

Running Head: EMOTIONAL COMPETENCE AND CUSTOMERS' EVALUATIONS

Linking Service Employees' Emotional Competence to Customer Satisfaction: A Multilevel
Approach

Angelo Giardini and Michael Frese
Justus-Liebig-University Giessen, Germany

Post-review version

Published in: Journal of Organizational Behavior

Link: <http://www3.interscience.wiley.com/journal/4691/home>

Author Note

This paper was supported by a grant from the German-Israeli Foundation for Scientific Research and Development (GIF) to Anat Rafaeli, Avraham Kluger, and Michael Frese.

Earlier versions of portions of this article were presented at the annual meeting of the Society for Industrial and Organizational Psychology, April 2001, San Diego, California.

We thank Doris Fay, Christian Dormann, and David Hofmann for their helpful comments and suggestions and Stefanie Guenter for her assistance in data collection.

Correspondence concerning this article should be sent to Angelo Giardini, Department of Business Administration and Economics (FB02), Human Resource Management (BWL VIII), Justus-Liebig-University Giessen, 35394 Giessen, Germany, email: angelo.giardini@wirtschaft.uni-giessen.de

Abstract

This study investigates the role of the Positive Organizational Behavior (POB) concept of emotional competence for the effective management of participants' affect in service encounters and customers' assessments about the encounter. We developed and tested a two-level model in which service employees' emotional competence is related to both service employees' and customers' state positive affect. Customers' positive affect, in turn, is related to customers' specific and general evaluations of the service rendered. A total of 394 service encounters involving 53 financial consultants of a bank were assessed. Data were analyzed by a combination of path analysis and hierarchical linear modeling (HLM), and the results support large parts of the model. More specifically, employees' emotional competence was related to customer evaluations through their own positive affective state during the encounter as well as through a direct link to the customer evaluations of the encounter.

Linking Service Employees' Emotional Competence to Affective Experiences and Customers'
Evaluations: A Multilevel Approach

Introduction

Positive Organizational Behavior (POB) has been defined as “positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace” (Luthans, 2002, p. 59). Emotional competence is an integrative term for skills that are concerned with the processing, regulation, and utilization of emotions at the workplace (Cherniss, 2000; Zeidner, Matthews, & Roberts, 2004). As such, emotional competence may qualify as a POB concept because it ultimately focuses on employees' capability to make use of the positive functions of affect. Anecdotal accounts claim, for example, that individuals high on emotional competence are more successful employees because in social interactions they are able to create a positive affective climate, which leads to more favorable individual and organizational outcomes (e.g., Goleman, 1998). However, empirical evidence supporting this claim is still scarce. Service encounters are a particularly suitable setting for testing the contribution of emotional competence because affective processes are central for how an encounter proceeds and how it is evaluated (e.g., Pugh 2001). Thus, the objective of this study is to explore the relationship between emotional competence, affective processes, and evaluations in social interactions in the service context. In doing this, we go beyond prior research in three ways: First, we not only test the assertion that emotional competence is related to customers' evaluations but we also try to describe one of the mechanisms by which this is likely to happen. More specifically, we hypothesize that emotional competence is related to customers' evaluations via affective experiences within the service encounter. Second, we take into account the affective *state* of both employee and customer at the same time. Thus, we complement prior

research that has investigated the relationship between employees' *display* of positive emotions and customer affect (e.g., Tsai & Huang, 2002). Third, our methodological approach reflects the fact that our model involves relationships between variables from two different levels: The person level (employee emotional competence) and the situation level (affective experiences and evaluations within the single service encounter). Research investigating emotion-related topics in services predominantly has a single-level orientation. In studies that explore affective processes in service settings, the data is usually analyzed on the situation (encounter) level (e.g., Tsai & Hunag, 2002). When stable person characteristics are added to the model, situational data is typically aggregated to the higher level of analysis (e.g., Pugh, 2001). However, in some cases, the aggregation of variables may change their meaning (Morgeson & Hofmann, 1999). To avoid these problems, variables should be analyzed on the same level as they are located in the theory. Thus, because our model comprises variables from two levels, we use hierarchical linear modeling (HLM) which allows us to process and relate variables from different levels.

The conceptual model of this study is depicted in Figure 1. Before we describe the model in more detail, we turn to the concept of emotional competence.

Insert Figure 1 about here

Emotional competence

Following other scholars, we define emotional competence as an interrelated set of skills used to perceive, understand, and regulate affective information toward the self and others (Cherniss, 2000; Mayer & Salovey, 1997). These skills are closely connected and relate to a single higher-order factor (Mayer, Caruso, & Salovey, 2000; Roberts, Zeidner, & Matthews, 2001). The role of affect-related skills in work settings became a "hot" topic with the introduction of the

“emotional intelligence” concept into academia (cf. Mayer & Salovey, 1997). Although this line of research has attracted severe criticism (most recently, see Locke, 2005), theoretical and empirical support for the usefulness of such an integrative concept in the workplace seems to accumulate (Ashkanasy & Daus, 2005; Zeidner *et al.*, 2004). Throughout this paper we will use the term “emotional competence” rather than emotional intelligence. Conceptually, emotional competence can be understood as the manifestation of actual (work-related) skills based on emotional intelligence (Zeidner *et al.*, 2004). As such, some conceptualizations of emotional competence comprise not only affect-related capabilities but also trait-like attributes and general orientations (Zeidner *et al.*, 2004). However, in our understanding, the “core” dimensions of both emotional intelligence and emotional competence (and thus the processes associated with them) are largely identical. These core dimensions are awareness for the emotions of oneself and others and regulation of one’s own and others’ emotions. Thus, in our opinion, the two concepts overlap strongly as long as they are conceptualized (and operationalized) around these central dimensions. Although this is the case in the present study, we prefer the term ‘competence’ rather than ‘intelligence’, mainly for two reasons: First, in contrast to intelligence, the use of the term competence emphasizes that the affect-related skills are changeable (Zeidner *et al.* 2004). In fact, as Luthans (2002) points out, this “open-to-development criterion” is central to the POB approach. There is some evidence that emotional competence can be developed. For example, the literature on stress reduction programs shows that individuals can learn and apply affect-related strategies to reduce stress symptoms (e.g., Roger & Hudson, 1995). Second, most of the self-report measures of emotional intelligence (including the ones used in this study) do not measure maximally possible behavior, as the intelligence label implies, but typical behavior, which is closer to the competence concept (cf. Ackerman, 1994).

