

A Dyadic Model of Customer Orientation: Mediation and Moderation Effects

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This research distinguishes between employees' customer orientation (ECO) and customer orientation as perceived by customers (COPC) to investigate the contingencies of the relationship between these two constructs. Drawing on emotional contagion theory and using a dyadic field study design, the authors examine whether ECO affects COPC, as well as whether the link between ECO and COPC might be mediated by employees' authentic emotional displays. They also examine service scripts and the accuracy with which customers detect employees' authentic emotional displays as moderators of this mediated link. The findings confirm the important role of ECO as an influence on COPC and provide evidence that employees' authentic emotional displays mediate the effects of ECO. In addition, service scripts and customers' detection accuracy have moderating effects.

Introduction

Service employees' customer orientation, which reflects their attitudes and predispositions to meet customer needs on the job (Brown *et al.*, 2002; Harber and Fried, 1975), has been identified as a key driver of customer outcomes, such as satisfaction, commitment and loyalty (Dean, 2007; Goff *et al.*, 1997; Hennig-Thurau, 2004). Customer orientation from a customer's perspective is the extent to which customers believe that the service provider is committed to understanding and meeting their needs (Dean, 2007). Despite substantial research into the correlates of employee–customer orientation, the extent to which customers recognize these customer-oriented attitudes during real-life service encounters remains unclear. With a few exceptions (e.g. Stock and Hoyer, 2005), extant research almost exclusively measures customer orientation from the service

employee's or customer's perspective and in relation to customer outcomes, such that both independent and dependent variables rely on same-source data, from either the employee or the customer. Some studies attempt to avoid percept–percept correlations by using dyadic data (e.g. Homburg, Müller and Klarmann, 2011; Homburg, Wieseke and Hoyer, 2009), but they do not specifically investigate the relationship between employees' customer orientation (ECO) and customer orientation as perceived by customers (COPC), so they cannot reveal how these constructs differ, theoretically or empirically. Also missing from the extant literature are studies that examine the nature of the relationship between ECO and COPC. In a practical sense, studying the ECO–COPC link can also provide managers with insights into ways to strengthen this relationship.

Despite some valuable advances in customer orientation literature, including investigations of the relationship between ECO and important service outcomes, two substantial gaps persist in current literature. First, few studies

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examine how employees' self-reported customer orientation relates to customers' perceptions of those ECO. Employee and customer perceptions do not always match; the theoretical mechanisms that describe how each side assesses employee behaviours might even differ (Groth, Hennig-Thurau and Walsh, 2009; Wieseke, Geigenmüller and Kraus, 2012). This research gap appears to be largely due to methodological reasons: Most studies into the correlates of ECO use single-source data, raising concerns about common method variance, inflated correlations between customer orientation and outcomes, and exaggerated customer orientation effects (Podsakoff *et al.*, 2003). But understanding the relationship between ECO and COPC is theoretically important for determining a firm's ability to influence customer outcomes.

Second, most knowledge about the effects of customer orientation on relevant downstream variables relies on bivariate findings. However, once an association between two constructs has been established, it is important to explicate the processes by which one construct affects the other (Bono and McNamara, 2011). To gain a more complete understanding of the effects of ECO and the ECO–COPC link, scholars need to examine the contingencies of this relationship, including an emphasis on its mediators and moderators.

Against this background, we seek to make three contributions. First, we investigate the extent to which ECO and COPC, as conceptually distinct concepts, relate to each other. Do customers recognize ECO as such, or is there a substantial gap between the perceptions of employees and the perceptions of customers when it comes to customer orientation? Second, noting the importance of employee authenticity in employee–customer interactions (e.g. Pugh, Groth and Hennig-Thurau, 2011; Van Gelderen, Konijn and Bakker, 2011), we examine the impact of the authenticity of employees' emotional displays on the ECO–COPC link. Do authentic emotions displayed during service encounters mediate the relationship between ECO and COPC? Employees' authentic emotional display (i.e. acting sincerely and expressing genuine emotions when interacting with customers) has been regularly discussed (e.g. Hennig-Thurau *et al.*, 2006; Pugh, Groth and Hennig-Thurau, 2011) but not empirically linked to customer orientation. Third, we examine whether organizational controls, in the form of

service scripts, affect the influence of ECO on authentic emotional displays and whether the latter effect on COPC depends on the customer's ability to detect employees' emotions accurately. In summary, we contribute to the literature by developing and testing a model that depicts mediated and moderated relationships between ECO and COPC, using dyadic data, and thereby offers implications at both conceptual and managerial levels.

Distinguishing between ECO and COPC is theoretically meaningful, because we cannot simply assume that ECO is perceived as such. Similarly, we cannot simply assume that only COPC determines value creation with unique influences on key service marketing outcomes. This conceptual differentiation also gains value when we couple it empirically with dyadic data that can link ECO and COPC to important mediator and moderator variables associated with service performance: employees' authentic emotional displays, service scripts and customers' ability to detect authentic employee emotions accurately. The direct and indirect links of ECO with customers' perceptions of ECOs can guide managers in their efforts to improve the customer-oriented behaviour of their frontline employees.

Theoretical background and hypothesis development

Frontline employees' customer orientation

Zablah *et al.* (2012) show that customer orientation is associated with various antecedents and multiple performance outcomes. However, because most existing studies do not distinguish between ECO and COPC, their findings might be inflated by common method variance. Existing studies also cannot reveal the actual impact of ECO on customers, because customers' perceptions of employee behaviour depend on their own perceptual processing (Groth, Hennig-Thurau and Walsh, 2009). For example, using a sample of 522 new car purchasers, Goff *et al.* (1997) test whether salespeople's customer orientation has a positive effect on customer satisfaction with the salesperson and the dealer. In the customer data, they find a strong positive effect of COPC on customers' satisfaction with the salesperson and a limited direct effect on satisfaction with the dealership. Yet in acknowledging their single-source

customer data, Goff *et al.* (1997, p. 179) recommend that customer orientation ‘should be examined dyadically’.

Similarly, using a sample of 649 customers of different services, Brady and Cronin (2001) test for the effects of frontline ECO on three dimensions of service quality (performance, physical and servicescape). They find that COPC has strong positive effects on all three service quality dimensions and indirect effects on customer satisfaction, value and loyalty intentions. Drawing solely on same-source data from customers (408 travel agency and 581 media retail), Hennig-Thurau (2004) tests the effects of COPC on customer satisfaction with the service firm, emotional commitment to the firm and loyalty intentions. The strong positive effects of COPC on satisfaction and commitment and the direct effect on loyalty are significant only for the media retail sample.

