The interplay between employee and firm customer orientation: 
Substitution effect and the contingency role of performance-related rewards

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Abstract

This paper identifies and explains a potential tension between a firm’s emphasis on customer orientation (CO) and the extent to which employees value CO as a success factor for individual performance. Based on self-determination theory and CO implementation research, we propose that firm CO may represent both autonomous and controlled motivations for CO, but that employees’ CO is more strongly linked to individual performance when employees experience solely autonomous motivation. Hence, we expect a substitution effect whereby the link between employees’ CO and their performance is weaker when firm CO is high. Furthermore, we examine a boundary condition for the previous hypothesis and propose that performance-contingent rewards have a positive effect on the internalization of the extrinsic motivation stemming from firm CO. Two multilevel studies with 979 employees and 201 top management team members from 132 firms support our hypotheses. Against previous research, our findings offer a new perspective on the effectiveness of CO initiatives, propose employees’ motivational states as the theoretical explanation for the heterogeneity in the link between employee CO and performance, and reappraise the role of performance-contingent rewards in CO research. We provide managerial implications for the effective implementation of customer-oriented initiatives within firms.
Introduction

It is widely accepted that a firm’s ability to benefit from a customer orientation (CO) is contingent on the employees who implement it (e.g. Brach et al., 2015; Kennedy, Lassk and Goolsby, 2002; Lin et al., 2016). Many companies are acting on this belief, as witnessed by organization-wide CO initiatives such as GE’s Gold Standard in Marketing Program and Macy’s Customer Centric Initiative. However, many of these efforts are ineffective. For example, evidence indicates that while 56% of firms perceive themselves as being very customer oriented, only 12% of their customers agree (CMO Council, 2008). Critical to the success of CO initiatives is the understanding of what motivates employees to adopt a CO.

The CO implementation literature suggests two such motivations: the need to comply with the normative mandate of the firm (Gebhardt, Carpenter and Sherry, 2006) and the self-driven recognition of CO as an important job value (Zablah et al., 2012). These two motivations can be differentiated in line with self-determination theory (SDT), a macro theory of motivation that explains how employees identify with values and behaviours that are endorsed by their firm (Gagné and Deci, 2005; Ryan and Deci, 2000). First, organizational leaders establish, diffuse and institutionalize customer-oriented values and norms in top-down CO initiatives (e.g. Stock and Hoyer, 2002). In line with the normative perspective of the CO literature, SDT suggests that as a result of organizational CO initiatives, employees will become more customer oriented in response to an inducement by an external agent. This external source of CO may lead employees to internalize the importance of CO in their work value set (i.e. autonomous motivation), and/or to act based on a certain sense of pressure and obligation (i.e. controlled motivation). Second, employees’ identification with CO as a work-related value may also be a self-induced choice, driven by inherent personal interest (i.e. autonomous motivation). Thus, employee CO can result from a purely autonomous motivation (low external stimulus for CO, high personal interest in CO), from a rather
controlled motivation (high external stimulus for CO, low personal interest in CO), or from a combination of both (high external stimulus for CO, high personal interest in CO).

Importantly, there is growing consensus in recent SDT research that autonomous and controlled motivations coexist independently of each other in the work context (e.g. Cerasoli, Nicklin and Ford, 2014; Gerhart and Fang, 2015; Grant et al., 2011). Moreover, SDT research indicates that the combination of controlled and autonomous motivations towards the same behaviour may lead to different performance outcomes for employees (Gagné and Deci, 2005). For example, Grant et al. (2011) found across two studies that the same level of initiative among highly autonomously motivated employees was more positively related to performance when they reported low levels of controlled motivation. This may pinpoint a potential tension between firm CO and individual CO. If employees perceive firm CO as controlled motivation, CO will not be fully internalized and therefore the relationship between employee CO and performance will be weaker. In contrast, if firm CO is perceived as a driver of autonomous motivation, the employee CO–performance link will be stronger due to a higher degree of CO internalization. Despite the relevance of this issue for understanding employees’ motivation for CO, no previous study has investigated the cross-level interaction between organizational CO and employee CO in relation to employee performance. Thus, the overarching research question of this study is: Under what circumstances will firm CO induce autonomous (versus controlled) motivation?

While taking into account a wide range of individual and organizational factors, we identify performance-related rewards as the key contingency variable to address our research question (Gerhart and Fang, 2015). We advance that performance-contingent rewards may help direct firm CO towards increasing employees’ autonomous motivation for CO, and have a positive effect on the internalization of firm CO (Gagné and Deci, 2005; Ryan, Mims and Koestner, 1983). To date, there is limited knowledge of the role of performance-related rewards in CO research; existing studies advancing a direct link between performance-related
rewards, employee CO and employee performance often report non-significant results (e.g. Liao and Chuang 2004; MacKenzie, Podsakoff and Rich, 2001; Schmitz and Ganesan 2014). Recent contributions have suggested adopting a contingency approach when studying the effectiveness of performance incentives (Gagné and Deci 2005; Gerhart and Fang, 2015). Following this line of research, in this study we examine how the interplay between performance-contingent rewards, firm CO and employee CO affects employee performance.

We test our conceptual framework through two multilevel studies comprising three independent samples composed of 979 employees and 201 top management team members from 132 firms. We use two different contexts, back office employees in Study 1 and customer-contact employees from various business-to-business (B2B) companies in Study 2, to strengthen the external validity of our findings. In Study 1 we find that employee CO is positively related to employee performance when firm CO is low, but not when firm CO is high. In Study 2 we replicate this result and additionally find that performance-contingent rewards counteract the buffering effect of firm CO, such that when these rewards are present, the positive relationship between employee CO and performance holds under both high and low levels of firm CO.