Emotional competence and service work

In most service settings, the direct interaction between employee and customer plays a crucial role. Accordingly, service encounters have been called the “moment of truth” in which the customer decides to buy a product or not. In most service jobs, one of the central tasks for the employee is to create a positive affective atmosphere during the encounter (Pugh, 2001). Such a positive atmosphere ensures a smooth interaction with the customer while making a positive outcome more likely. Emotionally competent employees should be more successful in fulfilling this “emotional task”. First of all, emotionally competent employees are expected to have higher levels of empathy and sensitivity toward affective or other social signals which serve as a basis for any action toward their customers (Lopes, Salovey, Côté, & Beers, 2005). Also, their capability to regulate their own emotions should be reflected in a more flexible focus of attention and a broader capacity for self-control (Lopes *et al.* 2004, 2005). Thus, it should be easier for highly emotionally competent employees to maintain a positive affective state in difficult or demanding situations (e.g., dealing with angry customers). Moreover, the capability to regulate the customer’s emotions may lead to the use of better interaction strategies (Lopes *et al.*, 2004). For example, in the face of risky decisions (as in financial services), emotionally competent employees may choose strategies that first reduce customers’ feelings of insecurity or anxiety before letting the customer make a final decision.

Thus, service employees with a high level of emotional competence should be able to successfully manage their own and their customers’ affect in a service encounter. There is some research supporting this assertion. In a study with call-center agents, Totterdell and Holman (2003) found a positive link between emotional intelligence and the use of positive refocus strategies (e.g., thinking about pleasant things). Furthermore, Giardini and Frese (2006) found that service employees high in emotional competence were less likely to show reduced levels of well-

being in the face of stressful emotional demands. However, to our knowledge there is no study linking emotional competence directly to individuals' affective states and perceptions in service settings. Thus, based on the arguments above, we contend that employees high in emotional competence should be able to create an affective atmosphere that is reflected in the positive affective state of both members of the dyad (i.e., employee and customer) during the service encounter.

Hypothesis 1: Employees' emotional competence is positively related to employee positive affect.

Hypothesis 2: Employees' emotional competence is positively related to customer positive affect.

The Relationship between Employee and Customer Positive Affect

Figure 1 indicates a reciprocal relationship between employee and customer positive affect at the level of the service encounter. Following other scholars, we argue that this relationship is based on processes of emotional contagion which is defined as individuals' tendency "to mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person and, consequently, to converge emotionally" (Hatfield, Caccioppo, & Rapson, 1994, p. 4). Research has shown that if one person in an interaction expresses positive (or negative) feelings, the other person tends to experience a corresponding positive (or negative) affective state (Hatfield *et al.*, 1994). Accordingly, recent studies in the service context have found a link between the employee's display of positive emotions (e.g., by smiling or a friendly greeting) and the customer's positive affective state (Pugh, 2001; Tsai & Huang, 2002). However, as social interactions entail a constant flow of action and reaction, the flow of affective information probably does not only lead from the employee to the customer but also the other way around.

More specifically, employee's emotional signals should lead to equivalent open responses by the customer. These responses should then produce a corresponding affective state in the employee which is then expressed and so on (Côté, 2005; Rafaeli & Sutton, 1989). Thus, the same spiral might also be triggered by an initially positive affective state of the customer (maybe as a result of the employees' ability to regulate others' emotions) that leads to positive affective changes in the employee (Côté, 2005). In any case, this ongoing emotional feedback loop should not only lead to the synchronization of the display of feelings but also to the convergence of affective states of employee and customer. To our knowledge, this relationship between employees and customer affective state within service interactions has not been investigated before.

Hypothesis 3: Employee positive affect and customer positive affect are positively related.

Customer Positive Affect, Evaluations, and Customer Satisfaction

Furthermore, we propose a positive relationship between customer positive affect and customer evaluation of the service encounter. Affect is often used as a source of information when people form attitudes or make judgments or evaluations (Schwarz, 1990). Thus, a customer in a positive affective state may attribute his state to the success of the service interaction and, consequently, may evaluate the encounter positively. Additionally, as services are to a large extent nontangible, the experience of positive affect is often a part of customer expectations. Confirmation of this expectation, in turn, may lead to a positive evaluation of the service encounter and service organization. In line with these theoretical arguments, research has consistently found a positive relationship between customer positive affect and customer evaluations (e.g., Pugh, 2001; Tsai & Huang, 2002; Wirtz & Bateson, 1999). In this study we will use the evaluation of the service encounter as a more proximal and customer satisfaction as a more distal outcome variable. The two variables are conceptually distinct. Customer satisfaction is a

summarizing judgment about the service as a whole while the evaluation of the service encounter describes an aspect of service quality (Gotlieb, Brewal, & Brown, 1994; Parasuraman, Zeithaml, & Berry, 1988). Moreover, conceptually and empirically it is suggested that service quality is a causal antecedent of customer satisfaction (Gotlieb *et al.*, 1994). Thus, we hypothesize that customer positive affect is positively related to customer evaluation of the service encounter, which in turn is positively related to customer satisfaction. Although these proposed relationships are not new to the literature, to our knowledge they have not been tested in a multilevel context.

