

Linking Emotional Dissonance and Service Climate to Well-Being at Work: A Cross-Level Analysis*

Relaciones de la disonancia emocional y del clima de servicio con el bienestar en el trabajo: un estudio transnivel

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ABSTRACT

In this study, emotional dissonance and service climate are related to well-being at work through two independent corridors. To consider emotional dissonance and service climate, we designed a cross-level model where multilevel predictors (individual emotional dissonance and work-unit service climate) were related to individual levels of burnout and engagement. Using a sample of 512 employees working in 152 work-units, we confirmed the existence of a model where service climate is significantly related to burnout and engagement, beyond the role of emotional dissonance. The research concludes with a discussion of these results and future implications.

Keywords

Burnout; emotional dissonance; engagement; service climate

RESUMEN

Este trabajo analiza las relaciones entre disonancia emocional y clima de servicio con bienestar en el trabajo, siguiendo dos vías. Se realizó un diseño transnivel en el que se analizan variables en diferentes niveles (disonancia emocional a nivel individual y clima de servicio *work-unit*), como predictores de *burnout* y *engagement*. En el estudio participó una muestra de 512 trabajadores pertenecientes a 152 unidades de trabajo. Los análisis multi-nivel confirmaron la existencia de un modelo donde el clima de servicio está directamente relacionado con los niveles de *burnout* y *engagement* de los trabajadores, una vez controlado su nivel de disonancia emocional. La investigación concluye con la discusión de los resultados y las implicaciones de los mismos.

Palabras clave

Burnout; clima de servicio; disonancia emocional; *engagement*

Introduction

The service sector continues having the highest number of jobs in both Europe and the United States (Bureau of Labour Statistics, 2001; European Commission, 2008). With this situation in mind, examining the well-being of service employees is a social research interest topic (Babakus, Yavas, & Ashill, 2009; Cascio, 1995, 2003).

In the effort to capture the peculiarities of employees' well-being in services, scholars have considered differential characteristics of services. Because services are often produced and performed in the presence of customers (Parasuraman, Zeithaml, & Berry, 1994a, 1994b), the service encounter between front-line employees and customers plays a critical role. This social interaction offers opportunities to improve service quality and achieve customer loyalty (Bove & Johnson, 2000), but the service encounter also increases emotional requirements for employees (Borritz et al., 2005) and potentially creates problems related to employees' well-being (Goldberg & Grandey, 2007). During the service encounter, it is very common that front-line employees develop feelings of being emotionally exhausted by job demands, and they can display depersonalized and insensitive behaviors toward customers (Wright & Cropanzano, 1998).

In order to understand the complexity of how well-being develops in front-line employees, different approaches have been taken into account. The study of the emotional regulation process (e.g., Brotheridge & Grandey, 2002) focuses the attention on the employees' efforts in displaying required emotions. When these emotional demands do not correspond to employees' real emotions, the experience of emotional dissonance may result (Ashfort & Humphrey, 1993; Hochschild, 1983).

Other approaches focus the attention on contextual factors. In the specific field of service organizations, social support has played an important role as a contextual factor (Halbesleben, 2006). Similarly, support climates are also associated with health at work (Makikangas & Kinnunen, 2003). Accordingly, service climate provides information about the availability of supportive resources and

facilitative conditions for the interaction between front-line employees and customers (Lam, Huang, & Janssen, 2010, p. 370). When employees perceive that their work activities are supported by the organization through a service climate, their chances of experiencing burnout decrease.

With this in mind, we test an additive model where emotional dissonance and service climate are independent predictors of well-being at work. This study contributes to previous knowledge in three ways. First, the consideration of service climate could offer a richer portrait of front-line employees' well-being in services, especially as the role of this contextual factor is examined simultaneously with internal variables such as emotional dissonance. Second, this joint consideration of emotional dissonance and service climate helps to integrate individual-level and work-unit level constructs in understanding employees' well-being at work. Although some research efforts have defined service climate at the individual level (e.g., Yoon, Beatty, & Suh, 2001), the majority of scholars have conceptualized service climate as an emergent group's property (Hui, Chiu, Yu, Cheng, & Tse, 2007). In contrast, emotional dissonance is defined as an individual level construct (Bakker & Heuven, 2003; Brotheridge & Grandey, 2002; Zapf, 2002), where the gap between personal and required emotions at work is considered. The simultaneous examination of both, emotional dissonance and service climate, offers the opportunity to test whether service climate, a description of a specific contextual factor of the work-units' environment, is able to predict employees' well-being variance beyond the role of individual emotional dissonance. Third, we distinguish between burnout and engagement as two independent, but related, constructs. Traditionally, scholars have placed the attention on variables predicting burnout. This emphasis on burnout reflects the assumption that the role of psychology is to focus on the reduction of negative symptoms. However, Psychology can also investigate factors to stimulate well-being and human strengths (Aspinwall & Staudinger, 2003; Seligman & Csikszentmihalyi, 2000). Therefore, we examine the joint role of emotional dissonance and service climate

