# Running Head: SERVICE BEHAVIOUR, SERVICE CLIMATE AND SERVICE QUALITY

Title: Service Quality: The key role of Service Climate and Service Behaviour of Boundary

Employee Units

Esther Gracia,
Universidad de Zaragoza,
Teruel, Spain;

Eva Cifre, and Rosa Grau,
Universitat Jaume I,
Castellón, Spain.

This research was supported by grants from the Spanish Ministry of Science and Technology (PB98 1499-C03-03) and (#SEC02I18).

Address correspondence to Esther Gracia, Ph.D. Department of Psychology and Sociology. Universidad de Zaragoza. Facultad de Ciencias Sociales y Humanas. Campus Ciudad Escolar s/n. E-44003, Teruel, Spain. Telephone: +34 978618101-3084. Fax: +34 978618103. E-mail: egracia@unizar.es

Service behaviour, Service climate and Customer service quality 2

Abstract

This study simultaneously tests the influence of two resources that boundary employee units can

use to improve service quality. The first is the boundary employee units' perceptions of

organizational values oriented towards creating a good service climate. The second is the

boundary employees' competences oriented to providing the service, that is, their own service

behaviour during service transactions. Moreover, organizational climate and organizational

facilitators are also analysed as antecedents of the two resources. The sample consisted of 117

boundary employee units aggregated from 349 boundary employees and 1157 customers.

Structural Equation Modelling analysis confirmed that service quality perceived by customers

can be predicted by both service climate and service behaviour perceived by boundary employee

units. Moreover, organizational facilitators and organizational climate are significant antecedents

for higher levels of service climate. Therefore, results confirm the importance of both roles in

improving customer perceptions of service quality.

**Keywords**: Organizational facilitators, organizational climate, service climate, service behaviour,

service quality.

Classification: Research Article

Service Quality: The key role of Service Climate and Service Behaviour of Boundary Employee

Units

Service organizations are becoming increasingly involved in a highly competitive marketplace. One of the most important issues that enable units to stand out from their competitors is the quality of the service they offer. In fact, a sound recommendation is to assess service quality and customer satisfaction so as to be able, in turn, to assess organizations' benefits and performance (Brown & Mitchell, 1993; Price, Arnould & Tierney, 1995).

Service quality is the gap between what customers expect from the service and the perceptions of the service received (Grönross, 1990). Service quality comprises both tangible aspects such as room design or furnishing style, and intangible aspects like helping customers, providing prompt service, and the individualized attention that the firm offers its customers, among others (Parasuraman, Zeinthaml & Berry, 1988). Intangible aspects are the potential source of sustainable competitive advantage (Kuei, 1999; Salvador, 2004). While tangible aspects between close competitors are similar, intangible aspects, which depend entirely on service encounters, can open up a considerable distance between firms and their competitors. Indeed one of the key elements considered in a successful business service are boundary employees (Davidson, 2003; Tsaur & Lin, 2004).

The literature distinguishes two main reasons for the importance of the boundary employees' role. First, boundary employees are important as they are 'the link' between organizations and customers (Schneider, White & Paul, 1998). Boundary employees are aware of the customer-oriented values of the organization. Additionally, being in contact with customers allows boundary employees to transmit them these values and to receive direct and accurate feedback about what the customers obtained during the service they received, and what they had

expected prior to receiving it (Little & Dean, 2006; Narver & Slater, 1990). Thus, they have privileged information about organizational values and customers' responses. One advantage of this is that it allows them to become aware of whether values really match customer needs and what the consequent customer responses are.

Second, boundary employees are important because their service behaviour is the intangible component of service quality assessed by customers (Price et al., 1995). Thus, boundary employees are not simply passive links between organizations and customers, but active people who represent their organization. In other words, their performance in service encounters becomes the organization's performance (Ashforth, Kulik & Tom, 2008). For this reason, boundary employees' service behaviour is essential to improve future service relationships and to create customer service loyalty (Dimitriades, 2007).

Yet, research on enhancing service quality has very rarely considered both reasons at the same time (Yoon, Beatty & Suh, 2001). This study therefore aims to examine the importance of boundary employees in improving service quality by taking into account two key factors: boundary employees as an organization-customer link, and boundary employees as an active role of the service. In this vein, boundary employee units' perception of organizational issues oriented towards improving service quality and boundary employee units' perception of their own service behaviour would play a key role in improving customers' perception of service quality.

Previous literature supports the claim that service organizations must focus their strategies on customer-oriented values in order to improve their business profitability (Narver & Slater, 1990). However, this orientation should be more than an organizational premise; for it to be genuinely effective, employees have to perceive and share it. In this way, customer orientation

Service Climate: Creating a customer-oriented value

values are effective when taken as a perceived climate. The service climate has been considered as the central axis in service organizations from which to infer service quality (Little & Dean, 2006). Specifically, service climate becomes crucial when critical employees, as is the case of boundary employees, agree that this climate involves them (Yoon et al., 2001). One definition of service climate is "the shared perceptions of the strategies that are rewarded supported and expected with regard to customer service" (Schneider, 1990, p. 384). That is, "how important service is in their organization" (Yoon et al., 2001, p. 502).

Moreover, service climate can be enhanced through other organizational issues such as Human Resources Management (HRM) practices and managerial practices (Little & Dean, 2006). A pioneering study on bank branches found that the branches that provided any kind of facilitative conditions (efforts, supervisory behaviours and HRM policies) to overcome obstacles and encourage good interdepartmental relationships between colleagues were the same branches whose boundary employees described service climate in positive terms, and the same branches whose service quality was described positively by customers (Schneider et al., 1998).

