CHAPTER 3
INCREASING ENERGY AND PERFORMANCE THROUGH CUSTOMER PASSION: AN ORGANIZATIONAL LEVEL STUDY

Petra Kipfelsberger and Heike Bruch

ABSTRACT

This study investigates the situations in which productive organizational energy (POE) and organizational performance increase through customer passion, that is, perceived customers’ affective commitment and customers’ positive word-of-mouth behavior. We integrate research on POE with research on customer influences on employees. Based on emotional contagion processes we develop hypotheses for the energizing influences of customers at the organizational level. We test the hypotheses using a dataset containing 495 board members and 8,299 employees of 152 organizations. The results show that customer passion is positively related to POE, which is in turn positively related to organizational performance. Furthermore, the findings indicate that the effect of customer passion on organizational performance through POE depends on top management team’s (TMT’s) customer orientation. By providing first

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insights into the linkages and contingencies of customer passion, POE, and organizational performance, this study puts forth a more holistic understanding of the energizing effect of customers on organizations.

Keywords: Productive organizational energy; customer passion; moderated mediation; organizational performance; TMT’s customer orientation

INTRODUCTION

An energetic workforce is imperative for corporate success. Accordingly, over the last few years, interest in human energy at work has increased (e.g., Atwater & Carmeli, 2009; Cole, Bruch, & Vogel, 2012; Fritz, Lam, & Spreitzer, 2011; Quinn, Spreitzer, & Lam, 2012). As employees’ individual energies at work are interdependent, it is crucial to study energy at work at the collective level (cf. Cole et al., 2012). Productive organizational energy (POE) is defined as the shared experience and demonstration of positive affect, cognitive arousal, and agentic behavior among members in their joint pursuit of organizationally salient objectives (Cole et al., 2012). Accordingly, POE is a multidimensional and collective construct, which emerges at the organizational level via mutual dependence and interindividual interaction (Bruch & Vogel, 2011; Cole et al., 2012). Since companies with high POE perform better compared to companies with low POE (Bruch & Vogel, 2011), they may gain a competitive advantage through POE. Hence, an intriguing question for practitioners and scientists is how to create and sustain POE.

Thus far, researchers have identified some intra-organizational factors that influence POE. Studies show that transformational leaders and transformational leadership (TFL) climate influence the productive energy of teams and organizations, respectively (Kunze & Bruch, 2010; Walter & Bruch, 2010). Furthermore, Raes, Bruch, and De Jong’s (2013) study provided empirical evidence that top management team’s (TMT’s) behavioral integration is an important determinant of POE based on survey-based data from TMT members and employees within 63 organizations. However, we know very little whether factors outside the organization, such as customers, positively influence employees’ collective energy within the organization. At the individual level of analysis, research has supported the idea of an affective spillover of customers’ positive emotions on
employees’ positive emotions (Zimmermann, Dormann, & Dollard, 2011). Additionally, Grant and his colleagues found energizing influences of customers on individual employees (Grant, 2012; Grant et al., 2007). So far, at the organizational level of analysis, two studies have found that customers have a positive influence on employees in terms of employees’ job satisfaction and behavior. First, a study with data from 131 branches of a financial services organization in two consecutive years showed that customer satisfaction was associated with an increase of employee satisfaction over time but not the other way round (Ryan, Schmit, & Johnson, 1996). Second, on the basis of large-scale secondary data of 139 companies in two consecutive years, customer satisfaction was linked “back” to an organization’s excellence in human capital which points to the positive effect of customer satisfaction on employee attraction and retention (Luo & Homburg, 2007).

Hence, the present research intends to reveal whether, and under which conditions, customers energize whole organizations. For this purpose, the relations among customer passion, POE, and organizational performance will be tested. Based on emotional contagion processes (Barsade, 2002; Hatfield, Cacioppo, & Rapson, 1994), we expect that customer passion spreads within the organization, increasing POE and organizational performance. Referring to potential contingencies, this study investigates TMT’s influence on employees’ collective perceptions according to TMT’s strategic and symbolic role (Hambrick, Cannella, & Pettigrew, 2001; Raes, Bruch, & De Jong, 2013; Zott & Huy, 2007).

While doing so, we intend to contribute to several research streams. First, this study aims to contribute to the existing research on POE (Bruch & Ghoshal, 2003; Cole et al., 2012; Raes et al., 2013; Walter & Bruch, 2010). This study is the first attempt to examine the factors outside the organization, namely customer passion, as the antecedent of POE. Moreover, we aim to corroborate scientific results on the outcomes of POE (Cole et al., 2012; Raes et al., 2013). Second, we strive to contribute to the extant research on customer influences on employees (Grandey & Diamond, 2010; van Jaarsveld, Walker, & Skarlicki, 2010). We build upon research on the energizing influences of customers on individual employees (Grant, 2007, 2012; Zimmermann et al., 2011) and provide a theoretical mechanism through which customers might energize the entire organizations. Third, the present investigation also aims to contribute to TMT’s strategic and symbolic role (Hambrick et al., 2001; Raes et al., 2013; Zott & Huy, 2007) by introducing TMT’s customer orientation as a boundary condition of the relations among customer passion, POE, and organizational
performance. Finally, beyond theoretical contributions, this research intends to offer significant practical implications by providing companies with new suggestions on how to create and sustain POE in the pursuit of gaining competitive advantage.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The Construct of Customer Passion