Our work provides three major contributions to the management literature (see Table 1). First, we identify an interesting substitution effect between the emphasis a firm places on CO and the extent to which employees perceive it as an individual success factor. Our model suggests that the failure to consider these two factors simultaneously may jeopardize the implementation of customer-oriented initiatives. Second, we empirically support the moderating role of firm CO as a new source of heterogeneity in the relationship between employees’ CO and their performance, and theoretically explain this effect by considering the different motivational states of employees.
<table>
<thead>
<tr>
<th>Key Studies</th>
<th>Key Findings</th>
<th>Research Gap</th>
<th>Contributions of this Study</th>
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<tbody>
<tr>
<td>Influence of firm’s CO on employees’ CO</td>
<td>Boles et al., 2001&lt;br&gt;Cross et al., 2007&lt;br&gt;Guenzi et al., 2011&lt;br&gt;Liao and Subramony, 2008&lt;br&gt;Williams and Attaway, 1996</td>
<td>Firm CO, both in terms of top management teams’ CO and organizational CO, increases employees’ CO.</td>
<td>Previous research did not differentiate between controlled and autonomous motivation of employees for CO, nor did it consider the implications of these different kinds of motivation.</td>
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<tr>
<td>Influence of employees’ CO on employees’ performance</td>
<td>Boles et al., 2001&lt;br&gt;Cross et al., 2007&lt;br&gt;Donavan et al., 2004&lt;brFranke and Park, 2006&lt;brKennedy et al., 2002&lt;brZablaha et al., 2012</td>
<td>Employees’ CO increases several desirable job outcomes, including employees’ performance, both for back office and customer-contact employees in service and sales contexts.</td>
<td>Meta-analytic investigations found unexplained heterogeneity in the relationship between employees’ CO and their performance.</td>
</tr>
<tr>
<td>Influence of performance-contingent rewards on employees’ CO and employees’ performance</td>
<td>Liao and Chuang, 2004&lt;br&gt;MacKenzie et al., 2001&lt;brSchmitz and Ganesan, 2014</td>
<td>Previous research found no significant associations between performance-contingent rewards and (a) store-level CO, (b) employees’ customer-directed efforts and (c) employee performance.</td>
<td>Previous research did not consider the interplay between performance-contingent rewards and the controlled motivation of firm CO.</td>
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</table>
Third, our study brings new knowledge concerning the role of performance-contingent rewards in customer-oriented firms; our contingency approach complements and extends previous studies focusing on the direct effect of rewards. Our study further informs the design of performance-contingent rewards by reporting the effectiveness of a specific type of incentive (i.e. directly performance-salient incentives). Also, our results offer managers a unified framework to understand and manage the complexity of autonomous and controlled motivations within CO initiatives.

**Conceptual background and hypotheses**

*Baseline relationships from prior research*

Employee CO, defined as an attitude and a set of behaviours to meet customer needs on the job (e.g. Brach *et al*., 2015; Zablah *et al*., 2012), is an important antecedent of individual performance. For example, customer-contact employees with a high CO are more likely to identify a customer’s needs and the services or products that will best solve customer problems, thus enhancing their performance (Boles *et al*., 2001; Cross *et al*., 2007). However, even those who have no direct customer contact should focus their efforts on external customers in order to fulfil their job expectations (Kennedy, Lassk and Goolsby, 2002; Lin *et al*., 2016). CO affects the performance of back office employees by motivating collaborative exchanges with customer-contact employees (Liao and Subramony, 2008), and enhances job satisfaction, commitment and organizational citizenship behaviours (Donavan, Brown and Mowen, 2004), which will further improve employee performance.

Scholars further suggest that firm CO, defined as organization-wide culture, practices and processes that help to put the customer’s interests first (Deshpandé, Farley and Webster, 1993), is transferred to employees through the dissemination of shared values and behavioural norms (Stock and Hoyer, 2002). In line with these suggestions, previous research indicates that firm CO is positively related to the CO of both customer-contact and back office
employees. Liao and Subramony (2008) used the CO of the top management team as a proxy for firm CO and found that individual employees in both customer-contact and back office roles are motivated to be more customer oriented by the top management team. Other studies have revealed that a customer-oriented organizational culture and processes positively affect employee CO (e.g. Guenzi, De Luca and Troilo, 2011; Williams and Attaway, 1996).

The studies of Boles et al. (2001) and Cross et al. (2007) combined the two effects, indicating that firm CO influences employee performance via employee CO, while not formally testing for an indirect effect. In sum, a review of key studies provides ample support for the notion that employee CO is positively related to employee performance, firm CO is positively related to employee CO and firm CO may have a positive indirect effect on employee performance via employee CO. We position our study in this literature by using these relationships as baseline effects in our analyses (see Figure 1).

The substitution between firm and employee customer orientation

In the preceding subsection, we reviewed the CO implementation research, which indicates that firm CO is an important antecedent of employee CO. While generally supporting the effectiveness of external motivation on individual behaviour, SDT makes a key distinction between autonomous and controlled motivation, both stemming from external sources (Gagné and Deci, 2005). Autonomous motivation means acting on one’s own volition and experiencing a sense of choice in adopting a certain behaviour (Ryan and Deci, 2000). We consider firm CO as a possible driver of autonomous motivation for CO because previous research found that at least some employees unreservedly adopted a CO advocated by the firm (Harris and Ogbonna, 2000). Controlled motivation means acting under external pressure and experiencing no choice in adopting a certain behaviour (Ryan and Deci, 2000). Given that CO initiatives often instil a sense of pressure, which urges employees to adopt CO, we consider firm CO to be also a possible driver of controlled motivation for CO.
Figure 1. Conceptual framework: The interplay between firm and employee customer orientation

- Firm Customer Orientation
- Employee Customer Orientation
- Performance-Contingent Rewards
- Employee Performance

Level 1 Controls:
- Employee Selling Orientation
- Employee Emotional Labour
- Employee Job Demand
- Employee Job Stress
- Employee Job Engagement
- Employee Gender
- Employee Age
- Employee Education
- Employee Tenure

Level 2 Controls:
- Firm Selling Orientation
- Organizational Formalization
- Number of Employees
- Turnover Previous Year
- Employee Selling Orientation
- Employee Job Resources
- Co-Worker Customer Orientation

Baseline relationships and controls from prior research → New relationships tested in this study
For instance, the terminology used to describe customer-oriented initiatives often reflects the controlled motivation concept: customer-oriented values and norms are ‘inculcated’ (Lichtenthal and Wilson 1992, p. 194), and employees are ‘indoctrinated’ (Gebhardt, Carpenter and Sherry, 2006, p. 48). Indeed, the need for employees to keep their jobs, meet managers’ expectations and embrace the organizational culture may push them to comply with CO, irrespective of their autonomous motivation towards the behaviour. Thus, the extrinsic motivation of firm CO varies in its degree of self-determination and may be both a driver of autonomous and controlled motivation for CO (Gagné and Deci, 2005). In contrast, the intrinsic motivation of employees’ personal interest in CO is invariantly self-determined and thus solely a driver of autonomous motivation for CO (Gagné and Deci, 2005).