Additionally, similar results were found in subsequent studies that examined actions and strategies aimed at controlling the obstacles that may interfere with employees' performance (Tesluk & Mathieu, 1999). In the tourist sector, Salanova, Agut and Peiró (2005) found that the central agents for improving service climate in hotel and restaurant units were organizational facilitators, such as technical support, autonomy and training previously detected by qualitative methods and measured quantitatively in the sample. Moreover, service climate also exerted a positive influence on customers' perceptions of service quality and loyalty.

Additionally, Davidson (2003) proposed a theoretical model that explains that organizational climate, which includes service climate, may influence service quality.

Organizational climate collects the shared perceptions of the organizational environment (González-Romá, Lloret & Peiró, 1995). Some studies went on to also investigate similar ideas. In a study of automotive manufacturers, results from 351 small organizations showed that both organizational facilitators, focused on the development of HRM practices, and climate, which includes both organizational climate and service climate features, were positively related to positive customer outcomes such as customer satisfaction and loyalty (Rogg, Schmidt, Shull & Schmitt, 2001).

Therefore, organizational facilitators and organizational climate could be fundamental issues for creating a service climate that would translate into higher customer perceptions of service quality.

Moreover, in service organizations, boundary employees share not only organizational environment, rules, goals and facilitators – they also share their customers. Indeed, nowadays, a single boundary employee rarely provides full service to one customer and they mostly have to work in units. Additionally, this trend seems to be on the increase in service organizations (Carmeli, 2008; Sprejtzer, Cohen & Ledford, 1999). Thus, a unit level seems to be more consistent than an individual level for studying the relationships that all the constructs of this study have with service quality. Therefore, previous findings and premises suggest the following hypotheses:

Hypothesis 1: The service climate perceived by boundary employee units is positively related to the service quality perceived by customers.

Hypothesis 2: The organizational issues perceived by boundary employee units (organizational facilitators and organizational climate) are positively related to the service climate perceived by boundary employee units.

However, boundary employee units should not be considered as passive entities that follow and transmit organization values to interact with customers, since they actually play an active role in improving service quality. Boundary employee units "create an image for the firm" (Bettencourt & Brown, 1997, p. 39). The direct interaction between boundary employees and customers plays a decisive role in buying or purchasing a service. Indeed, the capability to provide services beyond expectations is considered a critical factor for success (Haynes & Fryer, 2000). In this sense, boundary employees' behaviour is especially important for service quality. Therefore, not only organizational issues and customer-oriented values that generate a good service climate can improve service quality – it can also be improved by boundary employee units, with their service behaviour.

Service behaviour: The active role at service encounters

Service behaviour consists in employee's self-reports of role-prescribed and extra-role behaviours (Tsaur & Lin, 2004). Consequently, the dimensions of service quality, as perceived by boundary employees, range from the role-prescribed (i.e., reliability, which is the ability to perform the promised service dependably and accurately) to the extra role (i.e., empathy, that is, the caring, individualized attention that the firm provides its customers) and make it possible to check whether service behaviours are those required by customers (Kuei, 1999).

A few studies have tested the positive relationship between service behaviour and service quality (Williams, 1999; Hartline & Jones 1996). For instance, a study on tourist hotels in Taiwan showed that service behaviour reported by employees was positively related to service quality reported by customers (Tsaur & Lin, 2004). This study also found that boundary employees' training and development were the strongest HRM practices that improve service behaviour and, indirectly, facilitate higher levels of service quality. Additionally, similar conclusions have been

drawn from open-ended interviews with managerial staff at luxury hotels (Haynes & Fryer, 2000). Thus, previous findings suggest that organizational issues could also be positive antecedents for enhancing service quality through service behaviour. Specifically, in a unit-level study of boundary employees in hotels and restaurants, organizational facilitators and service behaviour of boundary employee units showed an interaction effect related to service quality perceived by customers (Gracia, Grau & Ventura, 2005). The results showed that service quality was higher when employees felt they offered high service behaviour, regardless of the level of the facilitators provided by the organization. However, when employees felt they offered low service behaviour, the organizational facilitators proved to be important to improve the service quality. Consequently, organizational facilitators could play a key role in explaining not only service climate, but also boundary service behaviour.

Accordingly, the following hypotheses were tested in this study:

Hypothesis 3: Service behaviour perceived by boundary employee units is positively related to the service quality perceived by customers.

Hypothesis 4: The organizational issues perceived by boundary employee units (organizational facilitators) are positively related to the service behaviour perceived by boundary employee units.

Hence, the objective of this study is to improve our knowledge of service quality not only by taking into account organizational issues (i.e., organizational facilitators, organizational climate, service climate) as previous studies have done (Schneider et al., 1998), but also by stressing the importance of boundary employees' service behaviours as the active role that they play in service encounters (Kuei, 1999).

## PLEASE INSERT FIGURE 1 ABOUT HERE

## Materials and Method

# Sample and Procedure

The study sample consisted of 117 Spanish tourist units. We collected information from two sources: employees and customers. The employees sample comprised 349 boundary employees (54.2% men and 45.8% women; mean age was 34.2 years; SD = 10.3) at hotel checkin desk units (51%) and waiter/waitress units (49%). The response rate was 90%. This participation rate may seem high compared to those of other studies (see Baruch & Holtom, 2008) but this is because the managers of the units had previously agreed to allow their boundary employees take part in the study during work time. We randomly selected three employees from each unit and invited them to participate in the study. When an employee declined to participate, we randomly selected another one from the same unit, whenever possible. These employees worked together in the same unit, made up of an average of 3 employees working on the same shift and sharing customers.