Hypothesis 4: Customer positive affect and customer evaluation of the service encounter are positively related.

Hypothesis 5: Customer evaluation of the service encounter is positively related to customer satisfaction.

In summary, as depicted in Figure 1, we hypothesize that individuals high in emotional competence provide successful affect management in service encounters, conceptualized as positive affective states of both employee and customer. These affective experiences, in turn, are reflected in evaluations provided by the customers following the service encounter.

Organizational Context

The participants of this study were 53 bank consultants. They were employed by five banks in different cities in Germany. The banks are members of a larger network. The network is organized in such a way that each bank covers a certain region. The banks are supported by central institutions that, for example, analyze financial markets or develop new products. Thus, although the single bank has a considerable economic autonomy, the financial products that are offered are identical. Moreover, the network members share many organizational standards, including those that concern human resource management (e.g., apprenticeship training).

Strategically, the network has an “all-in-one” approach and serves private as well as business customers. Accordingly, the product portfolio of most member banks ranges from simple private accounts over loans to the management of large assets.

The participants advised customers about financial affairs such as investments and loans. Only employees with a certain degree of experience are entitled to do this kind of work. Accordingly, the mean age of the employee sample was relatively high (36.7 years), given the fact that the “traditional” bank employee begins his/her career between the age of 17 and 20 years with a specific 3-year apprenticeship training. On average, they had worked in this job for 9 years.

Method

Sample

Employee sample. We handed out questionnaire packages (see below) to 96 bank consultants. All consultants were told that the purpose of the study was to assess the satisfaction of the bank’s customers and that participation was voluntary. The employees were assured that no individual but only general results would be reported to the bank. We obtained usable data from 53 employees which corresponds to a response rate of 55.2 percent. Seventy percent of the employees were male. The employees’ mean age was 36.7 years (SD = 7.2), mean organizational tenure was 14.1 years (SD = 8.5).

Service encounters. We collected data from 394 service encounters. Thus, on average, about seven encounters with each service employee were available (range 5 to 13). Sixty-one percent of the encounters were consultations about a financial investment, 24 percent consultations about loans, and 15 percent concerned other services (e.g., information about online banking). Eighty-seven percent of the encounters took place in a separate office, 8 percent at a counter in the main

hall, and 5 percent at the customer's home. The duration of the encounter ranged from 1 minute to more than 2 hours, with a mean duration of 37 minutes ($SD = 22$ minutes).

Customer sample. Corresponding to the number of service encounters, the customer sample consisted of 394 customers of the bank. Forty-seven percent of the customers were female. The mean age was 44.8 years ($SD = 15.6$).

Materials and Procedure

We instructed the service employees to ask their customers, after each encounter, to complete a brief questionnaire about the interaction. If they consented, they were given a questionnaire to fill out at a separate location in the bank. This questionnaire contained items assessing the customers' positive affect and their service encounter evaluations. The service employees also filled out a questionnaire assessing their affect during the same interaction. In addition, on a different occasion, the service employees filled out a questionnaire that included the scales for assessing emotional competence and demographic variables.

Measures: Service Encounter Level

Employee and customer positive affect. The affective experience of service employees and customers was measured by asking the respondent "How did you feel during the interaction?". Respondents answered six bipolar items. The items were "unpleasant – pleasant", "well – unwell" (recoded), "calm – excited" (recoded), "relaxed – nervous" (recoded), "inferior – superior", and "secure – insecure" (recoded) with the response format ranging from -3 to $+3$ (later recoded into a response format from 1 to 7). The items "calm-excited" and "inferior-superior" were taken from the Mehrabian and Russell (1974) affect measure. This measure has been used in previous service-related research (e.g., Foxall & Greenley, 1998). The other four items were taken from other

studies on affective reactions (Russell, Weiss, & Mendelsohn, 1989; Rafaeli & Kluger, 2000) and adapted to the bipolar format. These items were selected from a larger pool of positive affect items and were considered to be particularly suitable for the present context (both in terms of content and face validity) as a result of discussions with experts from the bank. Cronbach's alphas for employee affect and customer affect was .83 and .86, respectively.

Customer evaluation of the encounter. Customers' evaluation of the encounter was measured using five items that were developed for this study. The items relate to different aspects of service-oriented behavior in consulting services ("The employee provided me with all the information I needed", "The employee addressed my individual needs", "I was able to follow the conversation easily", "The employee provided me with many suggestions", "It was possible to understand everything at any time of the encounter"). The response format ranged from 1 (complete disagreement) to 6 (complete agreement). Cronbach's alpha for the scale was .78.

Customer satisfaction. Based on a measure used by Wirtz and Bateson (1999) we developed four items to assess customer satisfaction: "How satisfied are you with the bank in general?", "How satisfied are you with the result of the preceding encounter?", "I would recommend the bank to other people", and "I intend to change banks" (reverse scored). The response format ranged from 1 (completely dissatisfied/disagree) to 6 (completely satisfied/agree). Cronbach's alpha for the scale was .75.

Measures: Service Employee Level

Emotional competence. Because emotional competence is conceptualized as a second-order factor that comprises more specific emotional skills (see theory section), we applied an indicator approach to measuring emotional competence (e.g., Ciarrochi, Chan, & Bajgar, 2001; Fox & Spector, 2000; Giardini & Frese, 2006; Wong & Law, 2002). That is, instead of assessing

emotional competence with a single scale, we used scales of variables that both correspond to the central dimensions of emotional competence and are suitable for the service context. These scales were then subjected to a confirmatory factor analysis to verify the existence of a common second-order factor.