Homburg and Stock (2005) examine the relationship between employee satisfaction and COPC using data from 221 salespeople and 488 customers from different manufacturing and services industries. However, they do not measure ECO. Homburg, Wieseke and Hoyer (2009) instead propose that ECO influences customer satisfaction and customer–company identification, which they test with dyadic data from 258 travel agency employees and 597 customers, to measure customer orientation and two postulated outcomes. Their findings exhibit significant paths between ECO and the two outcomes.

Finally, Stock and Hoyer (2005) differentiate between ECO and COPC¹ and use dyadic data (from customers and employees) to study salespeople in a business-to-business context (mostly sellers of technical products) and determine whether both types of customer orientation affect customer satisfaction. With 173 customer–salesperson dyads, they measure ECO from salespeople and COPC and satisfaction from customers. Their results reveal a significant effect of ECO on COPC. They also report that the effect of COPC on customer satisfaction is nearly three times stronger than that of ECO. In addition to indirect effects through COPC, they find empirical support for a direct effect of ECO on customer

satisfaction, which they explain with emotional contagion theory (Hatfield, Cacioppo and Rapson, 1994). Yet this important finding may not generalize to business-to-consumer service contexts, where employee–customer encounters are short and transactional, such that employees have little time to deploy appropriate emotions, and the customer has little time to assess the authenticity of the employee’s behaviour.

Whereas Stock and Hoyer (2005) used telephone interviews and solicited the help of salespeople to obtain customer contact information, we adopt a research design in which service employees and customers complete questionnaires immediately after their interaction. We thus extend previous research that ignores COPC as an outcome, as well as research that is based solely on single-source data or business-to-business service contexts, using a dyadic measurement approach and investigating both mediating and moderating effects.

Direct effects hypotheses

The theoretical framework in Figure 1 was derived from our literature review. Specifically, we linked the focal construct, frontline ECO, to customer perceptions of customer orientation. Following Stock and Hoyer (2005), we relied on emotion contagion theory (Barsade, 2002; Hatfield, Cacioppo and Rapson, 1994). Hatfield, Cacioppo and Rapson (1994, p. 5) define emotional contagion as ‘a tendency to automatically mimic and synchronize expressions, vocalizations, postures, and movements with those of another person’s and, consequently, to converge emotionally’. Such processes often take place in service encounters (Hennig-Thurau *et al.*, 2006), because the employee’s customer-oriented demeanour gets caught by the customer. In addition, at the individual service transaction level, higher ECO should result in employee behaviour that meets customer needs (Goff *et al.*, 1997). In other words, emotional contagion theory postulates that other people’s emotions can be perceived and expressed in characteristic manners. For example, during interactions, an employee expresses emotions through facial movements and head and body gestures, which provide customers with cues to infer the employee’s internal state (Niedenthal and Brauer, 2012). Thus, ECO is discernible during the service interaction, which leads to COPC (i.e.

¹Among employee and customer perspectives, Stock and Hoyer (2005) distinguish between ‘customer-oriented behavior’ and ‘customer-oriented attitude’.

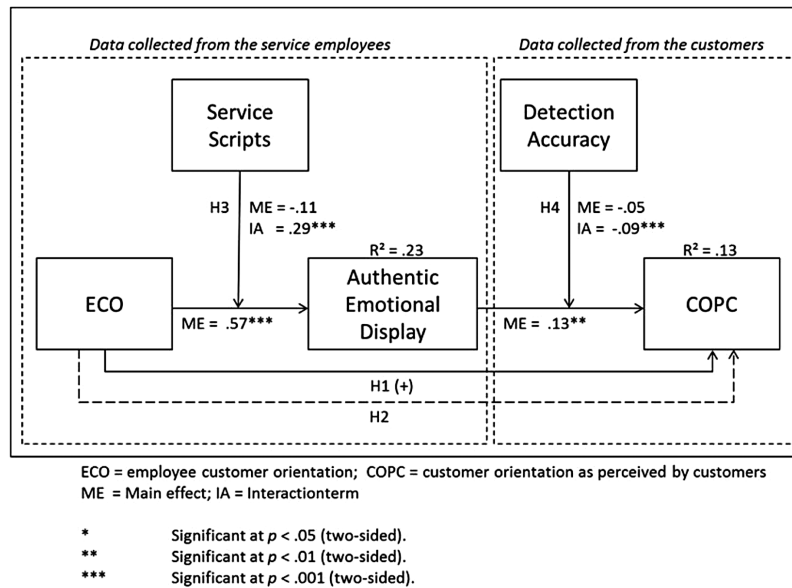


Figure 1. Conceptual framework

customer’s perception of employee attitudes and predispositions to meet customer needs).

Although some customers’ perceptions of employees’ behaviours might be erroneous, we expect customers to be generally able to perceive ECO. Moreover, ECO positively influences COPC, consistent with the notion of emotional contagion, such that emotions travel or flow from person to person (Barsade, 2002), and a recipient can ‘catch’ the emotions expressed by the sender (Pugh, 2001).

H1: Service employees’ customer orientation (ECO) positively affects employees’ customer orientation as perceived by the customers (COPC).

Frontline employees are expected to behave in a customer-oriented manner and thus must display positive emotions, such as friendliness, in their interactions with customers (Rupp, McCance and Grandey, 2007). Service employees can comply with these expectations by using either inauthentic or authentic emotions (Groth, Hennig-Thurau and Walsh, 2009).

Authentic on-the-job performance helps employees to cope with the emotional demands of their roles (Rich, LePine and Crawford, 2010) because behaving authentically enables them to avoid the strain of meeting expectations regarding how they should interact with customers. In addition,

authenticity and authentic behaviours are often associated with notions such as sincerity and truthfulness, so customers generally view it as positive behaviour (Grandey, 2003). However, frontline employees differ in their individual abilities to meet customer needs by deploying emotions (Groth, Hennig-Thurau and Walsh, 2009). The authenticity of their emotional displays in turn affects the emotional states of their customers (Hennig-Thurau *et al.*, 2006), illustrating a potential mediating role of authentic emotional displays in the process of emotional contagion from employees to customers during service encounters. Because many service organizations require employees to behave in a customer-oriented way, employees capable and willing to do so (i.e. high customer orientation) use the most effective, or authentic, emotions during their service encounters. Such customer-oriented behaviour is associated with ‘good faith’ acting (Allen *et al.*, 2010). The prediction that customer orientation affects customer outcomes via employee authenticity is also echoed by past research proposing that inauthentic positive displays undermine the assumed benefits of ‘service with a smile’ (e.g. Ashforth and Humphrey, 1993; Grandey, 2000). Customer reactions to an inauthentic display are less positive than those to an authentic display (Ekman, 1992), and Grandey *et al.* (2005) find that customer satisfaction is

higher when customers perceive employee behaviour as authentic.