The sample of customers consisted of 1157 hotel and restaurant customers (54% men and 46% women). The response rate was 95%. This high rate, compared to other studies (see Baruch & Holtom, 2008), may be due to the interviewers' distributing questionnaires in person, face-to-face. Consequently, very few customers refused to participate in the study. Only hotel customers staying more than 3 nights participated in the study. The criterion applied by the restaurants was that customers had either lunch or dinner there. From a list of customers from each unit, they selected 10 customers from each list and invited them to participate in the study. Units were mainly holiday (60%) and business (40%) restaurants and hotels. Seventy percent were 3-star

hotels, while the rest were 4-star hotels.

Both employees and customers received questionnaires in person. Questionnaires were administered in Spanish after translation of foreign scales by a professional translator. The questionnaire-administration processes took 20 min (approx.) for employees and 10 min (approx.) for customers. This study ensured the confidentiality and anonymity of the answers provided by all respondents. Employees filled in the questionnaire during breaks, or at the beginning or the end of their shifts. Hotel customers filled in the questionnaire while checking out. Data collection took place during two high season periods. Restaurant customers filled in the questionnaire after the service transaction had been completed (i.e. after paying the bill). Researchers were present to help employees and customers in case they had any difficulties filling in the questionnaire.

## Measures

In this study, we used a self-constructed questionnaire. Some of the variables used in this study were assessed in relation to boundary employees and others in relation to customers. We now go on to explain each variable used.

Boundary employees variables

Organizational facilitators: We assessed this variable using the facilitators scale for tourist services developed from the *Critical Incident Technique* (Flanagan, 1954), following studies by Brown and Mitchell (1991) and Peters, O'Connor and Eulberg (1985) on performance obstacles, and validated in Spanish by Grau, Salanova, Agut and Burriel (2001). To develop this scale, first we held semi-structured interviews with boundary employees to devise a series of facilitators. Employees answered questions about which organizational features help them to solve performance obstacles. Second, we analysed the information and we devised categories by means

of an inter-rate criterion. Finally, we designed the questionnaire items. This scale was made up of eleven 5-point Likert-type scale responses ranging from 1 (none) to 5 (considerable). Scale reliability was  $\alpha = .91$ . An example of one item is: "Indicate to what extent the following aspect facilitates your work performance and helps you overcome possible obstacles: The training received helps overcome obstacles".

Organizational climate: We assessed this variable using the short Spanish version of the FOCUS scale, which has twelve items (González-Romá et al., 1995). It consisted of four dimensions to assess the overall organizational climate perceived by boundary employees: support ( $\alpha$  = .80), rules orientation ( $\alpha$  = .83), goals orientation ( $\alpha$  = .74) and innovation ( $\alpha$  = .87). This scale was a 7-point Likert-type scale ranging from 1 (I totally disagree) to 7 (I totally agree). The overall reliability of this scale was  $\alpha$  = .90. An example of one item is: "In this hotel/restaurant, personal relationships among fellow employees are good".

Service climate: We assessed this variable by using a Spanish adaptation of the global service climate scale (Salanova et al., 2005), that is, the general dimension of the Service Climate Scale used by Schneider and Bowen (1985). It consisted of three items designed to assess the overall service climate perceived by boundary employees. It is a 7-point Likert-type scale ranging from 1 (I totally disagree) to 7 (I totally agree). Scale reliability was  $\alpha = .86$ . An example of one item is: "The delivery of superior work and service is recognised and rewarded in this restaurant/hotel".

Service behaviour: We assessed this variable by using the adapted Spanish version of the Servqual scale by Ramos, Collado, Marzo, Subirats and Martín (2001) to self-assess the service quality that boundary employees perceived that their unit offered. This scale was an adaptation of the one devised by Parasuraman et al. (1988) to assess service quality perceived by customers. It

contained the four intangible dimensions from the Servqual scale, adapted to assess work-unit service behaviour: reliability ( $\alpha$  = .76), responsiveness ( $\alpha$  = .62), assurance ( $\alpha$  = .87) and empathy ( $\alpha$  = .78), with three items each (García-Buades, 2001). It is a 7-point Likert-type design, ranging from 1 to 7 (I totally disagree / I totally agree). The overall reliability of this scale was  $\alpha$  = .90. An example of one item is: "In this hotel/restaurant: we deal with customers promptly".

### Customer variables

Service quality: We assessed this variable by an adapted Spanish version (Ramos et al., 2001) of the Servqual scale developed by Parasuraman et al. (1988) to evaluate the boundary employees' service performance as perceived by customers. This study took into account the four intangible dimensions of the Servqual scale: reliability ( $\alpha$  = .81), responsiveness ( $\alpha$  = .89), assurance ( $\alpha$  = .65) and empathy ( $\alpha$  = .80), with three items each (García-Buades, 2001). It has a 7 point Likert-type response scale, ranging from 1 (I totally disagree) to 7 (I totally agree). The overall reliability of this scale was  $\alpha$  = .84. An example of one item is: "In this hotel/restaurant: Employees are capable of putting themselves in the customer's place".

## Data Analysis

There has been strong support for the importance of taking into account the strength of within-unit agreement perceptions as a prerequisite for the unit-level variable and its relationship with performance (Schneider & Subirats, 2002). Aggregation indices enabled us to determine which of the units did not share their perceptions enough to be taken as a unit entity. For this purpose, we calculated diverse aggregation indices to test whether it was possible to understand units as an entity. We calculated the Intra-class Correlation Coefficient (ICC) (Bliese, 2000). This index compared intra-unit variance by using the mean score of the members who responded in each unit (Schneider et al., 1998). We also calculated the Average Deviation Index  $(Ad_{M(J)})$  as

proposed by Burke, Finkelstein and Dusig (1999). The AD<sub>M(J)</sub> index calculated the average deviation for each scale of J items in order to justify the aggregation of the individual member's response at a unit level. Ad<sub>m(j)</sub> is based on Monte Carlo procedures and "produces the equivalent of an approximate randomization test for the null hypothesis that the actual distribution of responding is rectangular and demonstrate its superiority to the chi-square test" (Dunlap, Burke & Smith-Crowe, 2003, p. 356). This index is strongly recommended because it seems to overcome the weaknesses of Rwg (González-Romá, Peiró & Tordera, 2002). Thus, both indices provided essential information about the internal homogeneity in each unit under study.