not only in reducing burnout, but we also examine whether individual and contextual factors are able to stimulate energy at work and feelings of enthusiasm, and significance (engagement).

Emotional Dissonance and Well-being at Work

Work interactions are typically guided by norms. The organization establishes rules (formally and informally) to guide worker behavior, including social interactions. There are many social interactions that require employees to manage their emotions (Hochschild, 1983) in order to fulfill their prescribed roles. The requirement to display specific emotions in front of customers, clients, patients, etc., (Gutek, 1995), and manage one's emotions to achieve the required display, is conceptualized as emotional labor or emotional work (Grandey, 2000; Hochschild, 1983; Zapf, 2002). Because of the nature of this emotional regulation process, it is possible that many emotions shown during interactions are in fact not felt, but "acted" by employees (Hochschild, 1983; Tschann, Rochat, & Zapf, 2005). When an employee is required to display an emotion that is not genuinely felt (Hochschild, 1983; Zapf, Vogt, Seifert, Mertini, & Isic, 1999), we refer to it as emotional dissonance. Thus, emotional dissonance is defined as a state of discrepancy between public displays and internal experiences of emotions (Côté & Morgan, 2002).

It is generally assumed that emotional dissonance is an individual-level construct. Employees of the same work-unit could be subjected to similar rules about the display of emotions to customers. However, these rules are confronted with each employee's internal emotions. Emotional differences are based on personality traits (e.g., Leikas & Lindeman, 2009), that are interrelated with differential trajectories at work (Judge & Hurst, 2008). These sources of emotions are present in daily work, establishing differences among front-line employees in their levels of emotional dissonance.

The connection from emotional dissonance to burnout and engagement is based on self-regulation theory (Hochschild, 1983) and conservation

of resources theory (COR) (Hobfoll, 1988, 1989). Self-regulation approaches differentiate between automatic and controlled efforts made in the display of emotions (e.g., Babakus et al., 2009). An automatic display of emotions may occur when required emotions are identical to the emotions front-line employees feel (Babakus et al., 2009). In contrast, control of emotions requires front-line employees to make efforts related to "surface acting" or "deep acting". Surface acting involves the faking of affective display (e.g., simulating the expression of positive emotions directed to customers). Deep acting requires a modification of the emotions felt in order to make a genuine display of emotions. There are differences between surface and deep acting in terms of well-being at work. Surface acting reflects the tension as front-line employees display emotions they do not feel, while deep acting brings emotions in consonance with expressions (Grandey, 2003). In fact, this author observed significant relations of surface acting with stress, which did not occur with deep acting. She attributed this non-significant relationship to the reduction in emotional dissonance in deep acting, as it is able to restore resources invested by front-line employees (Grandey, 2003).

These arguments are congruent with the principles of the COR theory (Hobfoll, 1988, 1989). This theory posits that employees are motivated to obtain resources they should invest as a consequence of work demands. Wright and Cropanzano (1998) argued that the COR theory is a useful framework to explain burnout experiences. These authors indicated that burnout is more likely to occur when there is a resource loss, a perceived threat of resource loss, or the anticipated returns are not obtained on an investment of resources (Wright & Cropanzano, 1998, p. 487). Emotional dissonance involved an effort by front-line employees in service encounters difficult to restore (Grandey, 2003), producing exhaustion and feelings of depersonalization (burnout). In fact, a number of previous research efforts have confirmed the positive and significant relationship between emotional dissonance and burnout indicators (Bakker & Heuven, 2003; Brotheridge & Grandey, 2002; van Dijk & Kirk Brown, 2006; Zapf, 2002).

Emotional dissonance is not only connected to burnout but also to the positive side of well-being: engagement. Work engagement is an emerging concept focused on human strengths, optimal functioning, and positive experiences at work (Mauno, Kinnunen, & Ruokolainen, 2007). Engagement is defined as a persistent, positive, affective-motivational state of fulfilment in employees that is characterized by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002).