As the literature does not offer a mature concept of customer passion appropriate for the focus of the present study, this study refers to two widely researched concepts in the context of customers and their passion, namely customers’ affective commitment (Gustafsson, Johnson, & Roos, 2005; Raggio & Folse, 2009) and customers’ positive word-of-mouth (Brown, Barry, Dacin, & Gunst, 2005; de Matos & Rossi, 2008). As we will show, these two constructs conjointly represent customer passion. First, passion is a strong emotion directed toward something (Cardon, Wincent, Singh, & Drnovsek, 2009; Drnovsek, Cardon, & Murnieks, 2009; Philippe, Vallerand, Houlfort, & Donahue, 2010). Accordingly, passion entails an affective-relational component. Concerning customers, this affective-relational aspect of passion reflects the degree of customers’ strong affective ties and their enthusiastic devotion to the organization as well as its brand, services, and products (Yim, Tse, & Chan, 2008), that is, customers’ affective commitment to the organization (Gustafsson et al., 2005; Raggio & Folse, 2009). Second, passion encompasses a mobilizing, energizing effect (Belk et al., 2003; Cardon et al., 2009). Consequently, passion also entails a behavioral component. Passionate, highly committed customers engage proactively to favor the organization by recommending an organization’s products or services to friends (Bettencourt, 1997), that is, customers’ positive word-of-mouth (Brown et al., 2005; de Matos & Rossi, 2008).

Customer Passion and Productive Organizational Energy

We propose that customer passion will be positively related with POE. Prior research at the individual level has demonstrated that customers
emotionally influence employees through emotional contagion processes (Tan, Foo, & Kwek, 2004; Zimmermann et al., 2011). Hence, emotional contagion processes (Barsade, 2002; Hatfield et al., 1994; Vijayalakshmi & Bhattacharyya, 2012) serve as the theoretical foundation for this study, which may explain why and how customers influence the energy of organizations (i.e., POE). The central notion of emotional contagion is that individuals consciously or unconsciously transfer emotions from one individual to another or to a group through interaction (Barsade, 2002; Hatfield et al., 1994). Since customer passion entails a strong positive emotion, and since organizational members adopt this passion, we assume that the collective affective, cognitive, and behavioral energy of organizations increases.

First, we assume that customer passion increases the collective affective energy. When customers’ emotions are positive and strong, as is the case with customer passion, positive emotions, such as enthusiasm and excitement, among employees should be created. As passion is a contagious emotion (Cardon, 2008), customer passion infects employees directly or indirectly through the emotional contagion processes (Barsade, 2002). As soon as customer passion enters the organization, it might spread within the organization. Employees catch and imitate each other’s emotions, which might reinforce and amplify the experienced customer passion due to a positive group affect spiral (Walter & Bruch, 2008). Hence, within the organization, a shared experience of positive feelings and affective arousal might occur, both of which enhance POE (Cole et al., 2012). Accordingly, customer passion should enhance the collective affective energy.

Second, customer passion might also positively relate to collective cognitive energy. According to broaden-and-build theory, positive emotions broaden an individual’s scope of attention and thought—action repertoires (Fredrickson, 2001; Fredrickson & Branigan, 2005). As customer passion is a positive emotion, which spreads through emotional contagion in the organization, employees’ collective cognitive capacities and resources might be enlarged (Fredrickson, 2003). Hence, employees have more cognitive resources available to develop solutions for organizational problems while staying concentrated and mentally alert. Consequently, customer passion should increase the collective cognitive energy.

Third, we assume that customer passion also increases the collective behavioral energy. Studies have shown that employees showed greater task persistence and higher productivity when they perceived that their work is important and significant to others (Grant, 2012; Grant et al., 2007;
Humphrey, Nahrgang, & Morgeson, 2007). Accordingly, we predict that customer passion, as a strong proof of the collective work significance, increases employees’ volume, intensity, and pace of their efforts, by making them focus on doing a good job while benefiting the organization’s customers. Accordingly, customer passion should increase the behavioral energy of an organization.

Consequently, as passion is a strong positive, contagious emotion entailing a motivating and stimulating force (Cardon, 2008; Drnovsek et al., 2009; Philippe et al., 2010), customer passion relates to all dimensions of POE. Based on emotional contagion processes passed on from customers to employees and among employees (Barsade, 2002; Hatfield et al., 1994; Vijayalakshmi & Bhattacharyya, 2012), customer passion might evoke an organization-wide experience of positive emotions, enhance the collective cognitive capacity for thinking constructively, and increase the intensity, pace, and volume of collective behavior. Our first hypothesis is therefore:

**Hypothesis 1.** Customer passion will be positively associated with POE.

**Productive Organizational Energy and Organizational Performance**

We propose that POE will be positively related to organizational performance. Until now, research has shown that POE leads to several positive organizational outcomes. Based on in-depth qualitative studies, Bruch and Ghoshal (2003, 2004) showed that POE enhances organizations’ ability to deal with change and improves overall company functioning. Additionally, large-scale survey studies showed positive associations between POE and internal effectiveness, such as goal commitment and organizational commitment (Cole et al., 2012), employees’ well-being in terms of job satisfaction and turnover intentions (Raes et al., 2013), and firm performance compared to rivals in the same industry (Cole et al., 2012). To corroborate and extend these results, particularly the link between POE and overall organizational performance, we investigate organizational performance from the perspective of both operational and organizational performance facets as recommended by Combs, Crook, and Shook (2005).

An organization with high rather than low POE is more likely to increase organizational performance. The research showed that a climate of
positive affective energy in organizations is positively related to aggregate employee task performance (Menges, Walter, Vogel, & Bruch, 2011). As positive employee work outcomes, such as increased task performance behavior, are considered important factors and signals of organizational performance (Huselid, 1995; Ryan et al., 1996), POE should improve organizational performance. Further, as organizational members are productively energized, and as they collectively strive to achieve the organizational goals, they should contribute to increased organizational goal attainment and hence benefit the organization.