H2: Employees' authentic emotional displays partially mediate the impact of service employees' customer orientation (ECO) on customer orientation as perceived by customers (COPC).

Moderation hypotheses

Service literature emphasizes the importance of organizational controls in relation to ECO (e.g. Chebat and Kollias, 2000; Joshi and Randall, 2001). Organizational controls are processes and procedures that define how organization members should perform duties (Restubog, Bordia and Tang, 2007). Prior literature distinguishes four types: social controls, self-controls, technical controls and administrative controls (Reason, Parker and Lawton, 1998). In this study, we examine service scripts, a form of administrative controls that seek to increase the probability that employees implement specified plans properly and thus achieve desired outcomes (Jaworski and MacInnis, 1989), manifested as organizational controls to manage frontline employee displays (Kirsch, 1996). In most cases, service scripts specify what actions an employee must take during a service encounter and include general rules and protocols for each step of the service process. These standards for appropriate employee behaviours and emotion deployment, as established by the organization (Diefendorff and Greguras, 2009; Diefendorff and Richard, 2003) can encompass several dimensions, such as verbal (e.g. phrases and words to use when interacting with customers) and visual (e.g. clothing, make-up) displays. Chebat and Kollias (2000) distinguish weak and rigid (i.e. less and more elaborate) service scripts: less elaborate scripts do not contain sequential information regarding prior and consequent events and probably give employees leeway in deciding how to respond to customer needs, whereas more elaborate scripts aim for employee adherence to uniform operating guidelines. Service scripts affect the strength of the relationship between ECO and employees' authentic emotional displays.

Because frontline employees with high customer orientation appraise job demands as less threatening owing to their natural disposition to view the work environment and people around

them with a customer service focus (Babakus, Yavas and Ashill, 2009), they should be more comfortable operating within the confines of service scripts. Service scripts often stipulate which emotions to use and how to use them during customer interactions, suggesting that customers can compare their own emotive level with that of the employee and adopt the employee's emotive level (Hatfield, Cacioppo and Rapson, 1994). Employees' higher customer orientation combined with more elaborate service scripts is expected to exert a synergistic effect on authentic emotional displays. Thus, customer-oriented employees display the required emotions to a greater extent than less customer-oriented employees, who may not agree that customer needs must be met. It is difficult to envision a frontline employee with a low customer orientation following rigorous service scripts to engage actively in behaviour that is designed solely to meet customer needs.

Organizational theory further holds that inhibiting job rules affect employees' performance and cause frustration (O'Connor *et al.*, 1982). Service scripts are one such constraint; they represent the service organization's formal control. However, when employees have a high customer orientation, their beliefs about their roles align with the rules and procedures embedded in the service scripts. Therefore, with regard to the link between ECO and authentic emotional displays, employees with high levels of customer orientation are more likely to display the emotions demanded by more elaborate service scripts. The Ritz-Carlton hotels, with their high-quality, customer-oriented service, provide an example of how service scripts and customer orientation work in tandem. The hotel uses service scripts (known as 'Ritz-Carlton Service Values') to stipulate how its well-trained employees should behave toward guests (Sanders, 2006). Thus, the service scripts facilitate already high levels of customer orientation.

In contrast, employees with low levels of customer orientation may find more elaborate scripts frustrating because: (a) they prescribe expression of emotions that they do not feel, and (b) they proscribe emotions that they do feel (including indifference). This frustration may be expressed in displays that customers perceive as 'fake' and in customer service that only meets minimal standards for retaining employment (including actual negative emotions expressed in some interac-

tions). This pattern would probably result in inadequate or inconsistent service deliveries and a limited focus on building relationships with customers (Riley and de Chernatony, 2000). In the absence of elaborate service scripts, staff with low ECO would be able to exercise some discretion in how they define and execute their role, for example, in responding to cues from customers (e.g. acting positively to customers who display positive emotions) and others, including servers (social pressures). While some employees with low ECO may act to meet only minimal standards, the positive effects of limited scripting would probably result in a higher level of authentic behaviour by other staff.

H3: The impact of service employees' customer orientation (ECO) on employees' authentic emotional display is moderated by service scripts, such that more elaborate service scripts result in higher authentic emotional displays for employees with high levels of ECO and lower levels of authentic emotional displays for employees with low levels of ECO.

We further posit that the perceptual gap between employees and customers influences the degree to which employees' authentic emotional display affects COCP. People prefer to encounter authentic emotions in others. Authentic emotions, associated with sincerity and spontaneity (Ashforth and Humphrey, 1993; Hochschild, 1983), influence customer perceptions and behaviours (Hennig-Thurau *et al.*, 2006). For example, service employees who display authentic positive emotions tend to be rated as better performers than those whose emotions are inauthentic (Grandey, 2003; Groth, Hennig-Thurau and Walsh, 2009). Groth, Hennig-Thurau and Walsh (2009) demonstrate that employees who display positive emotions during a service interaction prompt customers' perceptions of the service employees' interest in and ability to fulfil their service-related needs when those customers have the ability to identify authentic emotions. Research rooted in emotion contagion theory also shows that, in general, people can detect emotions in others (Ekman, 2001, 2003), though customers vary in the strength of their ability to detect emotions in employees (Groth, Hennig-Thurau and Walsh, 2009). Depending on their detection accuracy (i.e. degree to which customers detect employees' authentic emotional displays), cus-

tomers perceive a stronger or weaker customer orientation by the employee. If an employee deploys authentic emotions during a service encounter and the customer discerns the emotions as genuine, COCP probably increases more than if the customer had not discerned the employee's emotions correctly. However, if customers exhibit limited susceptibility to employees' emotions, the effect of authentic emotions on COCP may be less pronounced. Regardless of customers' ability to discern employee emotions though, authentic emotions should be easier to detect than inauthentic ones (Ekman, 2003) and thus should affect COCP even among customers with low emotion detection accuracy skills.

H4: The relationship between authentic emotional displays and employees' customer orientation as perceived by the customers (COCP) is moderated by customer detection accuracy, such that the relationship is stronger in situations in which customers have high detection accuracy compared with situations in which customers have low detection accuracy.