In this study, emotional competence was comprised of four emotional skills: sensitivity to affective cues, perspective taking, regulation of others' affect, and affective self-regulation. These indicators are part of most conceptualizations of emotional competence and emotional intelligence (Zeidner *et al.*, 2004). *Employees' sensitivity to affective cues* was measured using the subscale "Sensitivity to the expressive behaviors of others" of the Revised Self-Monitoring Scale (Lennox & Wolfe, 1984: six items, Cronbach's alpha = .78, sample item "In conversations I am sensitive to even the slightest change in the facial expression of the person I'm conversing with"). *Employees' perspective taking* was measured with 6 items of the perspective taking subscale of the Interpersonal Reactivity Index (Davis, 1983). A sample item from this scale is "Before criticizing somebody, I try to imagine how I would feel if I were in their place". One item had to be removed from the scale because of its insufficient item-total correlation (i.e., $r_{it} < .30$). Cronbach's alpha of the six-item scale was .73. For the *employees' regulation of other's affect*, we used a five-item scale that was made up of items from the emotional intelligence questionnaire developed by Schutte and colleagues (1998). The items were chosen on the basis of their content and their loading on one factor in previous studies that utilized the Schutte *et al.* (1998) questionnaire (Ciarrochi, Chan, & Bajgar, 2001; Petrides & Furnham, 2000). A sample item from this scale is "I compliment others when they have done something well". Cronbach's alpha of this scale was .79. Finally, *employees' affective self-regulation* was measured with the subscale 'repair' of the Trait Meta Mood Scale (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). A sample item is "No matter how badly I feel, I try to think about pleasant things". We removed one item due to its

insufficient item-total correlation (i.e., $r_{it} < .30$). Cronbach's alpha of the seven-item scale was .76. The response format for all four scales ranged from 1 (disagree absolutely) to 5 (agree absolutely).

To be able to conduct a second-order confirmatory factor analysis we additionally collected data on the four scales from a sample of 114 students who were employed part-time (mean age 25.1 years, $SD = 4.1$; 51% female). Because the two samples did not significantly differ in means and standard deviations of the emotional competence scales, we combined the two samples, resulting in an overall sample of 169. Using structural equation modeling we tested a model with one second-order factor and four first-order factors (i.e., the four indicators of emotional competence). Each latent first-order factor was measured by two "parcels" (Marsh, Hau, Balla, & Grayson, 1998), assigning one half of the respective scales' items to one parcel and the other half to the other parcel. The four factor model demonstrated a very good fit ($\chi^2 = 22.9$, $df = 20$, $p < .30$, $GFI = .97$, $CFI = .99$, $TLI = .99$, $RMSEA = .03$). Therefore, the four scales were averaged into one measure that had a Cronbach's alpha of .72.

Control variables. There are other person characteristics that might predict positive affect in service encounters, of these most notably trait positive affectivity (Pugh, 2001). Thus, to rule out alternative explanations for our results we used employee positive affectivity as a control variable in all multilevel analyses. Positive affectivity was measured with the respective subscale of the PANAS (Watson, Clark, & Tellegen, 1988). Cronbach's alpha of the 10-item scale was .83.

Given the wide range of encounter duration, we also examined whether the amount of time spent in an encounter might influence our results. Duration of encounter correlated only with customer positive affect (Table 1). Furthermore, we conducted the multilevel analyses with and without duration of encounter as a control variable, and the results were very similar. For the sake of clarity of display and to not reduce statistical power, in the following we report the results without this control variable.

Analytical approach

We opted to analyze the data with hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992). One reason for this decision lies in the fact that our model describes relationships that comprise variables on two different levels. Variables on the level of the single service encounter (level 1), that is, service employees' and customers' affective experiences and customers' evaluations, are hypothesized to be related to emotional competence which is a stable characteristic of the service employee (level 2). To reflect these two levels we used a hierarchically nested design, that is, we investigated multiple service encounters for each service employee. One strategy for dealing with this nested design would be to aggregate level 1 data to level 2 (i.e., service employee level). However, this procedure reduces statistical power and does not allow the processing of potentially meaningful information from the service encounter level (Hofmann, 1997). More importantly, our model involves cross-level relationships as well as relationships *within* specific situations (i.e., encounters). Aggregation of level 1 variables might change the variables' meaning and, thus, the meaning of the relationship (Morgeson & Hofmann, 1999). For example, a correlation between employee affect and customer affect *within* a specific encounter does not have the same meaning as the correlation between employee affect and customer affect *averaged across* encounters. HLM allows the simultaneous processing of data from the two levels without losing important information. At the same time, HLM provides the opportunity to model cross-level effects. Moreover, in contrast to the Ordinary-Least-Square approach, HLM accounts for the fact that, in hierarchically nested data designs, the measurements at level 1 are not independent.

To test the hypotheses we used a combination of HLM and path analysis. Corresponding to traditional path analysis with linear regression (Billings & Wroten, 1978), we ran a series of HLM

analyses in which initially the most distal variable of our conceptual model (customer satisfaction) was regressed on all the other variables, then the second to last variable (evaluation of the encounter) was taken as the criterion and regressed on the preceding variables, and so on. Thus, following this strategy, we tested four HLM models. For clarity of exposition Table 2 shows the HLM results in the reverse order of models tested.

We centered both level 1 and level 2 variables around the grand mean because this approach is suggested for multilevel mediator models and because it reduces potential problems with multicollinearity (Bryk & Raudenbush, 1992; Hofmann & Gavin, 1998). We also ran the same analyses with all (level 1) variables group mean centered (i.e., centered around the mean of all encounters of a specific service employee) and yielded basically the same results. Therefore, we only report the results with the grand mean centering approach.