Following Amabile (1993), Cerasoli, Nicklin and Ford (2014), Gerhart and Fang (2015) and Grant et al. (2011), amongst others, we conceptualize autonomous and controlled motivations as orthogonal in the work context (see Figure 2). In support for this conceptualization, empirical studies have found – based on non-significant correlations – that autonomous and controlled motivations are independent of each other, and concluded that these two motivations ‘are essentially orthogonal’ (Amabile et al., 1994, p. 958). In line with recent meta-analytic investigations (Cerasoli, Nicklin and Ford, 2014), we propose that both autonomous and controlled motivations may lead to a desired behaviour (e.g. employee CO). The effectiveness of such behaviour, when it occurs, is another matter as the different kinds of motivation that lead to the desired behaviour may also determine its ability to produce desired outcomes (Grant et al., 2011). Thus, it is important to understand how employees’ motivation for CO influences the effectiveness of their CO. We expect employee CO to be more strongly related to performance under purely autonomous motivation. In this situation, we expect the benefits of CO for individual performance to exceed those generated when employees experience rather controlled motivation or high levels of both autonomous and controlled motivation.
Figure 2. Autonomous and controlled motivations for employee CO

<table>
<thead>
<tr>
<th>Purely Autonomous Motivation for CO</th>
<th>Ambivalent Motivation for CO</th>
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<tbody>
<tr>
<td>Low externally-driven motivation for CO</td>
<td>High externally-driven motivation for CO</td>
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<tr>
<td>High personal interest in CO</td>
<td>High personal interest in CO</td>
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<tr>
<td>Sense of free-choice increases attention, interest, energy and enthusiasm</td>
<td>Ambivalence decreases attention, interest, energy and enthusiasm</td>
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<tr>
<td>High effectiveness of employee CO</td>
<td>Lower effectiveness of employee CO</td>
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<tr>
<th>Apathetic Motivation for CO</th>
<th>Purely Controlled Motivation for CO</th>
</tr>
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<tbody>
<tr>
<td>Low externally-driven motivation for CO</td>
<td>High externally-driven motivation for CO</td>
</tr>
<tr>
<td>Low personal interest in CO</td>
<td>Low personal interest in CO</td>
</tr>
<tr>
<td>No attention, interest, energy or enthusiasm</td>
<td>Sense of pressure decreases attention, interest, energy and enthusiasm</td>
</tr>
<tr>
<td>Low employee CO</td>
<td>Low effectiveness of employee CO</td>
</tr>
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</table>

Notes: Based on Grant et al. (2011). Although earlier work in SDT treats autonomous and controlled motivations as opposite poles of a single continuum, there is growing consensus with regard to conceptualizing these motivations as orthogonal in the work context (e.g., Amabile, 1993; Cerasoli et al., 2014; Gerhart and Fang, 2015). Empirically, Amabile et al. (1994, p. 958) and Grant et al. (2011, p. 245) found in several samples that autonomous and controlled motivations are independent. We expect the effectiveness of employee CO (i.e. its performance effect) to be highest under conditions of purely autonomous motivation (grey area).
The strongest link between employee CO and employee performance should occur when motivation is purely autonomous as employees have an inherent personal interest in CO in spite of the low level of firm CO. Under these circumstances, employees are more likely to engage in the most effective forms of CO as their autonomous motivation helps them maintain attention, interest, energy and enthusiasm, thus facilitating effective effort (Gagné and Deci, 2005). Indeed, Ryan and Deci (2000, p. 69) argue that the more autonomous the motivation, the higher its quality and the more authentic it is, which means that employees ‘have more interest, excitement, and confidence, which in turn is manifest … as enhanced performance’. In addition, low levels of firm CO should make individual CO behaviours stand out more, granting additional performance advantages to the employees promoting and adopting such behaviours, relative to others.

At the opposite extreme, when employee’s inherent personal interest in CO is low despite the high firm CO, we expect a weaker link between employee CO and employee performance. This is because low levels of personal interest in CO, despite the high emphasis on CO by the firm, is likely to lead employees towards mere compliance, which may often result in an uninspired approach to addressing customer needs, and low levels of effort towards customer-related obligations (Gagné and Deci, 2005). Therefore, the combination of low personal interest in CO and high firm CO is likely to result in firm CO be perceived as controlled motivation, which is met by a certain degree of resistance by the employee (Harris and Ogbonna 2000).

Even when both firm CO and employees’ personal interest in CO are high, we expect that CO may still be less strongly related to performance than under pure inherently autonomous motivation. We propose that when both individual and firm CO motivations are high, employees may experience motivational ambivalence and conflicting goals (Fong and Tiedens, 2002; Grant et al., 2011). Autonomous motivation will pull employees in the direction of CO as they view it as bringing inherent enjoyment and fulfilment in their work
On the other hand, controlled motivation provides employees with a perception of being externally directed (Gagné and Deci, 2005), which may reduce the willingness to allocate resources and efforts to engaging in effective forms of CO. In addition, higher levels of controlled motivation will create an internal environment whereby CO is socially expected; in this context, customer-oriented individuals are less likely to emerge or to attribute unique performance advantages to their CO. Thus, the presence of both autonomous and controlled motivations is likely to create a motivational ambivalence that can at least partially reduce the benefits of high autonomous motivation alone (Grant et al., 2011).

Complementary explanations for why the effectiveness of CO may be highest under pure autonomous motivation are offered by emotional labour theory and the CO literature. Emotional labour theory differentiates between surface acting and deep acting as two outcomes of employees’ CO (Yoo and Arnold 2016) and suggests that the link between employee CO and performance is stronger when the emotion regulation of employees is more authentic (i.e. deep acting: Allen et al., 2010; Brach et al., 2015). As autonomous motivation is associated with higher internalization of behaviours and thus with authenticity, we expect employees’ CO to be more strongly associated with their performance if they are fully autonomously motivated for CO. The CO literature echoes this idea by highlighting the positive performance effects of customer-oriented authenticity (Hennig-Thurau et al., 2006).

In summary, based on SDT we expect employee CO to be linked to autonomous motivation, and firm CO to be linked to both autonomous and controlled motivation. Building on this, we predict that employee CO will be most strongly associated with performance when employees experience high autonomous and low controlled motivation due to the experience of choice, energy and enthusiasm. This condition is more likely characterized by high personal interest for CO and low firm CO. On the other hand, the performance payoff of employee CO will diminish when motivation is both autonomous and controlled (i.e. high personal interest for CO, high firm CO) due to ambivalence and associated self-regulatory
efforts and stress. The payoff from employee CO is also likely to suffer when motivation is rather controlled (i.e. low personal interest for CO, high firm CO) due to the predominant effect of perceived external pressure. Thus:

**H1**: Other things being equal, the firm’s customer orientation negatively moderates the positive relationship between employees’ customer orientation and their performance, such that the higher the firm’s customer orientation, the weaker the relationship.