Method

Procedure and sample

Previous studies of service ECO have generally used percept–percept data collection methods, which may have resulted in artificially inflated correlations in predictor–criterion relationships. Because data collected from different respondents using different questionnaires can mitigate common method variance, we gathered information pertaining to the relevant constructs through a dyadic approach with a snowballing technique (Salganik and Heckathorn, 2004). The data collection took place in two major metropolitan cities. Trained research assistants distributed pairs of questionnaires (employee and customer versions) to service customers. Each participating customer received up to five pairs of matching customer and employee questionnaires and covering letters (one for themselves, one for the service employee), which explained the nature of the study and provided instructions regarding the data collection procedures. After they had recruited participating service customers, the assistants asked these participants to take both the employee and the customer questionnaire and covering letters with them on their next visit to a

service provider. A list of eligible service industries appeared in the customer covering letter, which also detailed some exemplary service firms that had agreed to support the data collection (though we asked firm managers not to tell frontline employees about the survey in advance).

After a service transaction, the recruited customers immediately asked the service employee who had served him or her to fill out the employee survey. The customers simultaneously filled out the customer version. Thus, the unit of analysis is a distinct service interaction between one employee and one customer, rather than general, retrospective patterns of behaviour, which constitute the focus of most customer orientation research. The covering letter also instructed both customer and employee participants to complete the survey in different sections of the shop, to eliminate cross-influences during the questionnaire completion. Both customers and employees were informed that the survey dealt with 'satisfaction with services', to avoid revealing the actual focus of this research (i.e. customer orientation). The employee covering letter described the study and contained envelopes with unique seals, in which they put their completed surveys. Customers then returned the completed pair of questionnaires to the researchers. They had been informed that breaking the seal would invalidate the questionnaire. Customer and employee questionnaires contained the names of the customer, of the employee and of the service firm, as well as the date and time of the service episode. Using the matching codes, we later compared the handwriting on each questionnaire dyad. We also conducted random calls to about 10% of service firms named in the questionnaires to ascertain that the service episode had actually taken place.

Using the codes in the questionnaires, the employee–customer dyads were matched. After removing any dyads with missing data on the variables on interest or similarities in handwriting between the customer and employee surveys, we obtained 275 usable dyads for this study. The sample size compares favourably with previous studies in the services management field that use dyadic designs (e.g. $n = 198$, Rokkan, Heide and Wathne, 2003; $n = 115$, Yagil, 2001). The customers' ages range from 17 to 63 years (mean = 27 years, $SD = 10.6$). Fifty-eight per cent of them are women. The employees have a mean age of 28 years ($SD = 9.7$), ranging from 16 to 66 years, and

have been in their job for an average of 3 years ($SD = 5.0$), ranging from 1 month to 42 years. Sixty-three per cent of the employee sample are women.

A cross-section of service firms from various service industries appears in this sample. Using Bowen's (1990) service typology, we can characterize the majority of these firms (62%) as involving moderate employee contact and customization, as well as being directed at people (e.g. fast-food restaurants). In contrast, 26% entail high employee contact and high customization, though still directed at people (e.g. full-service restaurants); 12% feature moderate employee contact and customization and are directed at things (e.g. photo shops).

Measures

Customer orientation was measured in accordance with previous research as the degree to which employees aim to address customers' needs (e.g. Goff *et al.*, 1997; Michaels and Day, 1985). The items measuring frontline employees' customer-oriented attitudes were taken from Brown *et al.*'s (2002) adaptation of Saxe and Weitz's (1982) scale. To measure customers' perceptions of frontline employees' customer-oriented behaviours, we followed Groth, Hennig-Thurau and Walsh (2009) and used the same items as in the employee survey, just slightly re-worded to reflect the customer perspective (e.g. 'I try to help customers achieve their goals' became 'The employee tried to help me achieve my goals'). A seven-point agreement scale measured both employees' and customers' responses, such that higher scores indicated higher levels of agreement. The same format applied to all constructs measured. We report all the items in Appendix 1.

We could not find an existing measure of the elaborateness of the service scripts provided by the service provider firm in previous literature, so we employed five self-developed items reflecting the level of discretion that frontline service employees have when interacting with customers. We thus followed standard procedures to develop appropriate scale items (Churchill, 1979). Qualitative methods, including depth interviews with 12 service employees, supplemented with quantitative analyses, produced the items that we report in Appendix 1. We also validated the reliability and validity of this new scale.

Table 1. Descriptive statistics, reliabilities and correlations of model variables

	Mean	SD	1	2	3	4	5
1. ECO	5.61	1.13	(0.88)				
2. Employee level of service scripts	3.39	1.07	0.00	(0.72)			
3. Authentic emotional display	5.11	1.08	0.15*	-0.21*	(0.90)		
4. Authentic emotional display detection accuracy	^a		0.09	0.02	0.00		
5. COPC	5.31	0.98	0.24*	-0.08	0.40**	-0.05	(0.83)

Notes: $n = 275$. Values in parentheses along the diagonal represent Cronbach's alpha reliabilities.

^aFor 'authentic emotional display detection accuracy', no descriptive statistics or reliability coefficients are listed, because this variable was computed with a residual centring regression approach.

*Significant at $p < 0.05$ (two-sided).

**Significant at $p < 0.01$ (two-sided).

Our assessment of authentic emotional displays by employees featured three items from Dahling and Perez (2010) to capture naturally felt emotions, and four items from Grandey (2003) to measure surface acting (reverse coded), as originally developed by Brotheridge and Lee (2003). The items were averaged to compute the scale (for similar approaches, see Barsade *et al.*, 2000; Westbrook, 1980). Combining these two constructs (naturally felt emotions and surface acting) into one measure of authentic emotional display was appropriate because they correlated highly, suggesting that they measured the same theoretical domain. In addition, both naturally felt emotions and reverse-coded surface acting items captured the notion of behavioural authenticity. For example, Grandey (2003) conceptualizes surface acting as an expression of feigned emotions that lack authenticity.

For the detection accuracy measure, we needed to determine customers' perceptions of employees' authentic emotional displays, so we used the items from the employee questionnaire, adapted to reflect the customer perspective (e.g. 'The emotions I have expressed to this customer were completely genuine' became 'I believe the emotions the employee has expressed to me were completely genuine'). As in the employee questionnaire, the stem of the questions focused on the interaction that the customer had just completed. To these responses, we applied Lance's (1988) two-step residual centring regression approach (see Groth, Hennig-Thurau and Walsh, 2009), regressing the interaction term on its two components using ordinary least squares, and then using the residuals of this regression, instead of the corresponding interaction term, to test the hypothesized model. This approach helps minimize the multicollinear-

ity that might result from high correlations of regression variables with their product terms. Furthermore, residual centring provides a 'straight-forward means to assess the predictability of some criterion from the interaction among predictors' (Lance, 1988, p. 166; cf. Bottomley and Holden, 2001). Accordingly, we calculated the difference between an employee's authentic emotional display score and the customer's perception of his or her authentic emotional display, using each individual item. The aggregated difference variable yielded a satisfactory reliability score ($\alpha = 0.86$). Next we estimated the cross-product residuals of the regression of detection accuracy and authentic emotional displays on the cross-product of these two variables. The cross-product residuals ultimately provided the authentic emotional display detection accuracy variable that we used to test our hypotheses.