Furthermore, we also calculated the unit-level internal consistency (Cronbach's  $\alpha$ ) in all the scales by using the average item response per unit as the input. This is a strongly recommended strategy as it aligns the measurement reliability information with the level of analyses used in the substantive tests (Mathieu, Gilson & Ruddy, 2006). Additionally, we performed analyses of variance (ANOVAs) to test whether significant differences existed between units. Consequently, ANOVAs made it possible to verify external heterogeneity in order to measure non-dependence between units.

Moreover, some non-studied variables might also affect the studied variables. Therefore, we controlled for the influence that some organizational features might have had on each unit by measuring the following control variables: type of unit (accommodation or restaurant), rating (3-or 4-star) and location (holiday or business). We also conducted a multivariate analysis of variance (MANOVA) to check the effect of the control variables on the studied variables.

Furthermore, we performed Confirmatory Factor Analyses (CFAs), as implemented by the AMOS program (Arbuckle, 1997), to verify the dimensional structure of the multidimensional variables (organizational facilitators, organizational climate, service behaviour and service quality). Finally, we carried out Structural Equation Modelling (SEM), as implemented by the AMOS program (Arbuckle, 1997), to test the overall theoretical model approached in this study. SEM allows models of linear relationships among variables to be specified and estimated while maintaining the structure of the constructs (MacCallum & Austin, 2000). The hypothesized model is depicted in the figure (see Figure 1).

### Results

## Aggregation Analyses

We confirmed the internal homogeneity in most of the boundary employee units with the ICC and Ad<sub>m(j)</sub> indices. First, the employees' mean ICCs value was .30, while that of customers was .20. As expected, both values were above .12 and, according to this index, it is therefore possible to aggregate the data (James, 1982). Furthermore, the Ad<sub>m(j)</sub> score that was obtained also enabled us to aggregate the individual means since the mean values obtained in the employee and customer samples were .98 and .70, respectively. However, only 3 boundary employee units out of the original 120 did not reach the degree of internal homogeneity required to be aggregated (according to the ICC and Ad<sub>m(j)</sub> indices; González-Romá et al., 2002). This meant having to eliminate 3 units from the original 120 because they did not share the perceptions which considered a unit to have self-entity. Multiple causes could have an influence on this agreement, mainly because the unit members did not spend enough time together or they did not use enough communication resources. That is, aggregation indices indicated that most of the boundary employees in each unit and most of the customers had shared perceptions about the variables used in this study.

We also performed ANOVAs to check heterogeneity between units. All the variables, organizational facilitators F(1, 118) = 2.36, p < .001, organizational climate F(1, 118) = 2.80, p < .001, service climate F(1, 118) = 2.89, p < .001, service behaviour F(1, 118) = 2.04, p < .001 and service quality F(1, 116) = 3.95, p < .001, scored significant F values at the level of p < .001. Therefore, significant differences exist among the units for each variable.

## Descriptive Analyses

Descriptive statistics (see Table 1) verified some of the relationships between the unit-level variables with the matrix correlations. Thus, as expected, service climate correlated with service quality dimensions, although it only correlated significantly with the reliability dimension of service quality. Moreover, both organizational issues (organizational facilitators and organizational climate dimensions) correlated significantly and positively with service climate. In addition, dimensions of organizational climate correlated significantly with some of the service quality dimensions (i.e. goals with reliability, innovation with responsiveness, rules with assurance and social support with reliability, innovation and empathy).

Furthermore, the reliability dimension of service behaviour correlated positively and significantly with most of the service quality dimensions (i.e. reliability, assurance and empathy). However, organizational facilitators only correlated significantly with the responsiveness dimension of service behaviour and did not correlate significantly with any of the service quality dimensions. Finally, it is important to highlight the fact that the responsiveness subscale of service behaviour showed zero correlations with the rest of the subscales of service behaviour, so it was deleted from the measurement model. Moreover, negative significant correlations were found between service climate and service behaviour.

### PLEASE INSERT TABLE 1 ABOUT HERE

In order to check the influence of the control variables on the study variables, examining the MANOVA results showed that none of the control variables (type of unit, rating and location) had a significant influence on the studied variables (organizational facilitators, organizational climate, service behaviour, service climate and service quality). Multivariate results showed non-significant Wilks's lambda multivariate coefficients for all the control variables: unit, F (14, 102) = .135, rating, F (14, 101) = .369, and location, F (14, 102) = .139. Therefore, customers did not differ significantly in the study variables and the control variables have no influence on the studied variables.

Finally, we performed four simultaneous CFAs to verify the dimensional structure of the multi-dimensional variables. The overall measurement model confirmed that the expected structure of the variables fitted the data satisfactorily in terms of fit indices. The fit index scores of the overall measurement model were  $\chi^2$  (77) = 127.103, p < .001; IFI = .91; CFI = .91; RMSEA = .075. Organizational facilitators contained the three hypothesized dimensions (training, autonomy and technical support) with  $\lambda$  = .66,  $\lambda$  = .66 and  $\lambda$  = .78 factor loadings, respectively. Organizational climate contained the four hypothesized dimensions (goals, rules, innovation and support) with  $\lambda$  = .96,  $\lambda$  = .60,  $\lambda$  = .74 and  $\lambda$  = .69 factor loadings, respectively. Service behaviour contained the three dimensions (reliability, assurance and empathy) with the following respective factor loadings:  $\lambda$  = .79,  $\lambda$  = .77 and  $\lambda$  = .74. Finally, service quality contained the four hypothesized dimensions (reliability, responsiveness, assurance and empathy) with factor loadings of  $\lambda$  = .61,  $\lambda$  = .63,  $\lambda$  = .78 and  $\lambda$  = .63 respectively.