In line with the procedure proposed by Hofmann (1997), we included a preliminary step for all HLM models, which is not shown in Table 2. We tested a null model with no predictor variable that enabled us to test whether there is systematic between-person variance in the criteria, which is a necessary condition to be met in HLM models. The analyses indicated that for all four criteria this was the case (χ^2 tests; for each criterion $p < .001$). Moreover, the percentage of between-person variance relative to the total variance was assessed: 12.8 percent for customer satisfaction, 14.2 percent for customer evaluation of service encounter, 22.4 percent for customer positive affect, and 32.6 percent for employee positive affect.

Results

Table 1 shows the means, standard deviations, reliabilities, and correlations of the variables on the service encounter level (level 1) and the service employee level (level 2; i.e., variables from

level 1 were aggregated for each service employee). Respective correlations on the two levels are similar but not identical.

Multilevel path analyses

Table 2 shows the results for each of the four HLM models. As can be seen, employee positive affectivity (level 2) was not related to the criterion in any of the models. Hypothesis 1 predicted a positive relationship between employee emotional competence and employee positive affect in the service situation. Thus, we regressed employee positive affect on emotional competence while additionally controlling for customer positive affect (level 1). Consistent with our hypothesis, emotional competence emerged as significant predictor ($\gamma = .289$, $SE = .133$, $p < .05$).

To test Hypothesis 2, which predicted a positive relationship between employee emotional competence and customer positive affect, and Hypothesis 3, which predicted a positive relationship between employee positive affect and customer positive affect, we regressed customer positive affect on emotional competence and employee positive affect. Hypothesis 2 was rejected as emotional competence did not emerge as a significant predictor of customer positive affect ($\gamma = .005$, $SE = .160$, ns). As predicted in Hypothesis 3, however, employee positive affect was positively related to customer affect. ($\gamma = .338$, $SE = .084$, $p < .001$).

In the next model, evaluation of the service encounter was regressed on employee positive affect, customer positive affect, and employee emotional competence. Supporting Hypothesis 4, customer positive affect was positively related to the customer evaluation of the encounter ($\gamma = .172$, $SE = .040$, $p < .001$). Unexpectedly, also emotional competence was positively related to customer evaluation of the encounter ($\gamma = .220$, $SE = .090$, $p < .01$).

Finally, Hypothesis 5 predicted that the evaluation of the service encounter is positively related to customer satisfaction. Thus, in the final model, customer satisfaction was regressed on

all level 1 and level 2 variables. Consistent with our hypothesis, evaluation of the encounter was positively related to customer satisfaction ($\gamma = .734$, $SE = .081$, $p < .001$). Although not hypothesized, employee positive affect emerged as an additional significant predictor ($\gamma = .148$, $SE = .042$, $p < .001$).

Figure 2 presents a simplified illustration of the HLM path analysis results.

Discussion

The main objective of this study was to test a two-level model that links service employees' emotional competence to customers' evaluations of the service encounter and customer satisfaction. More specifically, the model predicts that emotional competence is associated with both the employee's and the customer's affective state during the service encounter. Customer positive affect, in turn, was hypothesized to be related to customer evaluation of the service encounter, which was proposed to be related to customer satisfaction. The findings support large parts of our model (see Figure 2).

The results of the HLM path analysis suggested two avenues for the relationship between emotional competence and customers' evaluations. The first avenue emerged as predicted. Emotional competence was associated with employee positive affect (Hypothesis 1) which, in turn, was related to the customer positive affect. In contrast to our expectations, however, emotional competence was not directly associated with customer positive affect (Hypothesis 2). This finding may suggest that one important way to regulate the customers' positive affect requires the employees to first regulate their own affect, which then "spills over" to the customer. The second, and unexpected, avenue was represented by a direct link between emotional competence and evaluation of the service encounter. This relationship suggests that although some of the behaviors shown by the service employee were not mirrored in the customers' positive

affect they did influence the customers' evaluations by different mechanisms. One possibility is that service employees who are affectively competent have higher job-specific self-efficacy beliefs, that is, they are convinced that they can handle emotionally challenging situations successfully (Gist & Mitchell, 1992). This belief may be translated into the display of confidence and trustworthiness, which then is evaluated positively by the customer.

Employee and customer positive affect were positively related which supported our hypothesis concerning the contagion effect (Hypothesis 3). This result gives credit to the notion that affective contagion processes in service encounters cannot only be described on a surface level (i.e., a link between employee's emotional display and customer's affective reaction; Pugh, 2001) but also on the level of actual affective experience. Although we did not provide a direct test of the contagion effect because this would necessitate a longitudinal and/or observational design (see below), we did find some evidence for emotional convergence. Furthermore, we also found a direct positive link between employee positive affect and customer satisfaction that was not hypothesized. It is possible that the employee positive affect may be interpreted by the customer as a signal that everything is going well, finally leading to greater customer satisfaction. Also, based on research relating positive affect to better decision making and cognitive flexibility (Fredrickson, 2001), one can speculate, in the service context, whether positive affect may help employees' to apply more adequate consulting strategies and objectively better solutions (cf. Humphrey & Ashforth, 1994).

Customer positive affect was associated with the evaluation of the service encounter (Hypothesis 4). This result is in line with those from previous studies that found a link between customers' positive affect and customers' evaluations (e.g., Oliver, 1993; Pugh, 2001). Finally, customers' evaluation of the encounter was positively related to customer satisfaction (Hypothesis 5), a finding which supports the notion that the specific judgments made by customers about the

encounter can be translated into broader judgments about the service (Gotlieb et al., 1994). This finding further illustrates the importance and centrality of service encounters as “moments of truth” for service companies.