*Performance-contingent rewards as a boundary condition*

Performance-contingent rewards are defined as the performance-related compensation received by employees (e.g. Procter *et al.*, 1993). Previous research has found no significant associations between performance-contingent rewards and store-level CO (Liao and Chuang, 2004), employees’ customer-directed efforts (Schmitz and Ganesan, 2014) and employee performance (MacKenzie, Podsakoff and Rich, 2001). Thus, we treat these rewards as exogenous to a firm’s CO as they can be adopted by firms with either high or low CO.¹

An important aspect of SDT is that ‘extrinsic motivation can vary in the degree to which it is autonomous versus controlled’ (Gagné and Deci 2005, p. 334), and that performance-contingent rewards ‘may actually have a net positive effect on autonomous motivation’ (Gerhardt and Fang, 2015, p. 505). This corresponds to the central proposition of SDT that ‘when a socially-valued activity is prompted by extrinsic motivation in an autonomy-supportive social context, people will tend to internalize and integrate the regulation of that behaviour’ (Gagné and Deci, 2005, p. 349). This view challenges the strong assumption in previous theories on work motivation, such as cognitive evaluation theory, according to which extrinsic rewards are always detrimental for the individual internalization of focal behaviours (Deci, Koestner and Ryan, 1999; Gerhardt and Fang, 2015). Thus, in line with SDT, we

¹ This point is reinforced by the non-significant correlation between organizational CO and performance-contingent rewards we found in our data.
expect performance-contingent rewards to mitigate the substitution effect between employee CO and firm CO. We advance three related theoretical explanations to articulate our hypothesis.

First, performance-contingent rewards foster the perception of competence among employees and provide them with more satisfaction of their need for individual autonomy (Hoheneberg and Homburg, 2016; Ryan, Mims and Koestner, 1983). This has a positive effect on the internalization of extrinsic motivation, which therefore decreases the chances that firm CO is perceived as a form of controlled motivation. Second, the marketing literature typically suggests that the superior value generated by a CO is shared between the firm and its customers (Narver and Slater, 1990). While customers benefit from better and more customized services, firms benefit from superior customer, market and financial performance. In this context, the introduction of performance-contingent rewards represents a mechanism employees can leverage to appropriate a share of the value that they generate through their customer-oriented behaviour, which otherwise would only benefit the firm and the customer. This again should help in the internalization of the otherwise rather controlled motivation of firm CO. Third, a recent meta-analysis found that directly performance-salient incentives, such as performance-contingent rewards, ‘impart a competence-boosting message, thus also boosting intrinsic motivation’ (Cerasoli, Nicklin and Ford, 2014, p. 983). In line with this finding, Gerhardt and Fang (2015, p. 498) posit that: ‘employees generally feel inequitably treated if extrinsic rewards do not correspond to their performance, and inequity will negatively influence motivation and creativity’. This can reinforce the mixed messages associated with ambivalent motivation (Grant et al., 2011) because employees will be more likely to interpret an ambivalent motivation as externally controlled, and will be less creative in addressing and satisfying customer needs, both factors leading to a weaker link between their individual CO and performance. Following this reasoning, the substitution effect of between firm CO and employee CO in the link with employee performance should be
observed in conditions of low performance-contingent rewards, but not in conditions of high-performance rewards:

\textit{H2}: Other things being equal, the substitution effect of the firm’s customer orientation on the relationship between employees’ customer orientation and their performance is weaker when employees receive higher levels of performance-contingent rewards.

\textbf{Study 1}

\textit{Data collection and measures}

For Study 1, we gathered data from a convenience sample of the top management teams, back office employees, and managerial key informants in 77 German manufacturing firms from various industries taking part in executive education at the first author’s university. All firms received a benchmark report as an incentive. We pre-tested the measurement scales with seven top management team members and 15 employees during a company workshop. None of the pre-test participants took part in the main study. The exclusion of seven firms due to missing data led to a final sample of matched data from 201 top management team members and 813 back office employees from 70 firms. We used multiple data sources to avoid same-source bias. Specifically, we used online surveys to collect data on firm CO from top management team members and data on employee CO, gender, age, education, tenure and performance from employees. We collected data on numbers of employee and turnover from company records. We found no systematic differences in the means for demographics or other study constructs between early and late respondents.

Appendix 1 provides an overview of all measurement items and reliability measures; Table 2 displays means, standard deviations and average variance extracted. All scales had satisfactory Cronbach’s alpha values. We used the employee CO scale from Liao and Subramony (2008) because this measure is uniquely suitable for employees with no direct customer contact.
Table 2. Descriptive statistics and correlations in both studies

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<th>Variables</th>
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<td>Level 2: Firm</td>
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<tr>
<td>1. Firm Customer Orientation</td>
<td>-0.3</td>
<td>0.15</td>
<td>-0.01</td>
<td>0.07</td>
<td>-0.10</td>
<td>0.04</td>
<td>0.03</td>
<td>0.08</td>
<td>-0.20</td>
<td>0.02</td>
<td>0.05</td>
<td>-0.05</td>
<td>0.08</td>
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<td>2. Firm Selling Orientation</td>
<td>-0.19</td>
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<td>3. Organizational Formalization</td>
<td>0.44</td>
<td>-0.25</td>
<td>0.27</td>
<td>0.15</td>
<td>-0.04</td>
<td>-0.05</td>
<td>0.04</td>
<td>-0.05</td>
<td>-0.16</td>
<td>-0.24</td>
<td>-0.31</td>
<td>-0.24</td>
<td>-0.11</td>
<td>0.00b</td>
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<td>4. Number of Employees</td>
<td>-0.02</td>
<td>0.07</td>
<td>0.12</td>
<td>0.46</td>
<td>-0.03</td>
<td>0.01</td>
<td>0.02</td>
<td>0.06</td>
<td>-0.02</td>
<td>-0.08</td>
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<td>5. Turnover in the Previous Year</td>
<td>-0.21</td>
<td>-0.06</td>
<td>-0.01</td>
<td>0.29</td>
<td>0.07</td>
<td>-0.06</td>
<td>0.08</td>
<td>0.04</td>
<td>0.07</td>
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<td>-0.02</td>
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<td>11. Employee Job Engagement</td>
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<td>13. Co-Worker Customer Orientation</td>
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<td>0.01</td>
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<td>14. Performance-Contingent Rewards</td>
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<td>-0.13</td>
<td>0.11</td>
<td>0.06</td>
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<td>-0.06</td>
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<td>15. Employee Gender</td>
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<td>0.07</td>
<td>-0.15</td>
<td>-0.05</td>
<td>-0.02</td>
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<td>16. Employee Age</td>
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<td>0.02</td>
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<td>17. Employee Education</td>
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<td>0.03</td>
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<td>-0.17</td>
<td>-0.06</td>
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<td>18. Employee Tenure</td>
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<td>19. Employee Performance</td>
<td>0.22</td>
<td>-0.19</td>
<td>0.07</td>
<td>-0.01</td>
<td>-0.07</td>
<td>0.41</td>
<td>-0.29</td>
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<tr>
<td>Study 1: Mean</td>
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<td>5.95</td>
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<td>5.41</td>
<td>5.95</td>
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<td>3.33</td>
<td>11.48</td>
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<td>Study 1: Standard Deviation</td>
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<td>0.54</td>
<td>1.25</td>
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<td>0.89</td>
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<td>7.72</td>
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<td>0.45</td>
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<td>1.70</td>
<td>9.11</td>
<td>24.35</td>
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<tr>
<td>Study 1: Average Variance Extracted</td>
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<td>0.66</td>
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<tr>
<td>Study 2: Mean</td>
<td>5.25</td>
<td>2.72</td>
<td>4.78</td>
<td>4.15</td>
<td>4.47</td>
<td>6.38</td>
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<td>Study 2: Standard Deviation</td>
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<td>1.02</td>
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<td>Study 2: Average Variance Extracted</td>
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<td>0.52</td>
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</table>