Results

Reliability and validity

The means, standard deviations, coefficient alpha reliability estimates and correlation coefficients for all the variables appear in Table 1.² To assess the reliability and validity of the models' four latent constructs, we conducted a confirmatory factor analysis involving 24 items using AMOS 19. The model provided a good fit to the data; the fit indices and standardized loadings appear in

²Because the 'authentic emotional displays' construct consists of two dimensions (naturally felt emotions and surface acting (reverse coded)) correlations were calculated between the two dimensions and the other model variables (see Appendix 2).

Appendix 1. To establish discriminant validity for the employee-related and customer-related constructs, we used Fornell and Larcker's (1981) criterion, according to which discriminant validity exists when the average variance extracted by each of two constructs is greater than their shared variance. All pairs of constructs met this criterion.

To reduce the risk of common method variance, we employed several procedural remedies before collecting the data (Podsakoff, MacKenzie and Podsakoff, 2012; Podsakoff *et al.*, 2003). We pre-tested all the items for clarity, and we guaranteed respondents' anonymity, to reduce item characteristic effects. In designing the questionnaires, we ensured that the indicators of the different constructs appeared in different sections in the questionnaire, which should reduce the risk of common rating effects, item context effects and some of the measurement context effect. After the data collection, we applied Harman's single-factor test and the single method factor approach (Podsakoff *et al.*, 2003). The single factor solution fitted less well than the proposed model ($\chi^2/df = 3.01$; GFI 0.76; RMSEA = 0.087), indicating that common method variance was not an issue for our data.

Furthermore, we measured customers' relationship tenure with the company with two distinct items ('I consider myself a regular customer of this service firm' and 'How many times have you visited this service firm over the past 12 months?'), as well as the frequency of contact with the employee serving them at the point of data collection ('How many times have you been served by this specific employee in the last 12 months?'), to control for the effects of familiarity. Furthermore, we controlled for company size, measured as the number of employees (indicated by the employee). None of the covariates had a significant effect on the focal constructs.

Regression analysis

We tested the hypothesized model (see Figure 1) with an SPSS macro developed by Hayes (2013) that allows for simultaneous tests of mediation, moderated by multiple variables, and uses a bootstrapping procedure to test for indirect effects. Compared with the procedure described by Baron and Kenny (1986) and the Sobel (1982) test, this approach offers explicit quantification and testing of the indirect effect (Hayes, 2009), without

relying on the assumption of normal sampling distribution (see MacKinnon, Lockwood and Williams, 2004; Preacher and Hayes, 2004), and it minimizes the number of inferential tests, which reduces the likelihood of Type 1 errors. Finally, in accordance with Aiken and West's (1991) recommendation and for interpretative purposes (Echambadi and Hess, 2007), we mean-centred all independent variables prior to computing the interaction terms.

Mediation analysis. The overall regression model was significant, and 13% of the variance in COPC could be explained ($F(4, 270) = 10.42, p < 0.001$). In addition, ECO had a positive, significant direct effect on COPC ($\beta = 0.19, p < 0.001$), in support of Hypothesis 1.³ It also exerted a significant positive effect on authentic emotional display ($\beta = 0.57, p < 0.001$); authentic emotional display, in turn, had a significant positive effect on COPC ($\beta = 0.13, p < 0.01$), so the paths describing the indirect effect of ECO on COPC through authentic emotional display were significant. To test and quantify the indirect effect, we applied bootstrapping confidence intervals (Preacher and Hayes, 2004, 2008). The indirect effect differed positively and statistically significantly from 0, as evidenced by a 95% bias-corrected bootstrap confidence interval (CI) that did not include 0 ($\beta = 0.08$; lower level CI [LLCI] = 0.02; upper level CI [ULCI] = 0.15). Higher levels of ECO led to higher levels of COPC, as a result of the positive effect of ECO on authentic emotional display, which positively influenced COPC. Together with the direct effect of ECO on COPC ($\beta = 0.19, p < 0.001$), this result supports Hypothesis 2.

First-stage moderation analysis. We predicted that service script elaborateness would moderate the impact of ECO on authentic emotional display. As we noted in the previous paragraph, ECO had a significant main effect on authentic emotional display, whereas the elaborateness of service scripts revealed no significant effect ($\beta = -0.11, ns$). Yet the ECO \times elaborateness of

³We also conducted an independent sample t-test to assess whether the mean difference between ECO and COPC is significant. The results show that the two constructs ECO ($M = 5.61, SD = 1.13$) and COPC ($M = 5.31, SD = 0.98$) differ significantly with regard to their mean, $t(274) = 3.80, p < 0.05$.

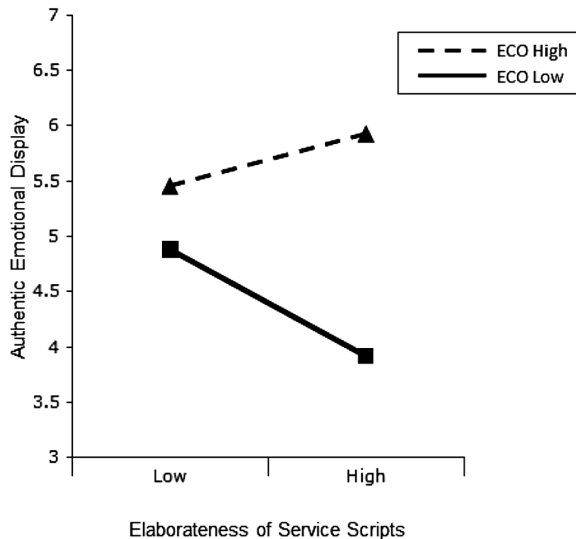


Figure 2. First-stage moderation

service scripts interaction exerted a significant effect ($\beta = 0.29$, $p < 0.001$). To clarify this interaction, we applied a simple slope analysis (Aiken and West, 1991). For employees with high levels of ECO (one standard deviation above the mean), more elaborately scripted service deliveries (one standard deviation above the mean) led to higher levels of authentic emotional display, compared with less elaborate scripted service deliveries (one standard deviation below the mean; $\beta = 0.22$, $p < 0.01$). Furthermore, for employees with low levels of ECO (one standard deviation below the mean), more scripted service deliveries (one standard deviation above the mean) produced lower levels of authentic emotional display than did less scripted service deliveries (one standard deviation below the mean; $\beta = -0.45$, $p < 0.001$). Together, these findings support Hypothesis 3. To facilitate the interpretation of this moderating effect, Figure 2 illustrates the relationships of ECO and authentic emotional display when service scripts are both less and more elaborate.