Emotional competence and POB

Theoretically speaking, emotional competence can be considered a Positive Organizational Behavior (POB) concept because it focuses on individuals’ strengths with regard to the successful management of affect in the workplace (Luthans, 2002). In our opinion, our study has also underlined this status empirically. First, the results suggest that emotional competence is related to positive emotional dynamics between the employee and the customer, even when the influence of employee positive affectivity is controlled for. However, as was pointed out above, a POB concept must also demonstrate its relation to effectiveness and performance (Luthans, 2002). Anecdotal or theoretical accounts about the relationship between emotional competence and customer evaluations have been provided in the past (e.g., Goleman, 1998) but clear empirical evidence has been lacking. Thus, if one accepts customer evaluations as relevant indicators for individual and organizational performance, this study contributes to strengthening the position of emotional competence as a POB concept.

Limitations and directions for future research

A possible limitation of the study lies in the selection of the employee and the customer sample. The participation of the service employees was voluntary which may have resulted in a systematic bias. It is a common phenomenon in field research that high performance employees are more likely to volunteer for a study. Furthermore, although we instructed the service employees to hand out the questionnaires to their customers back-to-back, the distribution of customer

evaluations may be biased to a certain extent. Unsatisfied customers may have refused to oblige or may even not have been asked by the service employees. This would result in an overrepresentation of more satisfied customers. Both sample biases could have led to range restrictions in some of our variables. However, range restriction often has the consequence that relationships are underestimated (Nunnally, 1978). In this case, our coefficients would be rather conservative estimates, thus making our results even more compelling.

A second limitation concerns the sample of 53 to 55 service employees which might be considered rather small. However, level 2 samples of this size are not unusual for studies using HLM (e.g., Ilies & Judge, 2002, N = 26; Kidwell, Mossholder, & Bennett, 1997, N = 49). Therefore, we deem the number of observed service employees as sufficient, although a larger sample size would certainly be desirable in future studies.

As a third limitation, our model and the path analytic procedure assumed a causal chain that cannot be tested directly in a cross-sectional design. Moreover, alternative causal links might be possible as well. For example, customers' prior experiences with the bank might have resulted in a relatively stable satisfaction judgment. The level of satisfaction that customers' bring to the encounter might then influence the affective state people experience during encounters. Thus, future studies might take into account attitudes or tendencies that customers have prior to the encounter. In addition, to test causal relationships directly, future research should apply a design with multiple measurement points during a service encounter. The use of the experience sampling method (Alliger & Williams, 1993) or observational studies (e.g., Tsai & Huang, 2002) may further our understanding of the relevant processes.

A final limitation concerns the potential context specificity of the results. In this study, a sample of bank consultants was used as the pool of service employees. Research in other service areas might yield different results. It could be argued that, in service settings where employees

have a much lower level of autonomy in dealing with customers, emotional competence might not be of particular importance. For example, in fast-food restaurants, service interactions are brief and rather predetermined. It can be hypothesized that in these settings there is probably not much of a chance for employees' mental or behavioral regulatory strategies to become effective. Therefore, future research might look more closely at the relationship between job characteristics and the effectiveness of emotional competence.

Future research should also examine the influence of other level 2 variables on affective processes in service encounters. This is also indicated by the amount of unexplained variance in the intercepts. Employee characteristics (verbal ability) as well as workplace characteristics (e.g., autonomy) could be potential candidates. Also, organizational variables (i.e., level 3 variables) would be interesting to study. For example, service organizations differ in their service climate, that is, how strongly the service idea pervades different parts of the organizations (e.g., managerial behavior, human resources practices, etc; Schneider, White, & Paul, 1998). We would hypothesize that service climate may create better working conditions for employees, resulting in a higher positive affect level of the service employees, which then affects customer positive affect. There might also be links between level 2 and level 3 variables. For example, one can hypothesize that the level of emotional competence of the employees is higher in organizations with a strong service climate through selection and/or personnel development.

In terms of practical implications, the findings suggest that the skills related to the perception, processing, and the regulation of affective states of selves and others are important factors for determining how service encounters are perceived by customers. When trying to enhance their service quality, service companies may want to focus on improving these skills. One way to do this is to select and hire service personnel that already possess this skill. A second way involves training or coaching efforts to improve the competence of existing staff. For example,

training may focus on dealing with different customer emotions (e.g., anger, anxiety), and different strategies for the different emotions may be developed. The results also highlight the value of service employees' positive affect for the success of service encounters. Thus, service organizations should do everything possible to maintain the positive affect of their service employees, for example, by creating a pleasant physical working environment or by providing a supportive climate in workgroups or departments.

References

- Ackerman, P. L. (1994). Intelligence, attention, and learning: Maximal and typical performance. In: D. K. Detterman (Ed.), *Current topics in human intelligence. Vol. 4: Theories of intelligence* (pp. 1-27). Norwood, NJ: Ablex.
- Alliger, G. M., & Williams, K. J. (1993). Using signal-contingent experience sampling methodology to study work in the field: A discussion and illustration examining task perceptions and mood. *Personnel Psychology, 46*(3), 525-549.
- Ashkanasy, N. M., & Daus, C. S. (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. *Journal of Organizational Behavior, 26*, 441-452.
- Billings, R. S., & Wroten, S. P. (1979). Use of path analysis in Industrial/Organizational Psychology: Criticisms and suggestions. *Journal of Applied Psychology, 63*(6), 877-688.
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical Linear Models: Applications and data analysis methods*. Newbury Park: Sage.
- Cherniss, C. (2000). Social and emotional competence in the workplace. In: R. Bar-On & J. D. A. Parker (Eds.), *The Handbook of Emotional Intelligence* (pp. 433-458). San Francisco: Jossey-Bass.
- Ciarrochi, J. V., Chan, A. Y. C., & Bajgar, J. (2001). Measuring emotional intelligence in adolescents. *Personality and Individual Differences, 31*, 1105-1119.
- Côté, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *Academy of Management Review, 30*(3), 509-530.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*(1), 113-126.