Notes: *Correlations are based on scores disaggregated per employee. **Study 1 measures employees’ performance relative to others in the same firm. Study 1 (2) correlations are reported above (below) the diagonal. Nstudy1 = 813 employees and 70 firms, Nstudy2 = 166 employees and 62 firms. \(^*p < 0.01, ^*p < 0.05\). Significance is based on two-tailed tests. The measurement is explained in the Appendix.
In addition, we aggregated the CO scores of top management team members, measured using the same scale as in Liao and Subramony (2008), to capture the customer-related attitudes of senior managers as a proxy for the firm’s CO. In fact, employees without direct customer contact are likely to look to the top management team as a signifier of the firm’s CO (Liao and Subramony, 2008). We obtained statistical support for aggregating top management team members’ answers at the firm level (ICC[1] = 0.36; ICC[2] = 0.65). We assessed employee performance with a self-report scale based on the measure employed by Wieseke et al. (2009). We applied a subjective scale to compare the performance of employees from different firms (Homburg, Müller and Klarmann, 2011) and a self-report measure because many participating firms would not allow managers to share employees’ individual performance information. We adjusted the performance measure to capture employees’ performance relative to colleagues from the same firm (i.e. employee performance = individual performance - mean individual performance within the firm).

We included a number of potentially important factors as control variables both at the firm level and employee level: Organizational formalization, measured with the scale of Jansen, Van Den Bosch and Volberda (2006), because it limits employee autonomy and thus may influence the employee CO-performance relationship; employee job resources, captured by the quality of internal cooperation, because in addition to CO as a crucial job resource for employees (Zablah et al., 2012), the quality of contact to and collaboration with internal partners is an important job resource which may affect both employee CO and performance (Plouffe et al., 2016); employee job demand, measured with an item based on Dwyer and Ganster (1991), because the demandingness of work-related activities may both directly affect employee CO and performance and influence the employee CO-performance relationship (Zablah et al., 2012); employee job stress, measured as the number of sick days (e.g. Dwyer

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2 The correlation between the adjusted and the unadjusted measures of performance is very high ($r = 0.93$, $p < 0.001$) and using an unadjusted performance measure led to similar results in the main analysis and the robustness tests.
and Ganster, 1991), because stress may negatively affect both employee CO and performance (Zablah et al., 2012); employee job engagement, measured with an item based on Rich, Lepine and Crawford (2010), because this positive, work-related affective-motivational state of mind may increase both employee CO and performance (Zablah et al., 2012); and co-worker customer orientation because the customer orientation of other employees may increase employee performance (Menguc et al., 2016). In addition, we control for number of employees, turnover in the previous year, and employee gender, age, education, and tenure.

Measurement model and common method bias
Two confirmatory factor analyses (CFAs) on the top management and employee data indicated a good fit between the measurement model and the data (top management: $\chi^2(2) = 3.57; \text{CFI} = 0.99; \text{RMSEA} = 0.06$; employees: $\chi^2(3) = 7.65; \text{CFI} = 0.99; \text{RMSEA} = 0.04$). We combined multiple sources and calculated deviation scores for the dependent variable (i.e. employee performance) to reduce single-source bias and common method bias. We also constructed the items and questionnaire as concisely as possible, minimized potential comprehension problems with pre-tests and included moderating effects in our statistical analyses, thereby reducing the potential for common method bias.

Data analysis strategy
Because of the multilevel nature of our data (employees are nested within companies, e.g. Kozlowski and Klein, 2000), we applied hierarchical linear modelling (HLM) with robust maximum likelihood estimation (MLE) to test our hypotheses and used the log-likelihood difference test to compare the nested models (Raudenbush and Bryk, 2002). The sample sizes of both the higher-level sample (70 companies) and the lower-level sample (11.61 employees for each company) are in line with recommendations from simulation studies (Maas and Hox, 2005), and higher than in other multilevel studies (e.g. Fong and Snape, 2015; van der Borgh,
Following the suggestion of Enders and Tofighi (2007), we applied group-mean centring for all exploratory variables involved in cross-level interactions (i.e. employee CO) and all other predictor variables at level 1 and level 2 were grand mean-centred on their respective levels.3

**Results**

The results are shown in Table 3. In Model 1.1, firm CO is positively related to employee CO ($\gamma = 0.14, p < 0.001$). In Model 1.2, a positive relationship is found between employees’ CO and their performance ($\gamma = 1.99, p < 0.007$). In Model 1.3, the cross-level interaction between employee CO and firm CO is significant ($\gamma = -3.78, p < 0.001$), yielding support for H1. Simple slope analysis shows that the relationship between employee CO and performance is positive and significant at low levels of firm CO ($\gamma = 3.68, p < 0.001$), but not at high levels of firm CO ($\gamma = -0.03, p = 0.96$) (see Figure 3).

![Figure 3. The interplay between employee and firm customer orientation in Study 1](image)

Notes: CO = customer orientation. The dotted line represents a non-significant effect in Figure 3.

3 We replicated our analyses with a grand-mean centring strategy: All the results remained stable.
Table 3. HLM results explaining employee customer orientation and employee performance