It is reasonable to expect that emotional dissonance reduces engagement, considering the same rationale described for the link from emotional dissonance to burnout. Tension associated with emotional dissonance (Grandey, 2003) and uncompensated efforts (Wright & Cropanzano, 1998) invested in the display of emotions not felt should be incompatible with the feelings of energy and dedication involved in engagement. When employees feel they are forced to display emotions not felt, engagement should be difficult. Nevertheless, few recent studies have explored this relationship between emotional dissonance and engagement (Heuven, Bakker, Schaufeli, & Huisman, 2006; Stringer, Ouwenel, Le Blanc, Cheriakova, & Smulders, 2009) and confirmed that emotional dissonance reduces engagement.

In the current study we propose emotional dissonance, an individual-level construct, decrease well-being at work.

Service Climate and Well-being at Work

Another approach in the study of well-being concentrates its efforts on contextual factors. In this tradition, organizational climate has played an important role. Research studies observed significant relationships between organizational climate and well-being at work. Peiró, González-Romá, and Ramos (1992) found that positive organizational climate, related to mutual support and goal-oriented information flow, reduced tension and increased job satisfaction. Arnetz, Lucas, and Arnetz (2011) obtained significant links from different dimensions of organizational climate to occupational stress and

mental health. These are examples of the power of organizational climate to predict different indicators of well-being at work.

The first efforts related to the investigation of organizational climate focused the attention on molar or general aspects (see James & Jones, 1974). However, during the last decades, scholars argued that specific climates exist in organizations. These specific climates provide information about specific organizational goals (e.g., safety). Thus, when a topic is important for the organization, a specific climate is created (Dietz, Pugh, & Wiley, 2004). In the service sector, one of the most important specific climates is service climate (Schneider, White, & Paul, 1998). Schneider and colleagues defined service climate as employee perceptions of the practices, procedures and behaviours rewarded, supported and expected with regard to customer service quality. It is generally assumed service climate behaves as a group-level construct (e.g., Hui et al., 2007; Lam et al., 2010; Schneider, Wheeler, & Cox, 2002). Front-line employees share perceptions about service climate. They interact and share similar structures and processes, stimulating consensual views about the importance of organizations attribute to service quality and the degree to which efforts to please customers are supported and rewarded.

In the current research study, we propose work-unit service climate as a precursor of well-being at work. Unlike general climates, specific climates – such as service climate – have a greater capacity to predict specific outcomes related to important goals of organizations, in our case front-line employees' well-being. In fact, Schneider, Wheeler and Cox concluded that “strategically focused climate measures produce stronger relationships with specific organizational outcomes than less-focused measures” (1992, p. 705). In addition, the COR theory (Hobfoll, 1988, 1989) allows us to understand the link from service climate to well-being at work. As we anticipated, this theory postulates that employees are motivated to obtain resources in order to restore efforts related to job demands. Front-line employees devote a lot of effort to offering service quality and pleasing customers. According to the

COR theory, front-line employees will feel happy if this depleting of resources is compensated for, and they can obtain specific resources to match job demands. If not, burnout is likely to occur, given the loss of resources and their inability to cope with service job requirements (Wright & Cropanzano, 1998). Consistent with this idea, Martin (2008) obtained significant links from service climate to job-induced tension and increasing job satisfaction. We extend this work to the relationship between work-unit service climate and burnout-engagement of front-line employees. When employees perceive a good supportive service climate, that burnout will decrease and engagement increases.

A Cross-level Approach & Hypothesis

The main contribution of this research is the joint consideration of emotional dissonance and service climate as service-related predictors of burnout and engagement in service front-line employees. These constructs pertain to different research approaches. Emotional dissonance is an individual-level construct addressing internal phenomena described by reported discrepancies between shown and felt emotions in service work. In contrast, the work-unit service climate research tradition arises from organizational behaviour studies, and it is usually analyzed through work-unit aggregated observations. Because neglecting the hierarchical nature of nested levels in organizations may lead to developing partial models for highly complex phenomena (Kozlowsky & Klein, 2000), the consideration of these different level predictors could improve our understanding of individuals' outcomes in service work settings, and serve as a step in bridging the individual and work-unit levels in services. More specifically, this research hypothesized that:

Work-unit service climate is negatively related to burnout and positively related to engagement, beyond individual emotional dissonance experiences.