Second-stage moderation analysis. Regarding the potential moderating effect of detection accuracy on the impact of authentic emotional displays on COPC, we recall that authentic emotional display had a significant main effect on COPC. Detection accuracy exerted no significant main effect on COPC ($\beta = -0.05$, ns). The authentic emotional display \times detection accuracy interaction was significant though ($\beta = -0.09$, $p < 0.001$).

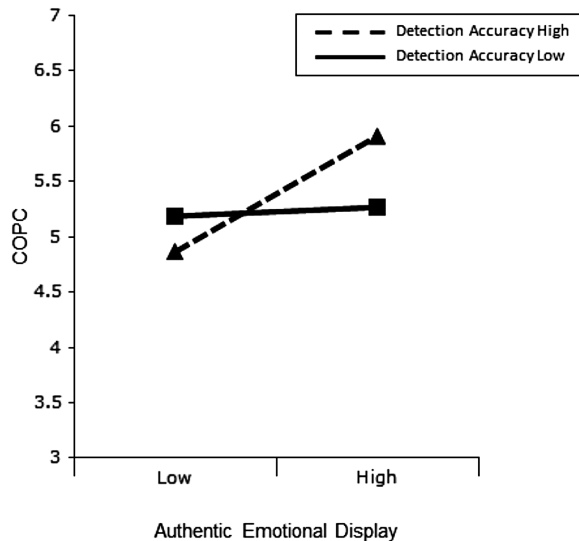


Figure 3. Second-stage moderation

In a simple slope analysis of this interaction, we determined that, in situations with high detection accuracy (one standard deviation above the mean), higher levels of authentic emotional display were associated with higher levels of COPC ($\beta = 0.38$, $p < 0.001$), whereas in situations characterized by low levels of detection accuracy (one standard deviation below the mean), higher levels of authentic emotional display had no effect on COPC ($\beta = 0.03$, ns). These findings support Hypothesis 4. To facilitate the interpretation of the moderating effect, we illustrate these relationships in Figure 3 at low and high levels of detection accuracy.

Alternative models

In addition to the theoretically proposed model, which contains all variables required for testing Hypotheses 1–4, we tested alternative mediated and moderated models. By comparing the alternative models against the hypothesized model, we aim to provide further empirical support for our results, as well as greater theoretical clarity about how ECO affects COPC.

In Hypothesis 2, we predicted that employees' authentic emotional displays would mediate the impact of ECO on COPC; with Hypothesis 3, we predicted that the link from authentic emotional displays to COPC would be moderated by detection accuracy. The assumed moderating role of detection accuracy implied that customers' per-

ception of employees' authentic emotional display should be associated with employee authentic emotional display and COPC. Accordingly, we estimated a model with two mediators of the ECO–COPC link: employee authentic emotional displays and customer perceptions of authentic emotional displays. The indirect effect of ECO on COPC through both mediating variables was significant, but modest in size ($\beta = 0.03$; LLCI = 0.01; ULCI = 0.06). In the baseline model, the indirect effect of ECO on COPC was not significant in conditions of low detection accuracy ($\beta = 0.02$; LLCI = -0.07; ULCI = 0.02) but significant and higher in conditions of high detection accuracy ($\beta = 0.16$; LLCI = 0.07; ULCI = 0.25). This finding suggested that 'detection accuracy' had an important moderating role. Thus, capturing the relationship between employee emotional displays and customer perceptions of emotional displays using a moderation function is more appropriate than relating them through correlations in a mediation model.

Next, we explored the potential moderating role of service scripts on the ECO–COPC link, in line with our prediction in Hypothesis 3 that service scripts moderate the link between ECO and authentic emotional displays. Leidner (1999, p. 93) maintains that service scripts help service employees 'bolster their confidence in their abilities', such that higher ECO may translate into behaviour that is directly discernible to customers. Therefore, we tested a model with service scripts as the moderator of the ECO–COPC link (using mean-centred independent variables). The results revealed a non-significant interaction term ($\beta = 0.05$, ns); the service scripts variable did not moderate the relationship between ECO and COPC.

Finally, we estimated a model with authentic emotional display as a moderator of the relationship between ECO and COPC. The results revealed a non-significant interaction term ($\beta = 0.01$, ns), so authentic emotional displays did not moderate the ECO–COPC path. Overall, these assessments of alternative models indicated the superiority of the hypothesized model.

Discussion

The purpose of this study was to examine the relationship between service ECO and their COPC, as well as several contingencies of this

relationship. Drawing on prior literature and emotional contagion theory (Hatfield, Cacioppo and Rapson, 1994), we find support for an ECO–COPC link, for a link between ECO and employees' authentic emotional displays, and for a link between authentic emotional displays and COPC. We also identify service scripts as a moderator of the ECO–authentic emotional display link. Finally, customer detection accuracy moderates the relationship between authentic emotional displays and COPC, in that authentic emotional displays and COPC relate positively when customers have high detection accuracy, but not when their detection accuracy is poor. This research thus builds on and extends extant research that has explored and found support for a direct relationship between customer orientation and customer outcomes (e.g. Brady and Cronin, 2001; Hennig-Thurau, 2004) by highlighting some contingencies of the ECO–COPC relationship.

Theoretical implications

Customer orientation literature generally argues that customer-oriented employee behaviours lead to favourable customer outcomes (Dean, 2007; Hennig-Thurau, 2004). However, such findings mostly emerge from studies that use non-dyadic data, so these prior conclusions require caution in relation to the actual implied causal effect of ECO on customer outcomes. Against this backdrop, we extend our existing understanding of frontline customer orientation along two critical paths: customer orientation from employee versus customer perspectives, and the contingencies of that relationship. Consistent with Stock and Hoyer (2005), we distinguish ECO and COPC and show that the two types of customer orientation are related. In this sense, this study represents one of the few attempts to link actual frontline service ECO with customer perceptions, using a dyadic research design.

