer feedback and organizational health and reveal intervention strategies for organizations besides empowerment climate. Such investigations might further deepen the understanding of the multiple individual and organizational consequences of customer feedback.

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Further reading

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