Fox, S., & Spector, P. E. (2000). Relations of emotional intelligence, practical intelligence, general intelligence, and trait affectivity with interview outcomes: it's not all just 'G'. *Journal of Organizational Behavior*, 21, 203-220.

Foxall, G., & Greenley, G. (1998). The affective structure of consumer situations. *Environment and Behavior*, 30(6), 781-798.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226.

Giardini, A., & Frese, M. (2006). Reducing the negative effects of emotion work in service occupations: Emotional competence as a psychological resource. *Journal of Occupational Health Psychology*, 11(1), 63-75.

Gist, M. E. & Mitchell, T. E. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17(2), 193-211.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam.

Gotlieb, J. B., Grewal, D., & Brown, S. W. (1994). Consumer satisfaction and perceived quality: Complimentary or divergent constructs. *Journal of Applied Psychology*, 79(6), 875-885.

Hatfield, E., Caccioppo, J. T., & Rapson, R. L. (1994). *Emotional Contagion*. Cambridge: University Press.

Hofmann, D. A. (1997). An overview of the logic and rationale of hierarchical linear models. *Journal of Management*, 23(6), 723-744.

Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24(5), 623-641.

Humphrey, R. H., & Ashforth, B. E. (1994). Cognitive scripts and prototypes in service encounters. *Advances in Services Marketing and Management*, 3, 175-199.

Ilies, R., & Judge, T. A. (2002). Understanding the dynamic relationships among personality, mood, and job satisfaction: A field experience sampling study. *Organizational Behavior and Human Decision Processes*, 89, 1119-1139.

Kidwell, R. E., Mossholder, K. W., & Bennett, N. (1997). Cohesiveness and organizational citizenship behavior: A multilevel analysis using work groups and individuals. *Journal of Management*, 23(6), 775-793.

Lennox, R. D., & Wolfe, R. N. (1984). Revision of the Self-Monitoring Scale. *Journal of Personality and Social Psychology*, 46(6), 1349-1364.

Locke, E. A. (2005). Why emotional intelligence is an invalid concept. *Journal of Organizational Behavior*, 26, 425-431.

Lopes, P. N., Brackett, M. A., Nezlek, J. B., Schütz, A., Sellin, I., & Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin*, 30(8), 1018-1034.

Lopes, P. N., Salovey, P., Côté, S., & Beers, M. (2005). Emotion regulation abilities and the quality of social interaction. *Emotion*, 5(1), 113-118.

Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57-72.

Marsh, H. W., Hau, K., Balla, J. R., & Grayson, D. (1998). Is more ever too much? The number of indicators per factor in confirmatory factor analysis. *Multivariate Behavioral Research*, 33, 181-220.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In: P. Salovey & D. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3-34). New York: Basic Books.

Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Selecting a measure of emotional intelligence: The case for ability scales. In R. Bar-On & J. D. A. Parker (Eds.), *The Handbook of Emotional Intelligence* (pp. 320-342). San Francisco: Jossey-Bass.

Mehrabian, A., & Russell, J. A. (1974). *An Approach to Environmental Psychology*. Cambridge, MA: MIT Press.

Morgeson, F. P., & Hofmann, D. A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review*, 24, 249-265.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.

Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *Academy of Management Journal*, 44(5), 1018-1027.

Rafaeli, A., & Sutton, R. (1989). The expression of emotion in organizational life. In: L. L. Cummings & B. Staw (Eds.), *Research in Organizational Behavior* (pp. 1-42). Greenwich, CT: JAI Press.

Rafaeli, A., & Kluger, A. N. (2000). The three dimensions of affective reactions to physical appearance. In: N. Ashkanasy, C. Härtel & W. Zerbe (Eds.), *Emotions and Organizational Life* (pp. 141-156). Westport, CT: Quorum Books.

Roberts, R. D., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards for an intelligence? Some new data and conclusions. *Emotion*, 1(3), 196-231.

Roger, D., & Hudson, C. (1995). The role of emotion control and emotional rumination in stress management training. *International Journal of Stress Management*, 2(3), 119-132.

Russell, J. A., Weiss, A., & Mendelsohn, G. A. (1989). Affect Grid: A single-item scale of pleasure and arousal. *Journal of Personality and Social Psychology*, 57(3), 493-502.

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. In: J. W. Pennebaker (Ed.), *Emotion, Disclosure and Health* (pp. 125-154). Washington, DC: American Psychological Association.

Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Test of a causal model. *Journal of Applied Psychology, 83*(2), 150-163.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., et al. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*, 167-177.

Schwarz, N. (1990). Feelings as information: Informational and motivational functions of affective states. In: E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of Motivation and Cognition: Foundations of Social Behavior* (Vol. 2, pp. 527-561). New York: Guilford Press.

Totterdell, P., & Holman, D. (2003). Emotion regulation in customer service roles: Testing a model of emotional labor. *Journal of Occupational Health Psychology, 8*(1), 55-73.

Tsai, W.-C., & Huang, Y.-M. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology, 87*(5), 1001-1008.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063-1070.

Wirtz, J., & Bateson, J. E. G. (1999). Consumer satisfaction with services: Integrating the environment perspective in services marketing into the traditional disconfirmation paradigm. *Journal of Business Research, 44*, 55-66.