To this end, a mixed cross-level model (Kozlowski & Klein, 2000) was designed, specifying multi-level predictors (individual-level, emotional

dissonance and work-unit level, service climate) and individual level outcomes (burnout and engagement). We are aware that this is a challenge for the predictive power of the work-unit service climate construct for two reasons. First, emotional dissonance is a well-consolidated predictor of well-being in the service sector, while work-unit service climate could be considered an emergent precursor of well-being. Second, both well-being and emotional dissonance share the same level of construct (individual), while service climate is defined as a work-unit level of construct.

Method

Sample and Procedure

This research extends previous efforts related to the service climate in hotels located in Spain by considering the joint impact of emotional dissonance and service climate on burnout and engagement. Data from two successive survey projects were brought together. In previous research efforts, difficulty of having the necessary sample size to aggregate data at the work-unit level has represented a restriction in the statistical analyses (Schneider et al., 1998). Both research projects included the same items to measure emotional dissonance, service climate and well-being at work (burnout and engagement). The sites for this research were 120 hotels (Research Project I, $N_{\text{work-units}} = 60$; Research Project II, $N_{\text{work-units}} = 60$). Two types of work-units were considered in each project: receptionists and waiters. Employees' surveys with missing data for any of the items considered in the current research study were excluded from the final sample. Only work-units with at least 3 usable employee surveys were considered. This sampling plan resulted in a final sample for this study of 152 work-units, with 512 employees, 267 working as receptionists (52.1%). Employees' average age was 33.6 years ($SD = 10.5$), and about 49% of the participating employees were men. Position tenure ranged from few months to 35.5 years, with an average deviation of 6.6 years. For the data collection procedure, we used a "real time approach" (Stewart & Hull, 1992). According-

ly, the assessment occurs on-site and reflects a direct evaluation of perceptions and experiences related to the focal service. Employee participation was voluntary. Complete anonymity was guaranteed in order to reduce evaluation apprehension, social desirability bias, leniency, and acquiescence (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). All the employees completed the survey in the absence of managerial personnel. In addition, researchers ensured participants that there were no right or wrong answers, and that they should answer the questions as honestly as possible. This procedure facilitated a high response rate (90 %). It included a phone-appointment with hotel managers to coordinate the first encounter with the employees, who filled in the surveys during work-time at hotel sites. To be eligible for this research study, employees had to interact face-to-face with customers as a critical part of their daily job.

Measures

Emotional Dissonance

In order to capture the emotional dissonance perceived by employees, 3 items from the FEWS scale (Zapf et al., 1999) were used. A person fluent in Spanish and German translated the original measure to Spanish. A sample item is: "In your job, how often do you have to display positive emotions that do not correspond to what you feel in this situation?" Responses are scored on a 5-point scale ranging from 1 (*never*) to 5 (*very often*).

Service Climate

We used the 4 items version (Salanova, Agut, & Peiró, 2005) of the Global Service Climate Scale (Schneider et al., 1998) to assess service climate, providing a measure on which responses are scored on a 7-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). A sample item includes: "Employees receive recognition and rewards for the delivery of superior work and service". We concentrated on this general measure because it is the direct precursor of outcomes in organizations; while other more

specific facets of service climate are antecedents of the aforementioned Global Service Climate (see Schneider et al., 1998, p. 157).

Burnout

To measure burnout, it was applied the Spanish adapted version (Schaufeli et al., 2002) of the Maslach-Burnout Inventory-General Survey (Schaufeli et al., 1996). The instrument consisted of 10 items assessing exhaustion (5 items) and cynicism (5 items). Low scores on burnout, ranging from 0 (*never*) to 6 (*always*), are indicative of well-being at work. Sample items for burnout and cynicism are, respectively: "I feel burned out by my work" and "I have become more cynical about whether my work contributes anything".

Engagement

For engagement, we used the Spanish adapted version of the Utrecht Work Engagement Scale (UWES) assessing vigour (6 items) and dedication (5 items) (Schaufeli et al., 2002). High scores on engagement, ranging from 0 (*never*) to 6 (*always*), are indicative of well-being at work. Sample items for vigour and dedication, respectively, are: "When I wake up in the morning, I feel like going to work" and "I am enthusiastic about my job"

Control Variables

The first control variable is the type of work-unit: receptionists vs. waiters. They both serve people through face-to-face contacts, but the two groups differ in the type of service provided. Interaction between employees and customers tends to be more extended for waiters than for receptionists, with potential effects on service climate. Second, we controlled for type of hotel industry: "sun-and-sand" (focused on facilities and services oriented toward pleasure and leisure) vs. "conference" hotels (takes care of functional services related to business activities or similar). It is reasonable to expect that different types of hospitality industries may affect the service encounter and employee perceptions

because each serves customers with different expectations and needs. The third control variable is related to the category of hotel where the service occurs, differentiating between 3-star and 4-star hotels. Employee perceptions and the rules for emotional display may be related to the organizational environment, which differs in the level of quality delivered to customers.