<table>
<thead>
<tr>
<th>Level and Variable</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1.1</td>
<td>Model 2.1</td>
</tr>
<tr>
<td>Intercept</td>
<td>γ</td>
<td>SE</td>
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<tr>
<td>Firm Customer Orientation</td>
<td>0.14**</td>
<td>0.04</td>
</tr>
<tr>
<td>Firm Selling Orientation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Organizational Formalization</td>
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<td>0.05</td>
</tr>
<tr>
<td>Number of Employees</td>
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</tr>
<tr>
<td>Turnover in the Previous Year</td>
<td>0.02‡</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee Customer Orientation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employee Selling Orientation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employee Job Resources</td>
<td>0.09**</td>
<td>0.03</td>
</tr>
<tr>
<td>Employee Job Demands</td>
<td>-0.14**</td>
<td>0.03</td>
</tr>
<tr>
<td>Employee Job Stress</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee Job Engagement</td>
<td>0.10**</td>
<td>0.02</td>
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<tr>
<td>Employee Emotional Labour</td>
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<td>Co-Worker Customer Orientation</td>
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<tr>
<td>Performance-Contingent Rewards</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employee Gender</td>
<td>-0.12†</td>
<td>0.06</td>
</tr>
<tr>
<td>Employee Age</td>
<td>0.01**</td>
<td>0.00</td>
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<tr>
<td>Employee Education</td>
<td>0.05**</td>
<td>0.02</td>
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<td>Employee Tenure</td>
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<tr>
<td>Two-Way Interactions</td>
<td>-4.78**</td>
<td>1.13</td>
</tr>
<tr>
<td>Employee CO × Firm CO</td>
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<td>-</td>
</tr>
<tr>
<td>Employee CO × Performance-Contingent Rewards</td>
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<td>0.50</td>
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<tr>
<td>Firm CO × Performance-Contingent Rewards</td>
<td>-0.79*</td>
<td>0.34</td>
</tr>
<tr>
<td>Three-Way Interaction</td>
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<tr>
<td>Employee CO × Firm CO × Performance-Contingent Rewards</td>
<td>1.57**</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Notes: NStudy1 = 813 employees and 70 firms, NStudy2 = 166 employees and 62 firms. **p < 0.01, *p < 0.05, †p < 0.10. Significance is based on two-tailed tests; unstandardized results with robust standard errors. CO = customer orientation. We calculated within-level Pseudo R² with the formula of Snijders and Bosker (1999). We applied group-mean centring for all exploratory variables involved in cross-level interactions, all other predictor variables at level 1 and level 2 were grand mean-centred on their respective levels.
Robustness tests and supplementary analysis

We replicated our analyses with a structural equation model to rule out the possibility of measurement error biasing our results. As a supplementary analysis, we further test for the conditional indirect effect of firm CO on employee performance. We used a parsimonious model and a robust MLE. The main effects model showed good fit ($\chi^2 (75) = 229.59$, CFI = 0.96, RMSEA = 0.05). In line with suggestions from previous research (Boles et al., 2001; Cross et al., 2007), employee CO fully mediates the effect of firm CO on employee performance ($\gamma = 0.52$, $p < 0.09$, 95% CI = 0.02; 1.00)$^4$. Adding the interaction between firm CO and employee CO significantly improves the model fit (−2LL change = 3.37, $p < 0.07$) and its effect on employee performance is significant ($\gamma = -5.08$, $p < 0.07$). The postulated moderation effect further qualifies the indirect effect of firm CO on employee performance: this indirect effect is positive and significant only if firm CO is low ($\gamma = 0.80$, $p < 0.05$, 95% CI = 0.04; 1.57), but not when firm CO is high ($\gamma = 0.24$, $p = 0.31$, 95% CI = -0.15; 0.63).

Discussion

Study 1 identifies a substitution effect whereby firm CO buffers the relationship between employees’ CO and their performance. Specifically, we find that employee CO is not related to employee performance when firm CO is high. Moreover, post-hoc analyses on the indirect effect indicate that firm CO does not indirectly contribute to employee performance through employee CO when firm CO is high. Given these findings, the question that arises is whether managers are able to resolve this substitution effect and attain the benefits of firm CO without generating undesired consequences for employees, namely the perception of a weak link between CO and individual performance. We explicitly address this question in Study 2.

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$^4$ All confidence intervals (CIs) for mediation effects correspond to directional one-tailed hypothesis tests.
Study 2

Data collection and measures

In our second study, we contacted 1,924 sales employees using a database provided by the Swiss Professional Marketing Association. These salespeople work for various B2B companies with different levels of firm CO and with various compensation schemes, ranging from 100% fixed compensation to 100% variable compensation. We chose a B2B context because employee CO is of the greatest importance for a B2B firm’s marketing strategy (e.g. Gummesson, 2004). After one follow-up, we received 382 fully completed questionnaires (20% response rate). We did not identify systematic differences in demographics and constructs means between early and late respondents. To reduce the risk of common method bias, we only retained responses from 62 firms for which more than one employee replied in our main analyses. In taking these steps, we followed the recommendation of Podsakoff et al. (2003) to differentiate the measurement sources of the variables. As a consequence, our main analyses are based on a sample of 166 employees from 62 firms. We also replicated our analyses with the combined sample of all respondents (n = 382) as a robustness test.

We pre-tested all measurement scales with 24 sales managers at a professional development workshop. Appendix 2 provides an overview of all measurement items and reliability measures; Table 2 displays means, standard deviations and average variance extracted for the main sample. All scales had satisfactory Cronbach’s alpha values. We used Thomas, Soutar and Ryan’s (2001) scale to assess the CO of employees with direct customer contact. We measured firm CO with the scale used by Deshpandé, Farley and Webster (1993). The ICCs provided statistical support for aggregation at the firm level (ICC[1] = 0.62; ICC[2] = 0.81). We assessed employee performance with a scale suitable for sales employees, adapted from Homburg, Müller and Klarmann (2011). All employees provided information regarding their performance.

5 Further information about the validation sample is available upon request from the authors.
performance-contingent rewards, operationalized as a continuous variable ranging from 100% for straight commission (salary has no role in the compensation plan) to 0% (salary has an exclusive role in the compensation plan) (John and Weitz, 1989). We controlled for the firm’s selling orientation (new measure; ICC[1] = 0.64; ICC[2] = 0.82), organizational formalization (based on Jansen et al., 2006), employee job resources (based on Plouffe et al., 2016), employee job demands (based on Marshall et al., 1999; Moncrief and Marshall, 2005), employee emotional labour (based on Hennig-Thurau et al., 2006), co-worker customer orientation (Menguc et al., 2016), number of employees, turnover in the previous year, and employees’ selling orientation (Thomas et al., 2001), gender, age, education and tenure.

Measurement model and common method bias
CFA indicated a good fit of the measurement model with the data ($\chi^2(194) = 350.98$; CFI = 0.89; RMSEA = 0.07). We used the same methods as in Study 1 to reduce the potential for common method bias. In addition—and because we obtained several multi-item constructs from the same source in Study 2—we estimated a further CFA model that included a latent method factor with paths to each item (Podsakoff et al., 2003). All substantive factor loadings remained significant and the method factor accounted for only 5.32% of variance.