Structural Equation Modelling Analyses

Subsequently, we tested the hypothesized model using SEM analyses, which enabled us to confirm whether or not the model fitted the data, the results being:  $\chi^2$  (86) = 146.287, p < .001; IFI = .91; CFI = .90; RMSEA = .078) (See Figure 2).

### PLEASE INSERT FIGURE 2 ABOUT HERE

In general, the model indicated a good fit since all the fit indices were equal to or higher than .90 (Hoyle, 1995). More specifically, the model corroborated most of the hypotheses that were put forward. The relationship between service climate perceived by boundary employee units and the service quality perceived by customers described in Hypothesis 1 was confirmed. A significant positive relationship was found between the service climate perceived by boundary employee units and the service quality perceived by customers ( $\beta$ = .24; p < .05). Furthermore, the relationship between organizational issues perceived by boundary employee units (organizational facilitators and organizational climate) and the service climate perceived by boundary employee units expressed in Hypothesis 2 was also corroborated. Both organizational issues perceived by boundary employee units (organizational facilitators and organizational climate) were significantly positively related to the service climate perceived by boundary employee units [organizational facilitators ( $\gamma$  = .19; p < .05) and organizational climate ( $\gamma$  = .73; p < .001)].

Moreover, the relationship between service behaviour perceived by boundary employee units and the service quality perceived by customers, explained in Hypothesis 3, was also confirmed. Service behaviour perceived by boundary employee units was significantly positively related to the service quality perceived by customers ( $\beta$  = .20; p < .05). However, the relationship between the organizational issues perceived by boundary employee units (organizational

facilitators) and the service behaviour perceived by boundary employee units, explained in Hypothesis 4 was not corroborated. Organizational facilitators were not related to service behaviour ( $\gamma = .00$ ; p = n.s.).

In conclusion, the results of this study confirm Hypotheses 1 and 3, which hypothesized that boundary employee units are related to customers' perceptions of service quality through two resources (i.e. perceptions of organizational values and their own service behaviour). Moreover, both together accounted for 10% of the variance of the predicted variable (customer perceptions of service quality). Results also confirm Hypothesis 2 that organizational facilitators and organizational climate are antecedents of service climate, but results did not confirm Hypothesis 4. Organizational facilitators are not a significant antecedent of service behaviour.

## Discussion and Implications

This study aimed to test whether service quality perceived by customers can be simultaneously explained from two boundary employees' resources, which are based on perceptions of organizational efforts, values and environmental issues (i.e., organizational facilitators, organizational climate, service climate), and on the boundary employees' active roles, that is, their perceptions of service behaviours.

Findings show that when boundary employee units perceive a higher level of service climate (such as effective supervisory customer-oriented tasks and continuous customer feedback), customers' evaluations of levels of service quality are higher. Consequently, this study corroborates previous findings that found that the organization-generated specific service climate leads to higher quality services for the organization (Davidson, 2003; Little & Dean, 2006; Salanova et al., 2005; Schneider et al., 1998).

Moreover, results from this study also support the idea that service climate is stronger when employees perceive organizational facilitators and organizational climate positively. Such issues include organizational strategies, rewarding policies and other efforts, such as providing autonomy, training or technical support, and creating a positive organizational climate with clear goals, rules and openness to innovation, as well as enhancing social support. This result is in agreement with previous studies that stress the importance of applying key HRM policies and practices to create good job designs and environments (Liao & Chuang, 2004; Haynes & Fryer, 2000; Rogg et al., 2001; Yoon et al., 2001). However, the current study defends the need to develop qualitative-quantitative measures as organizational facilitators that take into account employee units' opinions about which strategies are the ones that help them to overcome performance obstacles in order to develop only those HRM policies that are really perceived as effective.

Additionally, findings show that when boundary employee units self-perceive their units as highly competent (high reliability, high assurance and high empathy), customers' evaluations of levels of service quality are higher. This potential resource for improving service quality has often been neglected (Bettencourt & Brown, 1997). In this regard, the results obtained here are in agreement with the emerging literature which highlights the active key role of boundary employees to enhance service quality (Ashforth et al., 2008; Giardini & Frese, 2008; Liao & Chuang, 2004; Tsaur & Lin, 2004). However, contrary to our expectations, service behaviour was not explained by organizational facilitators. One possible explanation is that this relationship could be mediated by other variables that were not taken into account in this study (i.e., collective work-engagement, level of education). Therefore, these results have enabled us to make several contributions which we will go on to explain below.

First, this research expands on previous results which only focused on studying organizational issues to improve service quality. This study found that boundary employee units were more than intermediary informants between customers and the organization. They actually played active roles in service encounters and their service behaviour significantly predicted customers' evaluations of service quality. Thus, as Ashforth et al. (2008, p. 6) have recently argued, we cannot forget that "boundary employees are the face and voice of an organization for customers". In this regard, boundary employee units' active roles help organizations readjust and improve their service quality.

Second, this study confirms that service climate and service behaviour are both highly significant in predicting service quality. This derives from the fact that, in the model, both accounted significantly for the variance in service quality assessments. This also implies that variance derives from the organizational issues that improve the organization's customer-oriented policies (service climate), while at the same time it also relies on the boundary employees' service behaviour. Moreover, significant correlations showed that service behaviour and service climate are different constructs (even negatively related to each other) that could predict different dimensions of service quality perceived by customers. Therefore, boundary employees' perceptions of the organization's overall customer orientation and their service behaviour are vital to ensure service quality in service organizations.