In sum, the shared experience and demonstration of positive emotions, cognitive activation, and productive behavior of employees in pursuit of common goals should increase organizational performance. Consequently, we posit the following hypothesis:

**Hypothesis 2.** POE will be positively associated with organizational performance.

*The Mediating Role of Productive Organizational Energy*

Based on the reasoning thus far, we assume that POE mediates the relationship between customer passion and organizational performance. Hypothesis 1 proposes a positive relationship between customer passion and POE, and hypothesis 2 proposes a positive relationship between POE and organizational performance. Together, these hypotheses specify a model in which customer passion indirectly enhances organizational performance by contributing to POE. In order to lay the theoretical foundation for this argument, we build upon earlier research providing first evidences that customer satisfaction increases employee satisfaction which in turn enhances organizational performance (Luo & Homburg, 2007; Ryan et al., 1996). Based on emotional contagion processes (Barsade, 2002; Hatfield et al., 1994; Vijayalakshmi & Bhattacharyya, 2012) we propose that customer passion spills over to employees and materializes in higher POE in such way that customer passion has a positive indirect effect on organizational performance through POE.

Accordingly, we posit:

**Hypothesis 3.** POE will mediate the relationship between customer passion and organizational performance.
The Moderating Role of Top Management Team’s Customer Orientation

We propose that high TMT’s customer orientation strengthens the relationship between customer passion and POE while low TMT’s customer orientation limits it. The existing research provides evidence that TMTs have a symbolic effect on employees and serve as role models for employees (Hambrick et al., 2001; Raes et al., 2013; Zott & Huy, 2007). Accordingly, TMT’s attitudes and behaviors signalize to employees what is important in the organization and what is valued and rewarded (Gibson & Schroeder, 2003; Shamir, 2007). Thus, we expect that a high customer orientation of the TMT will draw employees’ attention toward customers and their passion. As attentional processes mediate emotional contagion processes, with greater emotional contagion occurring when more attention is allocated (Hatfield et al., 1994), customer passion might spread more within an organization and increase POE where employees’ attention is drawn toward customers and their passion due to high customer orientation of the TMT. On the contrary, low customer orientation of the TMT will form the opinion among employees that customer passion is neither important for the organization nor that it deserves closer attention. In this case, we would assume that POE is not leveraged in organizations due to customer passion. Hence, we posit:

Hypothesis 4a. TMT’s customer orientation strengthens the relationship between customer passion and POE when TMT’s customer orientation is high but limits it when TMT’s customer orientation is low.

Considering that the association between customer passion and POE is contingent upon the level of TMT’s customer orientation, it is also likely that TMT’s customer orientation will conditionally influence the strength of the indirect relationship between customer passion and organizational performance; thereby indicating a moderated mediation model. More specifically, we expect a strong relationship between customer passion and organizational performance when TMT’s customer orientation is high but not when it is low. Accordingly, we posit the following:

Hypothesis 4b. TMT’s customer orientation will moderate the positive and indirect effect of customer passion on organizational performance (through POE). Specifically, POE will mediate the indirect effect when TMT’s customer orientation is high but not when it is low.

Fig. 1 gives an overview of all hypothesized relationships.
As part of a larger study, survey data was collected in 176 small and medium sized German companies during spring 2010 and spring 2011. Participating companies received a detailed benchmark report electronically in return. As recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003) concerning common source bias, we collected data from several groups of respondents according to the following standardized procedure. All members received an invitation to participate in the study via an email which included the link to the questionnaire. Before starting the online questionnaire, participants indicated to which organizational group they belonged: members of the TMT, HR representatives, or employees. Based on that information, participants were directed to separate questionnaires. The TMT questionnaire assessed customer passion and TMT’s customer orientation, the key informant questionnaire answered by the HR representative assessed organizational performance, organizational size, industry affiliation, and environmental dynamism, and the employee questionnaire assessed POE. Due to the research design of the larger study which consisted of four distinct versions of the employee questionnaire, only about a quarter of the overall employee participants were assigned to the survey version which included POE.

Overall, 77 companies participated in 2010 and 99 companies participated in 2011. Out of the 176 organizations, 24 organizations failed to
provide sufficient data on all of the variables of interest. Hence, the final sample consisted of 152 companies, resulting in an organizational level response rate of 86% and entailing data from 8,299 employees and 495 board members. The distribution of the companies’ industry affiliation (coded in four major industries) was: 52% service, 23% production, 15% trade, and 10% finance. The average organizational size in the final sample was 432.55 employees (SD = 721.81).

**Measures**

All scales that were originally published in English were translated to German following a double-blind back-translation procedure in order to enhance the accuracy, correctness, and semantic equivalence of the translated items (Schaffer & Riordan, 2003). The respondents were assured full anonymity. All hypotheses addressed the organizational level of analysis. Accordingly, we aggregated individual members’ responses to the organizational level and examined the statistical adequacy of such procedure. In doing so, we relied on the widely used $r_{wg}$ index (James, Demaree, & Wolf, 1984). Values of $r_{wg}$ index greater than 0.70 indicate sufficient within-group agreement. Moreover, we tested for sufficient between-organization variance via ANOVA.

**Customer Passion**

Customer passion was captured via customers’ affective commitment and customers’ positive word-of-mouth at the TMT level by asking members about their perception of the organization’s customer passion. On an average, three TMT members answered the items measuring customer passion. “Our customers” term was the referent in this scale in order to capture the organizational perspective on customer passion (Chan, 1998). **Customers’ affective commitment** was measured with four items inspired by the scale of Allen and Meyer (1990) on employees’ affective commitment to organizations. According to the focus of our study we explicitly took the strong positive attachment of customers and their enthusiasm into account. The four items are: (1) “Our customers feel emotionally attached to our organization,” (2) “Our customers are proud to tell others that they are our customers,” (3) “Our customers are fans of our organization,” and (4) “Our customers can get enthusiastic about the products/services of our organization.” The responses are measured on a seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach’s alpha was 0.90.
The median $r_{wg}$ value using a uniform expected variance distribution was 0.89 showing high agreement between TMT members’ responses. The ANOVA was significant, indicating sufficient between-organization variance ($F_{(151,322)} = 2.52, p < 0.01$). Thus, we averaged the answers of TMT’s members to form the index for the organization’s perspective on customers’ affective commitment. Customers’ positive word-of-mouth behavior was captured using the three-item scale of Arnett, German, and Shelby (2003). The items were (1) “Our customers speak favorably about our products/services to people they know,” (2) “Our customers bring up our products/services in a positive way in conversations they have with friends and acquaintances,” and (3) “Our customers recommend our products/services.” Responses were measured on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). Cronbach’s alpha was 0.92. The median $r_{wg}$ value using a uniform expected variance distribution was 0.94. The ANOVA showed significant between-organization variance ($F_{(151,322)} = 1.43, p < 0.01$).