Data analysis strategy
Because employees are nested within different companies, the data structure suggests the use of multi-level modelling. While the higher-level sample size (62 companies) is well in line with common standards for multilevel models, the lower-level sample size is quite small (2.68 employees for each company). However, simulation studies justify the use of multi-level modelling despite the small lower-level sample size. For example, Maas and Hox (2005, p. 86) argued that ‘only a small sample size at level two (meaning a sample of 50 or less) leads to biased estimates’ and McNeish (2014, p. 558) concluded that ‘both methods [multi-level...
modelling and generalized estimating equations] are reasonable for accounting for the clustered data structure even with sparse data containing very few observations per cluster’. Thus, we applied HLM with robust MLE and log-likelihood difference tests, group-mean centring for all exploratory variables involved in cross-level interactions (i.e. employee CO and performance rewards), and grand-mean centring for all other predictors.\(^6\)

**Results**

We obtained similar results with respect to H1 as in Study 1, even after controlling for the effects of firm and employee selling orientation. The interaction of employee CO with firm CO \((\gamma = -0.54, p < 0.03)\) in Model 2.3 is significant and in line with our predictions. In Model 2.4, we found a positive three-way interaction between employee CO, firm CO and performance-contingent rewards \((\gamma = 1.57, p < 0.001)\), supporting H2.

In Figure 4, we probe this three-way interaction by plotting the simple slope of employee CO at one standard deviation above and below the mean of firm CO and the mean of performance-contingent rewards. In the case of low performance-contingent rewards (Panel A), there is a positive effect of employee CO on employee performance when firm CO is low \((\gamma = 1.90, p < 0.001)\) and a non-significant negative effect when firm CO is high \((\gamma = -0.10, p = 0.83; p < 0.001 \text{ for the slope difference test})\). In contrast, we find no significant difference in the positive relationship between employee CO and their performance between high \((\gamma = 0.91, p < 0.02)\) and low \((\gamma = 1.30, p < 0.001)\) firm CO when performance-contingent rewards are high (Panel B; \(p = 0.35\) for the slope difference test). In summary, consistent with our hypothesis, the substitution effect between firm CO and employee CO on performance is not detected under a high level of performance-contingent rewards.

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\(^6\) We replicated our analyses with simple regression, generalized estimating equations, and a grand-mean centring strategy: all results remained stable.
Figure 4. The contingency role of performance-related rewards in Study 2

Panel A: Low Performance-Contingent Rewards

Panel B: High Performance-Contingent Rewards

Notes: CO = customer orientation. The dotted line represents a non-significant effect in Figure 4 Panel A.
Robustness tests and supplementary analysis

First, we re-estimated our model using the combined sample of all respondents, including the 216 additional employees from 216 different firms. We used simple regression analysis and included the same controls as in the main analysis. The results confirm the findings from the main analyses (see Appendix 3). We find a negative interaction of employee CO with firm CO on employee performance ($b = -0.12, p < 0.007$) and a positive three-way interaction between employee CO, firm CO and performance-contingent rewards on employee performance ($b = 1.48, p < 0.001$). Second, we replicated our analyses with an adjusted measure of employee performance relative to colleagues from the same firm (i.e. employee performance = individual performance - mean individual performance within the firm) and found the same effects as in the main analysis (all hypotheses supported at $p < 0.01$). Third, we tested whether firm CO affects the performance-contingent rewards of employees and found no significant effect ($b = -0.04, p = 0.12$); thus, performance-contingent rewards appear to be an independent compensation device that firms use irrespective of their CO level. We further replicated our analyses using a parsimonious structural equation model. The main effects model showed good fit ($\chi^2 (159) = 211.12, CFI = 0.95, \text{RMSEA} = 0.05$) and employee CO fully mediates the effect of firm CO on employee performance ($\gamma = 0.10, p < 0.02, 95\% \text{CI} = 0.02; 0.19$). Adding the interactions significantly improved model fit ($-2\text{LL change} = 22.86, p < 0.001$): The interaction between employee CO and firm CO is negatively related to employee performance ($\gamma = -1.42, p < 0.01$), and the three-way interaction between employee CO, firm CO, and performance-contingent rewards is positively related to employee performance ($\gamma = 3.03, p < 0.03$). When performance-contingent rewards are low, the indirect effect of firm CO on employee performance is positive and significant only if firm CO is low ($\gamma = 0.19, p < 0.02, 95\% \text{CI} = 0.04; 0.34$), but not when firm CO is high ($\gamma = -0.05, p = 0.48, 95\% \text{CI} = -0.16; 0.07$). A Wald Tests of parameter equality confirms this observation ($\Delta \chi^2 = 2.94, \text{d.f.} = 1, p < 0.05$). In contrast, we find no significant difference in the indirect positive
relationship between firm CO and employee performance between high firm CO ($\gamma = 0.13, p < 0.07, 95\% \text{ CI } = -0.01; 0.26$) and low firm CO ($\gamma = 0.14, p < 0.02, 95\% \text{ CI } = 0.04; 0.24$) when performance-contingent rewards are high (Wald Tests of parameter equality: $\Delta \chi^2 = 0.03, \text{d.f. } = 1, p = 0.86$).

Discussion

Study 2 provides additional evidence that there is a substitution effect between firm CO and employee CO with respect to employee performance, and that the level of firm CO further affects the indirect effect on employee performance. More importantly, this study also identifies how managers can mitigate this substitutional effect by using performance-contingent rewards. Notably, we replicated our findings from the main analysis with a validation sample.

General discussion

In this paper, we identify and explain a potential tension that needs to be managed between a firm’s emphasis on CO and employees’ perception of the value of such behaviour. This is the first study to include both cross-level direct effects from firm CO to employee CO and cross-level interaction effects between firm CO and employee CO on employee performance. The simultaneous analysis of these two types of cross-level effects is important as it brings to the surface a substitution effect. Based on SDT, and using the distinction between autonomous and controlled motivation, we propose that the link between employee CO and employee performance will be stronger in firms with lower levels of CO. Furthermore, we examined a boundary condition for this hypothesis and posited that when performance-contingent rewards are introduced, the substitution effect described above is weakened.

Both Study 1 and Study 2 indicate a positive cross-level effect of firm CO on employee CO and a negative cross-level moderating effect of firm CO on the positive relationship
between employee CO and employee performance. In Study 2, we further found a positive three-way interaction between firm CO, employee CO and performance-contingent rewards on employee performance. We were able to replicate the full set of results with a validation sample. Taken together, our findings are robust across different types of employees (back office vs. customer-contact employees), measurements of key variables (top management team vs. organizational CO and measurement of performance) and data sources (key informants vs. multiple informants).