Our findings match those outlined by Stock and Hoyer (2005), who report a direct effect of ECO on COPC. From a theoretical standpoint, emotional contagion provides sufficient justification for this direct effect, as well as a mediated effect through employee authentic emotional displays. Employees' emotional displays reflect their emotional and cognitive states and therefore should be consistent with their attitudes toward customer service. This attitude becomes discernible to customers, leading

to COPC, and prompts employees to display authentic emotions. It is also noteworthy that we find consistent evidence of the ECO–COPC link across our study and Stock and Hoyer's (2005) research, despite the methodological differences. That is, we used the same items to measure ECO and COPC, but had employees and customers assess each type of measure, whereas Stock and Hoyer (2005) used different items for the separate facets of customer orientation. The agreement between our findings and Stock and Hoyer's (2005), despite different study settings and samples, speaks for the robustness of our results.

By considering moderators of the mediated relationship between ECO and COPC, we also extend customer orientation literature. Stock and Hoyer (2005) examine the effects of four moderating variables on the customer-oriented attitude–behaviour link and find that high levels of three of them (employee empathy, expertise and reliability) strengthen the relationship (as perceived by customers). In extending their work, we also consider a form of organizational control (service scripts) and a customer-related variable (detection accuracy) as moderators.

The findings pertaining to service scripts match our predictions. For employees with high levels of ECO, service scripts amplify the effects on their authentic emotional displays. However, when scripted service deliveries coincide with low levels of ECO, this results in lower levels of authentic emotional display compared with the case of employees with low levels of ECO who deliver weakly scripted services. Therefore, low levels of employee discretion appear counterproductive in terms of encouraging employees to deploy authentic emotions toward customers, especially when those employees are not customer oriented.

Finally, when customers have high detection accuracy, employees' authentic emotional displays positively affect COPC. This outcome does not result when customers' level of detection accuracy is low.

Implications for service management

With this research, we have sought to gain a better understanding of the relationship between service ECO and COPC. The key managerial implications that flow from this study pertain to this relationship. Our results indicate that service managers should foster employees' customer-oriented

behaviour, because frontline ECO strongly affects COPC directly and indirectly through employee authentic emotional displays, which in turn can affect several important customer outcomes. We provide insights into the moderating effects of both service scripts and detection accuracy.

When service employees can successfully display customer orientation and authentic emotions during service interactions, the service firm is likely to reap the benefits of COPC. These benefits might include customers' perceptions of service quality, satisfaction, commitment and loyalty (e.g. Dean, 2007; Hennig-Thurau, 2004; Homburg, Müller and Klarmann, 2011). A key recommendation for service firms arising from this research is that they should deploy resources to ensure ECO. Employees' customer orientation, similar to any employee skill, can be screened for during the application process and improved through training. To increase ECO, managers might focus on recruiting employees who already possess the ability to deploy authentic, customer-oriented emotions and train all employees to improve such skills. Moreover, firms can invest in the creation of a positive work environment (e.g. good service climate; Schneider, White and Paul, 1998), which is conducive to customer-oriented behaviour (Grizzle *et al.*, 2009). Alternatively, service firms looking to improve their customer orientation might establish policies to increase employee responsibility for service outcomes, especially COPC. As Peccei and Rosenthal (2001) find, employees who take responsibility for their work display more ECO.

Service scripts can also enhance the effects of ECO on downstream variables. However, standardizing employees' displays may involve unintended side effects: It increases employees' compliance with organizational display rules, but may simultaneously decrease COPC, because employee behaviour appears inauthentic to customers, especially if those employees have low customer orientation. In their efforts to control service employees' performance, service firms must carefully determine how much formal and informal control to exert (Jaworski, 1988), taking the effects on customer orientations into account. That said, our results show that, when high ECO coincides with more elaborate service scripts, authentic emotional displays are enhanced. Firms that deliver services in a high throughput manner tend to rely most heavily on service scripts. Hiring

employees with high customer orientation may provide a strategic advantage to such firms, because they can combine efficiency (i.e. customers served per time unit) with effectiveness (i.e. customer satisfaction).

Scripted services delivered by employees with low levels of ECO result, instead, in lower levels of authentic emotional displays than when these same employees deliver less elaborately scripted services. The implication for service management is to increase ECO through employee training or incentives, or else to abandon service scripts. The benefits of increasing ECO are more substantial: an even stronger direct effect on COPC and the ability to retain service scripts without hindering employees' authentic emotional displays. Such authentic displays are consistent with organizational and customer expectations and should ultimately result in customer satisfaction and improved organizational outcomes. Thus, it may be wisest to invest in the recruitment and selection of customer-oriented frontline employees who can deploy authentic emotions during their interactions with customers (Babakus, Yavas and Ashill, 2009). A positive side effect of using or retaining service scripts is decreased service heterogeneity, which tends to enhance customer satisfaction (Chebat and Kollias, 2000). Screening for customer-oriented employees who are capable of following service scripts also may help service firms to achieve the seemingly irreconcilable goals of service productivity (e.g. increasing customer throughput) and key service outcomes such as customer satisfaction (Anderson, Fornell and Rust, 1997). Research has confirmed that such 'ambidextrous' service employees, who can align seemingly conflicting goals, actually exist (Jasmand, Blazeovic and de Ruyter, 2012).

Finally, when customers have high detection accuracy, higher levels of employee authentic emotional displays are associated with higher levels of COPC. Although detection accuracy is less actionable for service firms than are other elements of the service interaction, this result is potentially relevant. It could be worthwhile for firms to find ways to provide cues to customers that help them correctly decode ECO.

Limitations and further research

This study's limitations provide avenues for further research. Our conceptual model proposes

that ECO leads to customer orientation that is discernible to customers. The significant correlation between the two constructs – ECO and COPC – provides empirical support for this proposition and allows us to support our hypotheses. However, the limited size of the effect (0.19) raises some interesting questions. The link is far from perfect, which may suggest that employees cannot always translate their self-perceived customer orientation into behaviours that are discernible to the customer. An alternative explanation is that customers may have an ambivalent perception of the employee's customer-oriented behaviour. For example, if the customer does not attribute the observed behaviour to the employee's positive attitude, but to ulterior motives (e.g. earning a performance bonus linked to customer satisfaction), the level of COPC might be lower. Moreover, attributions can evoke specific affect, depending on whether the outcome of the service encounter is a failure or success (Szymanski and Henard, 2001). This can shape the customers' post-encounter assessments such as their satisfaction. It suggests that attribution theory, which posits that people attribute events (e.g. pleasant service episodes) to either internally or externally controlled forces (Weiner, 1985), might be a useful theoretical lens for examining customer outcomes of COPC.