Wong, C.-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, *13*, 243-274.

Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology: An International Review*, *53*(3), 371- 399.

Table 1

Means, Standard Deviations, and Correlations of the Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Employee emotional competence	3.76	0.38	-	.43**	-.09	.35*	.07	.36**	.09
2 Employee positive affectivity	3.86	0.48	-	-	-.03	.19	.00	.08	.05
3 Duration of encounter	36.86	22.44	-	-	-	.12	.30*	.02	-.12
4 Employee positive affect	5.76	0.75	-	-	.04	-	.47**	.24	.16
5 Customer positive affect	5.19	0.97	-	-	.16**	.31**	-	.38**	.15
6 Customer evaluation of encounter	5.46	0.51	-	-	.08	.15**	.33**	-	.42**
7 Customer satisfaction	5.39	0.64	-	-	.04	.22**	.26**	.59**	-

Note: values below the diagonal: service encounter level (level 1; $N = 385-394$); values above the diagonal: service employee level (level 2; $N = 52-53$).

* $p < .05$. ** $p < .01$. Two-tailed tests.

Table 2

Results of the HLM Path Analysis

Fixed effects	Criterion							
	Employee positive affect		Customer positive affect		Customer evaluation of encounter		Customer satisfaction	
	Gamma coefficients	SE	Gamma coefficients	SE	Gamma coefficients	SE	Gamma coefficients	SE
<i>Situation variables (Level 1)</i>								
Employee positive affect			.338***	.084	.031	.039	.148***	.042
Customer positive affect	.174***	.044			.172***	.040	.035	.031
Customer evaluation of service encounter							.734***	.081
<i>Employee variables (Level 2)</i>								
Emotional competence	.289*	.133	.005	.160	.220**	.090	-.177	.118
Positive affectivity	.148	.103	-.047	.153	-.051	.058	.038	.076

Note: N for level 1 variables is 394, and N for level 2 variables is 53.

* $p < .05$. ** $p < .01$. *** $p < .001$; one-tailed tests.

Figure Caption

Figure 1. Hypothesized path model

Figure 2. Overview of HLM path analysis results

Figure 1. Hypothesized path model

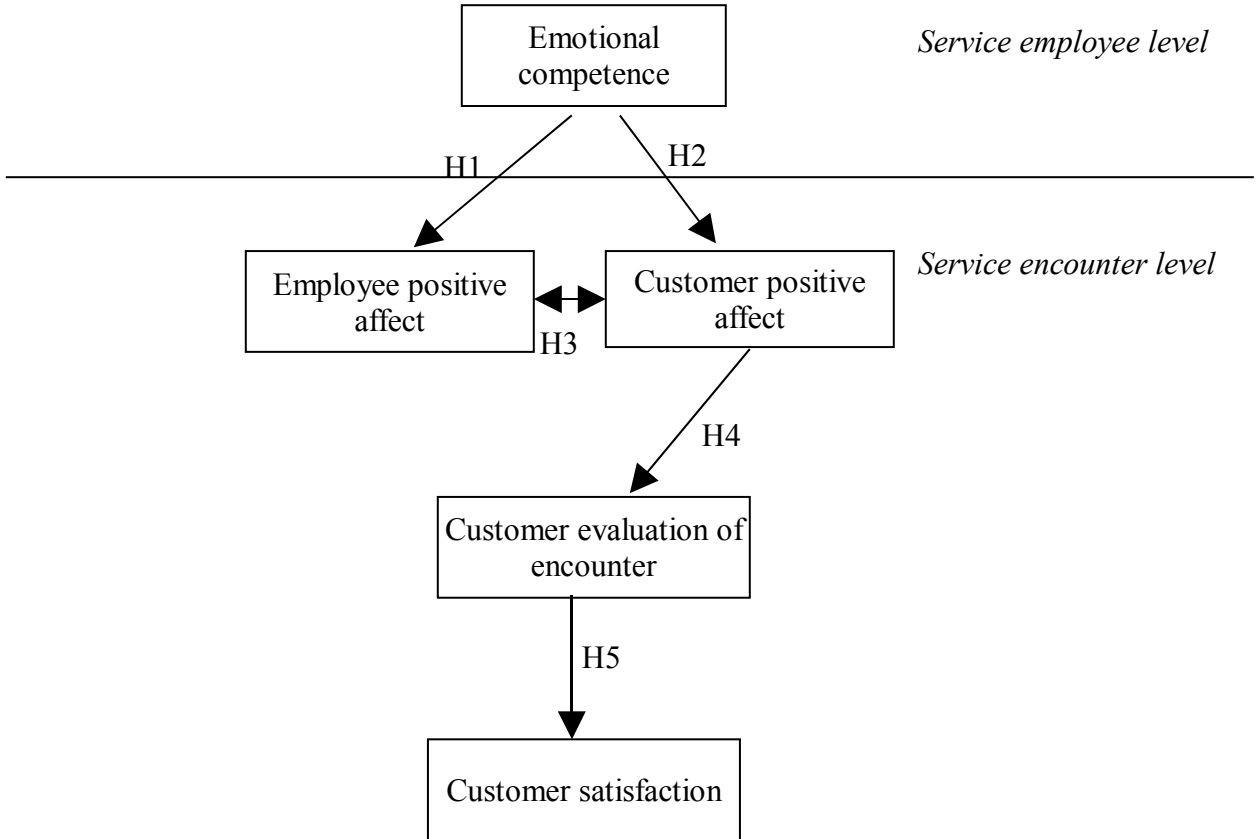


Figure 2. Overview of HLM path analysis results.