Both customers’ affective commitment and customers’ positive word-of-mouth uniquely represent customer passion considering both the affective-relational and behavioral component of passion as described earlier. However, they also tend to correlate and represent different facets of a common notion of customer passion which points to a second-order factor structure with two dimensions. Accordingly, we used confirmatory factor analysis (CFA) to estimate a reflective second-order factor model that represents these relationships (MacKenzie, Podsakoff, & Jarvis, 2005). In order to do so, we followed the recommendation of Hu and Bentler (1999) regarding the sample sizes smaller than 200 and calculated two incremental fit indices, namely the comparative fit index (CFI: Bentler, 1990) and the incremental fit index (IFI: Bollen, 1989) in combination with an absolute fit measure, the Standardized Root Mean Square Residual (SRMR). Common cutoff values for these indices are 0.90 for the CFI and IFI and 0.08 for the SRMR (see Hu & Bentler, 1999). Customers’ affective commitment and customers’ positive word-of-mouth represent the first-order factors while customer passion is the second-order factor. This two-factor second-order model provided a good fit to the data ($\chi^2(32) = 50.32; p < 0.01$; $CFI = 0.99$; $IFI = 0.99$; $SRMR = 0.05$). In order to test the robustness of customer passion as a second-order construct, we tested the following two alternatives. First, a first-order one-factor model with all survey items loading on one factor (alternative model 1) had a significantly worse fit compared to the two-factor second-order model ($\Delta \chi^2 = 75.54; p < 0.01$). Second, a first-order two-factor model in which each item loaded on
the respective independent factor, namely customers’ affective commitment and customers’ positive word-of-mouth, with no second-order common factor (alternative model 2) had the worst fit ($\Delta\chi^2 = 136.98; p < 0.01$). These results which are displayed in Table 1 confirmed that customer passion is best represented by the two-factor second-order model.

**Productive Organizational Energy**

POE was assessed using the 14-item productive energy scale of Cole et al. (2012) which reflects the affective, the cognitive, and the behavioral dimension of POE. Prior studies have demonstrated good psychometric qualities of this instrument (e.g., Kunze & Bruch, 2010; Walter & Bruch, 2010). We instructed the employees to provide a rough assessment of the employees who work at their company. The responses to the five items of the affective dimension were measured on a five-point Likert scale (1 = never; 5 = extremely often/always). A sample item is “Employees feel excited in their job.” The other two dimensions, the cognitive (five items) and the behavioral (four items) one, were measured on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). A sample cognitive dimension item is “Employees really care about the fate of this company,” and a sample behavioral dimension item is “Employees are working at a very fast pace.” Cronbach’s alpha was 0.97. We averaged the three distinct dimensions to form the overall index of POE in accordance with prior research (e.g., Cole et al., 2012; Walter & Bruch, 2010). Aggregation statistics indicate sufficient within-group agreement and sufficient between-group variance ($ICC_1 = 0.11$; $ICC_2 = 0.85$; $F_{(151,7106)} = 6.75; p < 0.01$; $r_{wg} = 0.82$).

Table 1. Measurement of Customer Passion.

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>$\Delta\chi^2$</th>
<th>$\Delta$df</th>
<th>CFI</th>
<th>IFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model: Second-order</td>
<td>50.32</td>
<td>32</td>
<td>1.57</td>
<td>0.99</td>
<td>0.99</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>two-factor model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative model 1: First-order</td>
<td>125.86</td>
<td>34</td>
<td>3.70</td>
<td>75.54**</td>
<td>2</td>
<td>0.93</td>
<td>0.93</td>
<td>0.05</td>
</tr>
<tr>
<td>one-factor model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative model 2: First-order</td>
<td>187.30</td>
<td>33</td>
<td>5.68</td>
<td>136.98**</td>
<td>1</td>
<td>0.87</td>
<td>0.87</td>
<td>0.31</td>
</tr>
<tr>
<td>two-factor model</td>
<td></td>
<td></td>
<td></td>
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</table>

*Note: All models are compared to the hypothesized model. df, degree of freedom; CFI, comparative fit index; IFI, incremental fit index; SRMR, standardized root mean square residual. POE was used as a dependent variable to identify the model (MacKenzie et al., 2005).

**$p < 0.01$.**
Organizational Performance
In line with Combs et al.’s (2005) recommendation, we measured organizational performance with various performance items referring to both operational and organizational performance facets. Similar to prior research (e.g., Kunze, Boehm, & Bruch, 2013), operational performance was captured by two items relating to process efficiency and employee retention while organizational performance was assessed by three items referring to return on investment, financial performance, and organizational growth. As expected, exploratory factor analyses yielded a one-factor solution. Similarly, in previous studies (e.g., Delaney & Huselid, 1996), the performance of other firms in the same industry served as reference point for key informants’ assessment of organizational performance (1 = far below average; 7 = far above average). Cronbach’s alpha was 0.74.

Top Management Team’s Customer Orientation
TMT’s customer orientation was assessed using the five-item scale of Liao and Subramony (2008), with items being measured on a seven-point response scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is “I have a deep understanding of our customers’ wants and needs.” Cronbach’s alpha was 0.82. The median $r_{wg}$ value using a uniform expected variance distribution was 0.98, indicating agreement among TMT members. Furthermore, the ANOVA showed significant between-organization variance ($F_{(151,322)} = 1.43; p < 0.01$).