Third, we analysed the data from this study at the boundary employee unit level in order to obtain a better understanding of current workplace structures in service organizations (Arthur, Bell & Edwards, 2007; Ashforth et al., 2008; Carmeli, 2008; Lent, Shmidt & Shmidt, 2006; Van Yperen & Snijders, 2000). Semi-autonomous units and teams are becoming a usual structure for working. Thus, individual conclusions often prove to be inappropriate (Van Mierlo, Rutte,

Kompier & Doorewaard, 2005). This study provides fresh knowledge to explain how work units develop their performance outcomes in the specific context of service encounters in tourist-related workplaces. Therefore, this work highlights the importance of the human factor grouped by units still underestimated. Moreover, it overcomes the limitations of obtaining a source of information by taking into account both boundary employees' and customers' perceptions. 

Limitations and Future Recommendations

This study is not without its limitations, but certain suggestions to improve future studies are worth noting. The first limitation is the fact that this study has a cross-sectional design and does not provide information about causality. It is, therefore, necessary to validate the current findings in a longitudinal study so as to be able to test the relationship between boundary employees and customers, which would even make it possible to study the reciprocity between them.

Another important limitation is the fact that we did not find any significant predictors of service behaviour. Previous literature suggested that organizational issues could also be predictors of service behaviour (Tsaur & Lin, 2004). However, this study found no support for the relationship between organizational facilitators and service behaviour. Therefore, although we did find important predictors of service climate, the former are needed to provide companies with specific contributions about how to improve employees' service behaviours. Future steps will introduce other variables into the study to help clarify the antecedents of service behaviour. One possibility would be to extend the model with psychosocial health variables, such as collective engagement or job satisfaction, and to study the consequences of boundary employee units' well-being on service quality, as others have claimed (Spreitzer, Cohen & Ledford, 1999; Van Mierlo et al., 2005). Other possibility would be to extend the model with the study of different

customers' responses (cognitive, affective and conative) as consequence of the service provided (Gracia, Bakker & Grau, in press).

### **Practical Implications**

This study also reports several practical implications that might help practitioners to develop strategies for enhancing service quality customer rates. Service organizations must follow both organization- and boundary employee unit-oriented HRM strategies in order to improve service quality.

The organizational strategy recommends to establish strong, clear service climates. To achieve this, service organizations should study the organizational facilitators that boundary employee units need (Tesluk & Mathieu, 1999), and they must also consider creating an organizational climate as a fundamental condition to promote a strong organizational service climate (Davidson, 2003). Thus, service organizations would acquire higher service quality through a strong service climate, if units perceive they have organizational facilitators that help them to work better and create pleasant environments.

The boundary employee units' strategy focuses on the active role that boundary employees, in units, play in improving service quality in this type of organizations. Thus, service organizations should help boundary employee units increase their skills and abilities through several strategies that make them feel and be more competent during service encounters with customers (Cherniss, 1993). For instance, they could organize service-oriented training for units. More specifically, service-oriented training focuses on making boundary employees units aware of important service quality factors for customers. Thus, service organizations would acquire higher service quality if they took the units' service competences and behaviours into consideration. Consequently, endowing units with knowledge and skills is especially important to

achieve competent performance (Spreitzer et al., 1999). Therefore, this study recommends service organizations to invest in the development of service behaviours in boundary employee units.

More specifically, this study informs organizations that strong customer-oriented values, such as service climate, are oriented more towards positive customers' evaluations of the basic features of service quality. However, service behaviour displays a more positive orientation towards customers' positive evaluations of the more complex features of service quality that have a certain emotional content, such as empathy. Therefore, providing an overall high service quality implies having to establish strategies and goals that involve both organizational and boundary employee unit issues.

### **Conclusions**

This study helps to understand how service quality is strongly dependent on boundary employees. Both resources, organizational customer values perceived by boundary employee units and their own service behaviour, should be taken into account in order to attain positive service quality assessments from customers. This study could be the first to blend the two approaches to conclude that both should be taken into consideration in order to improve service quality perceived by customers. Additionally, this study supports the need to perform measurements at unit level so as to better explain current workplaces. It also highlights the relationship between boundary employees and customers and, in turn, underlines the key role played by boundary employee units in improving organization service. Boundary employee units are, therefore, active units with their own entity which, with their perceptions of service climate and their service behaviour, can provide a clear vision of the extent to which service quality is perceived by customers. This means that organizations often only focus on organizational issues

without taking into consideration active roles of boundary employees, but their service quality reported by customers is probably capable of reaching higher levels by taking them both into account.

## References

- Arbuckle, J. L., (1997). AMOS users' guide version 4.0. Smallwaters, Chicago.
- Arthur, W. J., Bell, S. T., & Edwards, B.D. (2007). A longitudinal examination of the comparative criterion-related validity of additive and referent-shift consensus operationalizations of team efficacy. *Organizational Research Methods*, 10, 35-58.
- Ashforth, B. E., Kulik, C. T., & Tom, M. A. (2008). How service agents manage the person–role interface. *Group & Organization Management*, 33, 5-45.
- Baruch, Y. & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*, 1139-1160.
- Bettencourt, L. A. & Brown, S. W. (1997). Contact employee: relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, 73, 39-61.
- Bliese, P. (2000). Within-group agreement, non-independence, and reliability. In K. Klein & S. Kozlowski (Eds.), *Multi-level theory, research, and methods in organizations* (pp.349-381). San Francisco: CA: Jossey-Bass.
- Brown, K. A. & Mitchell, T. R. (1991). A comparison of just-in-time and batch manufacturing:

  The role of performance obstacles. *Academy of Management Journal*, *34*, 906-917.
- Brown, K. A. & Mitchell, T. R. (1993). Organizational obstacles. Link with financial performance, customer satisfaction and job satisfaction in a services environment. *Human Relations*, 46, 725-757.
- Burke, M. J., Finkelstein, L. M., & Dusig, M. S. (1999). On average deviation indices for estimating inter-rater agreement. *Organizational Research Methods*, 2, 49–68.
- Carmeli, A. (2008). Top management team behavioral integration and the performance of service

- organizations. Group & Organization Management, 33, 712-735.
- Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In W. B. Schaufeli & C. Maslach (Eds). *Professional burnout: Recent developments in theory and research. Series in applied psychology: Social issues and questions.* (pp.135-149). Washington, DC, USA: Taylor & Francis.
- Davidson, M. C. G. (2003). Does organizational climate add to service quality in hotels? International Journal of Contemporary Hospitality Management, 15, 206-13.
- Dimitriades, Z. S. (2007). The influence of service climate and job involvement on customeroriented organizational citizenship behavior in Greek service organizations: a survey. *Employee Relations*, 29, 469-491.
- Dunlap, W. P., Burke, M. J., & Smith-Crowe, K. (2003). Accurate tests of statistical significance for Rwg and average deviation interrater agreement indexes. *Journal of Applied Psychology*, 88, 356-362.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51, 327-355.
- García-Buades, E. (2001). *Calidad de servicio de hoteles de sol y playa*. [Service Quality in sun and beach hotels]. Madrid: Síntesis, S.A.
- Giardini, A. & Frese, M. (2008). Linking service employees' emotional competence to customer satisfaction: a multilevel approach. *Journal of Organizational Behavior*, 29, 155-170.
- González-Romá, V., Lloret, S., & Peiró, J. M. (1995). *The measurement of climate: a bridged version of the focus questionnaire*. Paper presented at the 7th European Congress on Work and Organizational Psychology, Gyôr, Hungary.

- González-Romá, V., Peiró, J. M., & Tordera, N. (2002). An examination of the antecedents and moderator influences of climate strength. *Journal of Applied Psychology*, 87, 465-473.
- Gracia, E., Bakker, A. & Grau, R. (in press). Customer's Positive Affective Responses in Service Encounters: Following the Cognitive-Affective-Conative Process to maintain Loyal Customers. Cornell Hospitality Quarterly.
- Gracia, E., Grau, R., & Ventura, M. (2005). La eficacia profesional como mediadora de la relación entre los facilitadores organizacionales y la percepción de calidad del cliente.

  [Professional efficacy such as mediator between organizational facilitators and customer service quality]. In Romay Martínez, J. (Ed). Perspectivas y retrospectivas de la Psicología Social en los albores del siglo XXI. Madrid: Biblioteca Nueva.
- Grau, R., Salanova, M., Agut, S., & Burriel, R. (2001). *Organizational obstacles and facilitators:* elaboration of a scale in users-contact. Paper presented to the X EAWOP. Prague (Czech Republic).
- Grönross, C. (1990). Relationship approach to marketing in service contexts: the marketing and organizational behavior interface. [Special issue. Service marketing]. *Journal of Business Research*, 20, 3-11.
- Hartline, M. D. & Jones, K. C. (1996). Employee performance cues in a hotel service environment: influence on perceived service quality, value, and word-of-mouth intentions. *Journal of Business Research*, 35, 3, 207-215.
- Haynes, P. & Fryer, G. (2000). Human resources, service quality and performance: a case study. *International Journal of Contemporary Hospitality Management*, 12, 240–248.

- Hoyle, R. H. (1995). The structural equation modeling approach: basic concepts and fundamental issues. In R. H. Hoyle (Ed.): *Structural equation modeling, concepts, issues and applications*. (pp. 1-15). Thousand Oaks: Ca: Sage.
- James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology*, 67, 219-229.
- Kuei, C. (1999). Internal service quality. An empirical assessment. *International Journal of Quality & Reliability Management*, 16, 8, 783-791.
- Lent, R. W., Shmidt, J., & Shmidt, L. (2006). Collective efficacy beliefs in student work teams.

  Relation to self-efficacy, cohesion, and performance. *Journal of Vocational Behavior*, 68, 73-84.
- Liao, H. & Chuang, A. (2004). A multilevel investigation of factors influencing employees service performance and customer outcomes. *Academy of Management Journal*, 47, 41-58.
- Little, M. M. & Dean, A. M. (2006). Links between service climate employee commitment and employees' service quality capability. *Managing Service Quality*, *16*, 460-476.
- MacCallum, R. C. & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, *51*, 201-206.
- Mathieu, J. E., Gilson, L. L., & Ruddy, T. M. (2006). Empowerment and team effectiveness: an empirical test of an integrated model. *Journal of Applied Psychology*, *91*, 97-108.
- Narver, J. C. & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing, October*, 20-35.
- 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, 12-40.
- Peters, L. H., O'Connor, E. J., & Eulberg, J. R. (1985). Situational constraints: sources, consequences, and future considerations. *Research in Personnel and Human Resources Management*, *3*, 79-114.
- Price, L., Arnould, E., & Tierney, P. (1995). Going to extremes: managing services encounters and assessing provider performance. *Journal of Marketing*, *59*, 83-97.
- Ramos, J., Collado, G., Marzo, J., Subirats, M., & Martín, P. (2001). Calidad de servicio percibida por gerentes, empleados y clientes de hoteles y restaurante. [Managers', employees' and customers' perception of service quality on hotels and restaurants]. *Revista de Psicología Social Aplicada*, 11, 49-68.
- Rogg, K. L., Schmidt, D. B., Shull, C., & Schmitt, N. (2001). Human resource practices, organizational climate, and customer satisfaction. *Journal of Management*, 27, 431-449.
- Salanova, M., Agut, S., & Peiró, J.M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate. *Journal of Applied Psychology*, *90*, 1217-1227.
- Salvador, S. (2004). La percepción del cliente de los elementos determinantes de la calidad del servicio universitario: Características del servicio y habilidades profesionales [Customer perceptions of service quality on the university services]. *Papeles del Psicólogo*, 90, 1-9.
- Schneider, B. (1990). The climate for service: An application of the climate construct. In B. Schneider (Ed.). *Organizational climate and culture* (pp. 383-412). San Francisco: Jossy-Bass.