Moreover, we calculated difference scores to measure perceptual accuracy in terms of employees' authentic emotional displays. The limited effect size may arise because the COPC measure employed is more situation-specific than is the ECO measure. Additional research should study the ECO–COPC link systematically on the employee side of the dyad, perhaps using expert coders to overcome common method issues, and then study the verbal and non-verbal cues that customers use to infer ECO.

On a related note, a customer's perception of an employee's customer orientation can result from a reciprocal process, such that a customer request or the customer's behaviour prompts the employee's customer orientation. During service interactions, emotion cycles can seemingly be triggered by either the employee or the customer (Groth and Grandey, 2012; Hareli and Rafaeli, 2008) and, in turn, affect service marketing outcomes, such as perceived customer orientation and customer satisfaction. Additional research should study entire service episodes to clarify these reciprocal processes.

Another limitation of this study is the cross-sectional nature of the data. Further studies should collect longitudinal data from service employees and customers to verify the hypothesized relationships in this study.

Finally, researchers might examine how antecedents of ECO affect COPC – directly or through ECO. Bettencourt and Brown (2003) report that employee job satisfaction positively affects ECO; however, Homburg, Wieseke and Hoyer (2009), who measure customer orientation using customer data, find no such influence. Bettencourt and Brown (2003) and Kelley (1992) also indicate that organizational commitment influences ECO. Ullrich *et al.* (2007) argue that employees' organizational identification exerts a positive impact on customer orientation. In studying whether employees' work motivation, in addition to the indirect impact through commitment and identification, has a direct impact on customer orientation, Kelley (1992) finds support for such an effect related to motivational direction (working smarter), but not motivational effort (working harder). Thus, employee- and organization-related antecedents of customer orientation represent an interesting area for research.

Conclusion

Despite the widespread appeal of and interest in customer orientation, extant research has left scholars and practitioners with a limited view of how customers perceive service ECO. Specifically, it has rarely investigated employees' ability to convey their customer orientation to customers or customers' ability to discern ECO. Our analysis of dyads of frontline employees and service customers across multiple consumer service companies and industries reveals that ECO has a positive effect on COPC. We provide empirical evidence that this effect is mediated by employees' authentic emotional displays. We also reveal that employees with low levels of ECO who deliver scripted services display less authentic emotions than do employees with low levels of ECO and less elaborately scripted service deliveries. Conversely, employees with high levels of ECO and scripted service deliveries display more authentic emotions than do employees with high levels of ECO and less-scripted service deliveries. When customers have high detection accuracy skills,

employees' high levels of authentic emotional displays affect COCP more positively than do employees' low levels of authentic emotional displays. Finally, when customers suffer from low detection accuracy, employees' authentic emotional displays do not affect COPC differently across levels. The present research therefore provides scholars with a framework for understanding how ECO leads to COCP.

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Appendix 1. Items, fit indices, composite reliability, average variance extracted and standardized loadings

Fit statistics: $\chi^2/dF = 1.91$; *GFI* 0.87; *RMSEA* = 0.058

Employee customer orientation (adapted from Brown <i>et al.</i> , 2002)		CR = 0.90/AVE = 0.61
Usually, I try to help customers achieve their goals.		0.71***
Usually, I achieve my own goals by satisfying customers.		0.80***
Usually, I get customers to talk about their service needs with me.		0.84***
Usually, I take a problem-solving approach with my customers.		0.74***
Usually, I keep the best interests of the customer in mind.		0.79***
Usually, I am able to answer a customer's questions correctly.		0.75***
COPC		CR = 0.88/AVE = 0.56
The employee tried to help me achieve my goals.		0.71***
The employee seemed to achieve his/her own goals by satisfying me.		0.75***
The employee got me to talk about my service needs with him/her.		0.77***
The employee took a problem-solving approach with me.		0.75***
The employee kept the best interests of the customer in mind.		0.75***
The employee was able to answer my questions correctly.		0.73***
Level of service scripts		CR = 0.78/AVE = 0.42
I have to follow a rigid script when interacting with customers.		0.82***
I have strict instructions that tell me how to behave when serving customers.		0.70***
Each employee in this firm must treat customers in exactly the same way.		0.50***
My supervisor usually instructs me on what to say and do when serving customers.		0.55***
I can interact with customers the way I think is best instead of following 'rules' (r).		0.63***
Authentic emotional display		CR = 0.94/AVE = 0.70
Items measuring naturally felt emotions (adapted from Dahling and Perez, 2010)		
The emotions I have expressed to this customer were completely genuine.		0.92***
The emotions I have shown to this customer were fully natural.		0.91***
The emotions I have displayed to this customer completely matched what I felt from the very start of the interaction.		0.86***
Items measuring surface acting (adapted from Grandey, 2003)		
I put on an act in order to deal with this customer in an appropriate way (r).		0.69***
I put on a 'show' or 'performance' when interacting with this customer (r).		0.75***
I just pretended to have the emotions I needed to display this customer (r).		0.92***
I put on a 'mask' in order to display the emotions my manager wants me to display (r).		0.79***

Notes: CR = composite reliability; AVE = average variance extracted; (r) = reverse coded. Numbers after the items represent the standardized loadings.

*Significant at $p < 0.05$ (two-sided). **Significant at $p < 0.01$ (two-sided). ***Significant at $p < 0.001$ (two-sided).

Appendix 2. Descriptive statistics, reliabilities and correlations of authentic emotional display dimensions with other model variables

	Mean	SD	1	2	3	4	5	6	7
1 ECO	5.61	1.13	(0.88)						
2 Employee level of service scripts	3.39	1.07	0.01	(0.72)					
Authentic emotional display employee measure									
3 Naturally felt emotions	5.19	1.50	0.55**	-0.02	(0.91)				
4 Surface acting (recoded)	4.94	1.58	0.27**	0.02	0.57**	(0.90)			
Authentic emotional display customer measure									
5 Naturally felt emotions	5.05	1.19	0.18**	-0.19**	0.20**	0.16**	(0.90)		
6 Surface acting (recoded)	5.15	1.18	0.11	-0.19**	0.21**	0.21**	0.61**	(0.88)	
7 COPC	5.31	0.98	0.24**	-0.08	0.15*	0.08	0.47**	0.29**	(0.83)

Notes: n = 275. Values in parentheses along the diagonal represent Cronbach's alpha reliabilities.

*Significant at $p < 0.05$ (two-sided); **Significant at $p < 0.01$ (two-sided).