Control Variables
In addition to the aforementioned variables, we included several control variables in the analyses. First, because organizational size may influence employee attitudes and behaviors (Pierce & Gardner, 2004; Ragins, Cotton, & Miller, 2000), we included organizational size as a control variable in the analyses. Organizational size was measured by asking the HR representative to report the total number of employees in the organizations (converted to full-time equivalents). As the number of employees in an organization might increase logarithmically (Gooding & Wagner, 1985), we log-transformed this variable in order to reduce the skewness of the distribution, as applied in prior research (e.g., Schminke, Cropanzano, & Rupp, 2002). Second, we also controlled for companies’ affiliation with one of the four broad classes of industries (i.e., services, manufacturing, trade, and finance; as reported in the key informant survey) (e.g., Dickson, Resick, & Hanges, 2006). Participant organizations were assigned four dummy-coded variables, indicating their affiliation with each of the industry categories.
Third, we asked the HR representative about the environmental dynamism because this factor affects companies’ usage of customer satisfaction indices (Morgan, Anderson, & Mittal, 2005). Fourth, to alleviate a bias related to the year of participation, which could emerge due to systematic change in the environment, we included year of participation as a control variable dummy-coded with 2010 and 2011.

Convergent and Discriminant Validity

We assessed convergent and discriminant validity of the constructs by testing whether the hypothesized measurement model fit the data adequately. We performed CFA and used the same indices and criteria as described above. For the purpose of keeping the ratio between parameters and cases acceptable, we used a partial disaggregation technique (e.g., Williams & O’Boyle, 2008). Consequently, we created the three dimensions of the POE measure and the two dimensions of the customer passion measure by averaging the items to obtain their respective dimensions. Hence, the hypothesized measurement model consisted of four latent constructs—customer passion, POE, organizational performance, and TMT’s customer orientation—with 15 items in total. This model fitted the data well ($\chi^2_{[84]} = 124.75; p < 0.01; \text{CFI} = 0.96; \text{IFI} = 0.96; \text{SRMR} = 0.06$). As shown in Table 2, we compared the measurement model to three alternative models.

First, a three-factor model with customer passion and organizational performance loading on one common factor (alternative model 1) showed a

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta \text{df}$</th>
<th>CFI</th>
<th>IFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model: Four-factor model</td>
<td>124.75</td>
<td>84</td>
<td>1.49</td>
<td></td>
<td></td>
<td>0.96</td>
<td>0.96</td>
<td>0.06</td>
</tr>
<tr>
<td>Alternative model 1: Three-factor model</td>
<td>234.79</td>
<td>87</td>
<td>2.70</td>
<td>110.01**</td>
<td>3</td>
<td>0.85</td>
<td>0.85</td>
<td>0.11</td>
</tr>
<tr>
<td>Alternative model 2: Two-factor model</td>
<td>349.98</td>
<td>89</td>
<td>3.93</td>
<td>225.23**</td>
<td>5</td>
<td>0.73</td>
<td>0.73</td>
<td>0.13</td>
</tr>
<tr>
<td>Alternative model 3: One-factor model</td>
<td>591.20</td>
<td>90</td>
<td>6.57</td>
<td>466.45**</td>
<td>6</td>
<td>0.48</td>
<td>0.49</td>
<td>0.15</td>
</tr>
</tbody>
</table>

*Note: All models are compared to the hypothesized model. df, degree of freedom; CFI, comparative fit index; IFI, incremental fit index; SRMR, standardized root mean square residual. **$p < 0.01$. 
worse fit ($\Delta \chi^2 = 110.01; p < 0.01$). Second, a two-factor model with also TMT's customer orientation loading on the prior specified common factor (alternative model 2) fitted worse ($\Delta \chi^2 = 225.23; p < 0.01$). Finally, a one-factor model (alternative model 3) with all items loading on one common factor also showed a worse fit ($\Delta \chi^2 = 466.45; p < 0.01$). Accordingly, the hypothesized measurement model fitted the data best, which indicates adequate convergent and discriminant validity.

**Analytical Procedures**

The study hypotheses were tested in two interlinked steps. In a first step, the simple mediation model was examined (hypotheses 1, 2, and 3). Together, hypotheses 1, 2, and 3 build an indirect effects model whereby the relationship between customer passion and organizational performance is transmitted via the POE. We tested the mediation hypotheses using hierarchical regression analyses and an SPSS-based application provided by Hayes (2012). Briefly, this application facilitates the estimation of the indirect effect, both with the Sobel test and with a bootstrap approach.

In a second step, the proposed moderator variable was integrated into the model testing for the hypothesized moderated mediation model (hypotheses 4a and 4b) (Preacher, Rucker, & Hayes, 2007). Concerning the hypotheses 4a and 4b, we predicted that TMT's customer orientation would moderate the relationship between customer passion and POE. To test the hypotheses 4a and 4b, we again used the SPSS tool developed by Hayes (2012). This tool provides the recommended bootstrapping methods and allows examining the significance of the conditional indirect effects at different values of the moderator variable.

**RESULTS**

**Descriptive Statistics**

Table 3 presents means, standard deviations, and bivariate correlations of all study variables.