- Schneider, B. & Bowen, D. (1985). Employee and customer perceptions of service in banks: Replication and extension. *Journal of Applied Psychology*, 70, 423-433.
- Schneider, B. & Subirats, M. (2002). Climate strength. A new direction for climate research. *Journal of Applied Psychology*, 87, 220-229.
- 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, 150-163.
- Spreitzer, G. M., Cohen, S. G., & Ledford, J. G. E. (1999). Developing effective self-managing work teams in service organizations. *Group & Organization Management*, 24, 340-366,
- Tesluk, P. E. & Mathieu, J. E. (1999). Overcoming roadblocks to effectiveness incorporating management of performance barriers into models of work team effectiveness. *Journal of Applied Psychology*, 84, 200-217.
- Tsaur, S. & Lin, Y. (2004). Promoting service quality in tourist hotels: the role of HRM practices and service behavior. *Tourism Management*, 25, 471-481.
- Van Mierlo, H., Rutte, C. G., Kompier, M. A. J., & Doorewaard, H. A. C. M. (2005). Self-managing teamwork and psychological well-being. *Group & Organization Management*, 30, 211-235.
- Van Yperen, N. W. & Snijders, T. A. (2000). A multilevel analysis of the Demands-Control Model: Is stress at work determined by factors at the group level or the individual level?

  \*\*Journal of Occupational Health Psychology, 5, 182-190.
- Williams, J. G. (1999). The impact of employee performance cues on guest loyalty, perceived

value and service quality. The Service Industries Journal, 19, 97-118.

Yoon, M. H., Beatty, S. E., & Suh, J. (2001). The effect of work climate on critical employee and customer outcomes: an employee-level analysis. *International Journal of Service Industry Management*, 12,500-521.

Service behaviour, Service climate and Customer service quality 32 Table 1. Means, standard deviations, internal consistencies (Cronbach's  $\alpha$ ), and correlations between variables, (n=117 boundary employee units).

Variables	Mean	SD	α	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Org. facilitators	3.84	.726	.91	.19*	.20*	.02	.17 *	.27**	.04	.30**	01	.06	.13	06	07	08
2. OC: Goals	5.08	1.13	.74		.71**	.59**	.66**	.63**	12	.34**	06	05	.16†	.11	.14	03
3. OC: Innovation	5.35	1.11	.87			.43**	.56**	.68**	16 †	.17*	14	13	.12	.18*	.14	.05
4. OC: Rules	5.49	.847	.83				.35**	.21*	.06	.27**	.16†	.05	.13	.13	.19*	04
5. OC: Support	5.48	.896	.80					.53**	.06	.28**	05	01	.27**	.14	.19*	.29**
6. Service climate	4.93	1.11	.86						19*	.34**	16†	13	.17*	.14	.09	.10
7. SB: Reliability	6.19	.440	.76							08	.60**	.59**	.15†	.06	.17*	.16†
8. SB: Responsiveness	6.26	.478	.62								07	.03	.17*	11	.08	.06
9. SB: Assurance	5.80	.596	.87									.57**	.03	03	.05	.02
10. SB: Empathy	5.64	.674	.78										.14	.02	.02	.08
11. SQ: Reliability	5.89	.462	.81											.45**	.45**	.38**
12. SQ: Responsivenes	s 5.97	.444	.89												.49**	.35**
13. SQ: Assurance	5.7	.484	.65													.52**
14. SQ: Empathy	5.24	.539	.80													

Note. †p<.08 \*p<.05; \*\*p<.01

Figure 1: The proposed model

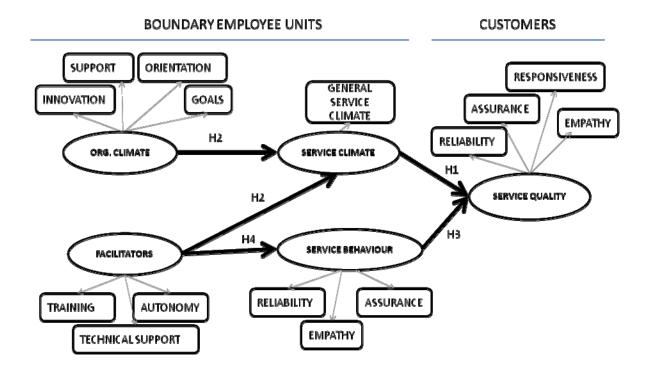
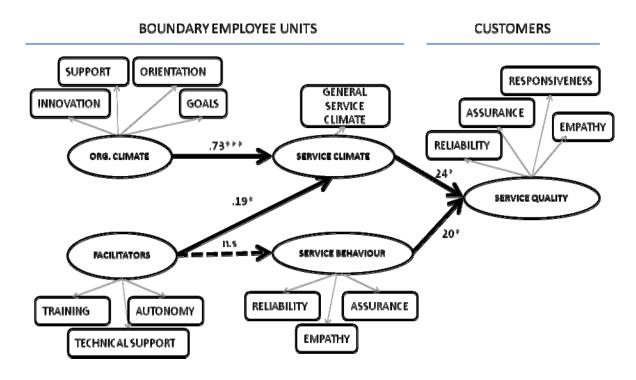


Figure 2: The research model with standardized path coefficients (N = 117 boundary employee units).



Note. \*p < .05, \*\*\*p < .001.