Theoretical implications
We contribute to the CO implementation literature in three important ways. First, scholars agree that employees have two main motivations for adopting CO: the need to comply with the normative mandate of the firm’s CO (Gebhardt, Carpenter and Sherry, 2006) and the expectation of superior individual job performance (Zablah et al., 2012). While the former can relate to both autonomous and controlled motivation, the latter is an inherently autonomous motivation because employees rely on their own judgment in terms of whether or not to adopt a CO (Gagné and Deci, 2005). Our work reveals an interesting interplay between the emphasis a firm places on CO and the extent to which CO is an individual success factor. Consequently, we propose an extended view of the process through which managers influence the adoption of a CO by employees. In doing so, we integrate the autonomous and controlled motivations in the CO context. This is also important to qualify the indirect relationship between firm CO and employee performance via employee CO suggested by previous research (Boles et al., 2001; Cross et al., 2007). We formally test this indirect relationship for the first time and find that the indirect effect of firm CO on employee performance appears to be conditional on the level of firm CO. In summary, our model and findings suggest that neglecting to consider the two different motivations simultaneously may explain the frequent failures of CO initiatives within firms.
Second, with regard to the moderating role of firm CO in the relationship between employee CO and employee performance, our study contributes to the ongoing debate concerning the extent to which employees benefit from their CO. Indeed, both Franke and Park (2006) and Zablah et al. (2012) observed significant variance in the meta-analytic correlations between employee CO and performance, and the moderator analyses in their work provided mixed results. Our findings suggest that the CO in the broader organizational context determines the performance effects of an employee’s CO. This potential moderator was not examined by previous studies and thus represents a novel finding and explanation of the heterogeneity of the employee CO–performance relationship, given that our study takes into account additional control variables and moderators reported by previous research. In firms with low CO, employees rely on their personal interests and enjoyment to direct their customer-oriented behaviour and thus high employee CO will be less frequent but more authentic compared to firms with high CO. Thus, employees with high CO are more likely to outperform other employees within their firm. In contrast, in firms with high CO, the performance effects of employees’ CO will be diluted because CO initiatives instil at least some controlled motivation for employees, making employee CO—other things being equal—more frequent but less likely to be internalized.

Third, our results point to a different and novel interpretation of the role and importance of performance-contingent rewards for CO. Indeed, such rewards help balance the negative effect of the normative pressure to comply with the organizational mandate, rather than working as a direct motivator to take on CO behaviours. This effect is due to a stronger perception of autonomy and competence as being related to CO, which in turn drives the adoption of the behaviour in question by individual employees. Hence, an important theoretical implication of our results is that performance-contingent rewards enable a fairer redistribution of the value employees help create. Indeed, marketing scholars propose value creation through relational and collaborative exchanges between the firm, its representatives
and its customers (Vargo and Lusch, 2008), while calling for a balanced consideration of the roles and rewards among this network of actors (Gummesson, 2008). We further find that when performance-contingent rewards are low, the indirect effect of firm CO on employee performance is positive and significant only if firm CO is low, but not when it is high, leading to an undesired situation for firms. In contrast, we find no significant difference in the indirect positive relationship between firm CO and employee performance for high and low firm CO when performance-contingent rewards are high, further supporting the importance of performance-contingent rewards in aligning the benefits of individual and firm CO.

Managerial implications
Our findings have direct implications for the implementation of customer-oriented initiatives within firms. Specifically, we shed light on how organizational leaders can influence the CO process by acting jointly on the top-down diffusion of CO and complementary aspects related to the work environment and performance-related pay. A first suggestion would be to include specific references to the benefits of CO for individual performance in various strategic initiatives (i.e. training, work procedures, internal communications) to emphasize the importance of individuals adopting CO. In companies that strongly encourage their employees to be customer-oriented, this may counterbalance the tendency towards low internalization of the behaviour. A second recommendation is to monitor and measure the perceived effectiveness of CO as part of the strategy implementation process, to detect the potential tension highlighted by our study. For example, using performance appraisals or staff surveys, line managers can gauge the extent to which their employees perceive CO as a key performance factor. Finally, we advise managers to implement appropriate performance-contingent rewards in conjunction with organizational initiatives that will promote or re-launch the adoption of customer-oriented behaviours among employees, with specific reference to the sales force. Also, our findings suggest that rather than ‘pushing’ employees to
become more customer-oriented, performance-contingent rewards should ‘pull’ employees in that direction by helping them to associate CO with individual performance. Thus, a further recommendation pertains to the communication of performance-related rewards. For example, rewards could be directly associated with relevant customer metrics, which in turn may be portrayed as naturally linked to the adoption of customer-oriented behaviour by individual employees. The ultimate aim here is to manage the organizational culture, environment and rewards to maximize the internalization of CO by individual employees.

Limitations
The empirical results across the two studies should be interpreted bearing their limitations in mind. First, we were not able to explicitly measure the proposed mechanism which transmits the moderating effect of firm CO on the relationship between employee CO and employee performance (controlled and autonomous motivation). Although the proposed mechanism is in line with SDT and the CO literature, future research should validate the proposed process by measuring the different types of motivation. Second, the cross-sectional nature of the data does not allow us to infer causality. Further research using longitudinal data or an experimental design could address this issue. Third, because no objective measures of performance were available, we relied on employees’ self-reported performance. Although empirical evidence shows that subjective measures may often ‘do a better job of tapping the content domain of the performance construct’ (Rich et al., 1999, p. 52) than objective measures, future studies may seek to replicate our results with objective measures of performance. Fourth, the comparability of the studies is somewhat limited: the back office employees in Study 1 received no substantial performance-linked incentives, Study 2 used different measures from those in Study 1 and we were only able to test for the moderating role of performance-contingent rewards with a sample of customer-contact employees. Examining whether this relationship holds for back office employees could be worthwhile because these
employees may be subject to different compensation arrangements. Fifth, while we controlled for organizational formalization, we were not able to include ‘service scripts’ among our controls because none of the participating firms use service scripts for their back-office employees and sales employees. Thus, future research should validate our model with frontline service employees and explicitly consider the role of service scripts. Finally, the substitution effects of firm CO may further depend on how organizations communicate CO to their employees and other factors, such as the ability of customers to detect surface acting, may affect the relationships proposed and tested in our model.\(^7\) Thus, investigating whether firms may use certain communication tactics to anticipate the substitution effect and considering how customer characteristics may affect the interplay between employee and firm CO are promising research directions.

**Future research directions**

In addition to the limitations mentioned above, our study points to interesting directions for future research. While we focus on CO as a prominent strategic orientation, future investigations can explore the cross-level effects that we examined by taking into account different dimensions of organizational culture and strategic orientation which span firms and individuals in terms of behaviours and performance implications (e.g. entrepreneurship or learning orientation). Second, our research context was homogeneous in terms of cultural traits (Hofstede, 1985). Given Hohenberg and Homburg’s (2016) findings that various financial and nonfinancial steering instruments are differentially effective in motivating employees across cultures, future studies could replicate our analyses in countries with varying levels of individualism, power distance, or uncertainty avoidance to produce interesting cross-cultural comparisons. Finally, while we reveal the importance of

\(^7\) We thank an anonymous reviewer for pointing these limitations and future research directions out to us.
performance-contingent rewards, future research could examine the ability of additional elements of the work environment and job characteristics to promote autonomous motivation.
References