An inspection of the correlations revealed that customer passion related positively to POE ($r = 0.40, p < 0.01$) and to organizational performance ($r = 0.30, p < 0.01$). POE related positively to organizational performance ($r = 0.33, p < 0.01$). Further, TMT's customer orientation related positively...
Table 3. Means, Standard Deviations, and Correlations of Study Variables.

| Variables                        | Mean | SD  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|----------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Customer passion              | 5.77 | 0.66|     |     |     |     |     |     |     |     |     |     |     |
| 2. TMT's customer orientation   | 6.56 | 0.41|     | 0.54**|     |     |     |     |     |     |     |     |     |
| 3. Productive organizational     | 3.68 | 0.31|     |     | 0.40**|     |     | 0.22**|     |     |     |     |     |
| energy                           |      |     |     |     |     |     |     |     |     |     |     |     |     |
| 4. Organizational performance    | 5.77 | 0.78| 0.30**|     | 0.17*|     |     | 0.33**|     |     |     |     |     |
| 5. Organizational size (log)     | 5.17 | 1.31| −27**| −0.15| −0.24**| −0.22**|     |     |     |     |     |     |     |
| 6. Service industry              | 0.53 | 0.50|     | 0.18*|     | 0.12|     | 0.17*| 0.05|     |     | 0.04|     |
| 7. Trade industry                | 0.16 | 0.37| −0.01| 0.06|     | 0.00|     | 0.10| −0.12| −0.42**|     |     |     |
| 8. Manufacturing industry        | 0.23 | 0.42| −0.20*| −0.19*| −0.20*| −0.14|     | 0.05| −0.51**| −0.24**|     |     |     |
| 9. Finance industry              | 0.10 | 0.30| −0.05| −0.06| −0.10| 0.00|     | 0.04| −0.26**| −0.14| −0.18*|     |     |
| 10. Environmental dynamism       | 3.36 | 1.19|     | −0.06| −0.02| −0.15| −0.10| 0.19*| −0.12| −0.07| −0.02|     |     |
| 11. Year of participation        | 0.55 | 0.50|     | 0.04| −0.06| 0.09| −0.13| 0.05| −0.01| 0.05| −0.06| −0.11|     |

Notes: Variables relating to industry were dummy-coded with 1 = belongs to the respective industry, 0 = does not belong to the respective industry; the variable year of participation was dummy-coded with 1 = 2011, 0 = 2010.

*p < 0.01, *p < 0.05. log, common logarithm.
to POE \((r=0.22, p<0.01)\) and to organizational performance \((r=0.17, p<0.05)\). Concerning the control variables, organizational size, industry service, and industry manufacturing correlated significantly with the focal study variables. In detail, organizational size related negatively with customer passion \((r=-0.27, p<0.01)\), POE \((r=-0.24, p<0.01)\), and organizational performance \((r=-0.22, p<0.01)\). Companies affiliated to the service industry related positively to customer passion \((r=0.18, p<0.05)\), whereas companies affiliated with the manufacturing industry related negatively to customer passion \((r=-0.20, p<0.05)\), TMT’s customer orientation \((r=-0.19, p<0.05)\), and POE \((r=-0.20, p<0.05)\). The results showed that the year of participation, environmental dynamism, and companies’ affiliation with the trade or finance industry had no influence on the endogenous variables under observation.

Tests of Mediation

Tables 4 and 5 display the results for hypotheses 1, 2, and 3. Supporting hypothesis 1, customer passion was positively associated with POE, as

<table>
<thead>
<tr>
<th>Variables Entered</th>
<th>Productive Organizational Energy</th>
<th>Organizational Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Organization size (log)</td>
<td>-0.39**</td>
<td>-0.31**</td>
</tr>
<tr>
<td>Service industry</td>
<td>0.11**</td>
<td>0.08</td>
</tr>
<tr>
<td>Production industry</td>
<td>-0.11</td>
<td>-0.07</td>
</tr>
<tr>
<td>Finance industry</td>
<td>-0.07</td>
<td>-0.06</td>
</tr>
<tr>
<td>Environmental dynamism</td>
<td>-0.11</td>
<td>-0.09</td>
</tr>
<tr>
<td>Year of participation</td>
<td>-0.13†</td>
<td>-0.12</td>
</tr>
<tr>
<td>Customer passion</td>
<td>0.29**</td>
<td>0.23**</td>
</tr>
<tr>
<td>POE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>0.08**</td>
<td>0.05**</td>
</tr>
<tr>
<td>(R^2) (adjusted (R^2))</td>
<td>0.20** (0.17)</td>
<td>0.28** (0.24)</td>
</tr>
</tbody>
</table>

Note: Standardized regression weights are shown.
**\(p<0.01\), *\(p<0.05\), †\(p<0.10\) level (two-tailed). log, common logarithm.
indicated by a significant standardized regression coefficient ($\beta = 0.29$, $p < 0.01$). Furthermore, the relationship between POE and organizational performance when controlling for customer passion was significant ($\beta = 0.24$, $p < 0.01$), supporting hypothesis 2. Finally, customer passion was found to have an indirect positive effect (0.08) on organizational performance, as we hypothesized (hypothesis 3). The Sobel test demonstrated that the indirect effect was significant ($z = 2.16$, $p < 0.05$). Bootstrapping methods confirmed this result (see Table 5), with a bootstrapped 95% confidence interval (CI) around the indirect effect not containing zero (0.03, 0.16). Thus, the hypotheses 1, 2, and 3 were supported. The direct effect of customer passion on organizational performance remained significant when controlling for POE, suggesting partial mediation.

### Tests of Moderated Mediation

Regarding hypothesis 4a, we predicted that the relationship between customer passion and organizational performance would be stronger for organizations high on TMT’s customer orientation than for organizations low on TMT’s customer orientation. The results indicated that the effect of the cross-product term between customer passion and TMT’s customer orientation on POE was significant ($\beta = 0.25$, $p < 0.01$), as displayed in Table 6.

As recommended by Aiken and West (1991), we conducted a simple slope test and plotted the interaction results graphically in order to inspect whether this interaction conforms to the hypothesized pattern. We examined the conditional effect of customer passion on POE at three different values of TMT’s customer orientation. Table 7 shows the results of the simple slope test. As expected, TMT’s customer orientation was not significant at one standard deviation below the mean.

Additionally, we applied conventional procedures to plot simple slopes (see Fig. 2) at one standard deviation above and below the mean of the

| Table 5. Indirect Effect of Customer Passion on Organizational Performance. |
|-----------------|--------|----------------|----------------|---|----------------|
| Effect          | SE     | LL 95% CI      | UL 95% CI      | z  | Significance Level |
| Sobel test      | 0.08   | 0.04           |                | 2.16| $p < 0.05$       |
| Bootstrapping   | 0.08   | 0.03           | 0.03           | 0.16|                 |

Note: Bootstrap sample size = 1,000. SE, standard error; LL, lower limit; UL, upper limit; CI, confidence interval.
TMT’s customer orientation measure. Supporting hypothesis 4a, the slope of the relationship between customer passion and POE was steeper for organizations high on TMT’s customer orientation than for organizations low on TMT’s customer orientation.

We examined the conditional indirect effect of customer passion on organizational performance (through POE) also for three values of TMT’s customer orientation (see Table 8). Bootstrap CIs indicated that two of the three conditional indirect effects (based on moderator values at the mean and at +1 standard deviation) were positive and significantly different from zero. As expected, the conditional indirect effect was not significant for low TMT’s customer orientation. Thus, hypothesis 4b was supported, such that the indirect and positive effect of customer passion on organizational performance was significant for organizations high on TMT’s customer orientation.

### Table 6. Moderated Hierarchical Regression Analysis on POE.

<table>
<thead>
<tr>
<th>Variables Entered</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization size (log)</td>
<td>−0.39**</td>
<td>−0.32**</td>
<td>−0.31**</td>
</tr>
<tr>
<td>Service industry</td>
<td>0.11</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>Production industry</td>
<td>−0.11</td>
<td>−0.08</td>
<td>−0.09</td>
</tr>
<tr>
<td>Finance industry</td>
<td>−0.07</td>
<td>−0.06</td>
<td>−0.05</td>
</tr>
<tr>
<td>Environmental dynamism</td>
<td>−0.11</td>
<td>−0.10</td>
<td>−0.12†</td>
</tr>
<tr>
<td>Year of participation</td>
<td>−0.13†</td>
<td>−0.12</td>
<td>−0.11</td>
</tr>
<tr>
<td>Customer passion</td>
<td>0.33**</td>
<td>0.28**</td>
<td></td>
</tr>
<tr>
<td>TMT’s customer orientation</td>
<td>−0.07</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Customer passion × TMT’s customer orientation</td>
<td>0.25**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ΔR²: 0.08**  0.04**

R² (adjusted R²): 0.20** (0.17)  0.28** (0.24)  0.32** (0.28)

Note: Standardized regression weights are shown.

**p < 0.01, †p < 0.10 level (two-tailed). log, common logarithm.

### Table 7. Conditional Effect of Customer Passion on POE.

<table>
<thead>
<tr>
<th>TMT’s Customer Orientation</th>
<th>Effect</th>
<th>SE</th>
<th>LL 95% CI</th>
<th>UL 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>−1 SD</td>
<td>0.07</td>
<td>0.05</td>
<td>−0.03</td>
<td>0.16</td>
</tr>
<tr>
<td>Mean</td>
<td>0.13</td>
<td>0.04</td>
<td>0.05</td>
<td>0.21</td>
</tr>
<tr>
<td>+1 SD</td>
<td>0.20</td>
<td>0.04</td>
<td>0.11</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Note: Bootstrap sample size = 1,000. LL, lower limit; UL, upper limit; CI, confidence interval.
The goal of the present study was to examine the linkages and contingencies of customer passion, POE, and organizational performance. We developed
a conceptual model, which proposed that POE mediates the relationship between customer passion and organizational performance. Further, we found that TMT’s customer orientation acts as a boundary condition. The study results support the hypothesized moderated mediation model, demonstrating that the effect of customer passion on organizational performance through POE depends on TMT’s level of customer orientation.

This study makes several theoretical contributions by corroborating and extending prior research. First, the present investigation adds to the existing research on POE, as it provides empirical evidence that POE is influenced by external factors, in this case customer passion. While doing so, we have extended scientific work on the antecedents of POE, which has focused so far on intra-organizational factors (Raes et al., 2013; Walter & Bruch, 2010). Further, as we found a positive association between POE and organizational performance, we corroborated previous research on the positive consequences of POE (Cole et al., 2012; Raes et al., 2013). Second, the present study extends the research on customer influences on employees (Grandey & Diamond, 2010; van Jaarsveld et al., 2010) and particularly research on the energizing influences of customers on individuals (Grant, 2012; Grant et al., 2007; Grant & Hofmann, 2011; Zimmermann et al., 2011) by focusing on customer passion as a positive customer influence at the organizational level. This research has taken the individual level findings a step further and has shown that customers energize not only individual employees, but also entire organizations through emotional contagion processes. While doing so, this study elaborated explicitly on emotional contagion theory at the organizational level according to scholars’ call (Ashkanasy & Ashton-James, 2007; Barsade, Ramarajan, & Westen, 2009; Vijayalakshmi & Bhattacharyya, 2012). We found empirical evidence that – depending on TMT’s customer orientation – attentional processes influence the extent to which emotional contagion occurs among employees. Third, the present investigation also contributes to the research that emphasizes TMT’s symbolic role (Hambrick et al., 2001; Raes et al., 2013; Zott & Huy, 2007) by introducing TMT’s customer orientation as a boundary condition of the associations among customer passion, POE, and organizational performance. We were able to show that the energizing potential of customer passion unfolds only when TMTs are customer oriented. In line with scholars’ recommendations on making theoretical progress (Boyd, Takaes Haynes, Hitt, Bergh, & Ketchen, 2012; Edwards, 2010), we provided greater clarity about the linkages and contingencies of customer passion, POE, and organizational performance.
Practical Implications

Beyond theoretical contributions, this research offers also significant practical implications. First, as POE is positively related to organizational performance, practitioners should strive to increase employees’ collective energy, specifically by energizing organizations through customer passion. Consequently, organizations should first make sure that their customers are passionate about the organization as well as its products and services. Companies might enable and stimulate customer passion by establishing customer communities and providing customers with an appealing website or online platform to express their ideas, thoughts, questions, experiences, and opinions (Wagner & Majchrzak, 2007). Second, we suggest actively facilitating, stimulating, and amplifying the emotional contagion processes due to customer passion among employees. For example, customer platforms, as mentioned above, should be developed in a way to allow employees to have access to them. This might help disseminate customer passion among employees. Another managerial measure could be to organize organizational events for both employees and customers. Such collective events with crowds of people have the potential to boost emotional contagion processes because affective spillover is highest if the parties concerned — here, customers and employees — are both physically present. Third, as revealed by the present study, another important factor for energizing organizations through customer passion is high TMT’s customer orientation. Due to their strategic and symbolic role, it is important that TMTs consciously develop high customer orientation and demonstrate the importance of customer orientation to employees. For instance, they might strive to spend time with customers on a regular basis and make such customer-oriented behavior visible to employees, for example, through reports about customer visits of TMTs disseminated by corporate communication. Fourth, managers might foster organizational usage and spreading of customer indices, such as customer satisfaction scores or the net-promoter score (Keiningham, Cooil, Andreassen, & Aksoy, 2007; Morgan & Rego, 2006; Morgan et al., 2005).

Limitations

In spite of several methodological strengths (e.g., a large sample from diverse industries, independent data sources for all focal variables), the present research has limitations; hence, the results should be interpreted with
caution. First, the generalizability of the results is limited because all participant companies were located in Germany. With individual and cultural factors potentially influencing susceptibility to emotions (Ilies, Wagner, & Morgeson, 2007), and hence emotional contagion processes, the relationships found in this study might follow different patterns if measured in other countries. In a similar vein, we caution readers that the sample consisted of organizations with less than 5,000 employees. Researchers could strive to obtain study samples also from larger organizations to further generalize the present findings.

Second, another potential limitation refers to the measurement of organizational performance. Due to the specific nature of our sample, we relied on subjective rather than objective ratings (Richard, Devinney, Yip, & Johnson, 2009). However, privately owned companies — as this was the case in the present study — are less likely to publish performance measures. At least, research showed that key informants’ answers are more reliable for small and medium sized companies compared to large organizations (Homburg, Klarmann, Reimann, & Schilke, 2012). Further, studies demonstrated that subjective performance measures correlate strongly with objective performance of privately held companies (Dess & Robinson, 1984; Wall et al., 2004).

Third, the data were cross-sectional, which makes it impossible to establish causality based on our results. Organizational performance might stimulate POE, and in turn, POE might enhance customer passion. Beyond an input—mediator—output model, it is also possible that organizational performance serves as an input for customer passion according to an input—mediator—output—input model (cf. Ilgen, Hollenbeck, Johnson, & Jundt, 2005). The present data, however, cannot test such a recursive model. In order to remedy these weaknesses, future research on customer influences on POE and organizational performance might use longitudinal or quasi-experimental designs (Grant & Wall, 2009; Ployhart & Vandenberg, 2010).

Fourth, to avoid the confounding effect of customer passion and POE in a cross-sectional design due to a common source bias (Podsakoff et al., 2003), customer passion was measured at the TMT level whereas POE was measured at the employee level. However, such approach assumes that members of the TMT are able to evaluate the perspectives of the overall organization and employees on customer passion. While doing so, we expected the TMT members to be well informed about the organization’s customers and their behavior for the following two reasons. First, CEOs spend a lot of their time collecting, cultivating, and analyzing vast amounts of data about, for example, markets, sales reports, or customers’ purchasing...
patterns (Farkas & Wetlaufer, 1996). Second, senior managers ranked customers as their most important stakeholders, followed by employees as their second most important stakeholders (Kouzes & Posner, 1988). Nevertheless, future research might replicate and cross-validate the present findings by asking employees and customers to assess customer passion.

**Directions for Future Research**

In addition to addressing study limitations, this investigation suggests several other directions for future research. Researchers may explore specific organizational practices and channels through which customer passion is most likely to spill over to the workforce. Accordingly, research on an organization’s use and dissemination of information on customer satisfaction and loyalty metrics, such as the net-promoter score, might explicitly investigate the effects on employees and on POE when disseminating such indices within the organization (Morgan & Rego, 2006; Morgan et al., 2005). Further, with increasing social media communication and usage within organizations, prospective studies might explore the effects of leaders’ messages about customer passion on POE. A current study has shown that employees’ perception of leaders’ authenticity and trust are crucial for effective positive emotional communication using social media (Huy & Shipilov, 2012). Additionally, future research might address the interplay of organizational design and customer passion. Organizational design could be used to enhance customer closeness (Homburg, Workman, & Jensen, 2000). Hence, increasing customer closeness of all employees might leverage the perceptible customer passion across employees, fostering POE. Moreover, as this study has focused solely on positive customer emotions and their emotional contagion, future studies could investigate interaction between customer passion and negative customer emotions, such as anger or rage (e.g., Harris, 2013) at the organizational level. Apart from emotional processes, which were central to this study, research is needed to further elaborate on the processes through which customers may positively influence POE.

Overall, this study suggests that customer passion is associated with increased POE and organizational performance contingent upon the level of TMT’s customer orientation. We conclude that the so far neglected influence of customer passion on the organizational climate could be a natural, sustainable source for POE and organizational performance, and eventually for long-term corporate success.
NOTE

1. Marketing research on customer passion mainly focuses on antecedents and consequences of customer passion related to customers but not to employees; hence, concepts such as consumer passion referring to consumers’ desire for consumption are not transferable to the present study (e.g., Belk et al., 2003).

ACKNOWLEDGMENT

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REFERENCES


Increasing Energy and Performance through Customer Passion