Data Aggregation and Analysis

We statistically justified aggregation of the service climate measure, exploring within-work unit agreement and reliability, and between-work unit differences. The median values on the interrater agreement index $r_{wg(J)}$ (James, Demaree, & Wolf, 1984) was 0.87. Because $r_{wg(J)}$ is above the 0.7 cut-off value, agreement at the work-unit level was satisfactory (Dunlap et al., 2003). In addition, the intra-class correlations ICC(1) and ICC(2) were calculated (James, 1982). ICC(1) represents both the degree to which group members' responses are influenced by group membership and the reliability. ICC(2) indicates whether groups can be differentiated based on the variable of interest (Bliese, 2000). The ICC(1) value was 0.26. This value is clearly above the median values typically reported in the literature of 0.11 (James, 1982) and 0.12 (Bliese, 2000). The ICC(2) value, indicating interrater reliability, was 0.65. Finally, one-way analysis of variance (ANOVAs) indicated that work-units differed significantly in their employee perceptions of service climate $F(151, 360) = 2.403, p < 0.001$. In general, our results supported the aggregation of service climate at the work-unit level.

Hypotheses related to testing the individual effect of emotional dissonance, and the group-level effect of service climate, require two separate analyses, one for burnout and another for engagement. To test the role of work-unit variables predicting individual-level outcomes beyond individual-level predictors, an incremental model is required (Hoffman & Gavin, 1998). In this case, work-unit service climate may predict a portion of the unique variance of burnout and engagement, after controlling for individual-level emotional dissonance

and control variables. Random coefficient models are appropriate for testing hypotheses. Following the Bryk and Raudenbush (1992) notation, the models for burnout, may be depicted as follows:

$$(1) \text{ Level 1 Burnout}_{ij} = \beta_{0i} + \beta_{1j} (\text{Emotional dissonance}_{ij}) + e_{ij}$$

$$(2) \text{ Level 2 } \beta_{0i} = \gamma_{00} + \gamma_{01} (\text{Emotional dissonance}_{ij}) + \gamma_{02} (\text{service climate}_j) + \gamma_{03} (\text{type of work-unit}) + \gamma_{04} (\text{type of hotel industry}) + \gamma_{05} (\text{category of the hotel}) + u_{0j}$$

$$(3) \beta_{1j} = \gamma_{10}$$

The level 1 equation describes that burnout is predicted by the work-unit intercepts β_{0i} plus emotional dissonance at the individual level rating, plus a random error term. The level 2 equation describes that group intercepts are predicted by an intercept mean of work-units, work-unit service climate, control variables (type of work-unit, type of hotel industry, and category), and a group-level random term. The third line indicates that the slope between burnout and the individual-level variable is fixed. Thus, replacing the second and third line in the first equation yields a composite equation as follows:

$$(4) \text{ Burnout}_{ij} = \gamma_{00} + \gamma_{01} (\text{Emotional dissonance}_{ij}) + \gamma_{02} (\text{service climate}_j) + \gamma_{03} (\text{type of work-unit}) + \gamma_{04} (\text{type of hotel industry}) + \gamma_{05} (\text{category of the hotel}) + u_{0j} + r_{ij}$$

The second model uses engagement as a dependent variable. The procedure for describing the analysis is identical to the one used for burnout.

$$(1) \text{ Level 1 Engagement}_{ij} = \beta_{0i} + \beta_{1j} (\text{Emotional dissonance}_{ij}) + e_{ij}$$

$$(2) \text{ Level 2 } \beta_{0i} = \gamma_{00} + \gamma_{01} (\text{Emotional dissonance}_{ij}) + \gamma_{02} (\text{service climate}_j) + \gamma_{03} (\text{type of work-unit}) + \gamma_{04} (\text{type of hotel industry}) + \gamma_{05} (\text{category of the hotel}) + u_{0j}$$

$$(3) \beta_{1j} = \gamma_{10}$$

$$(4) \text{ Engagement}_{ij} = \gamma_{00} + \gamma_{01} (\text{Emotional dissonance}_{ij}) + \gamma_{02} (\text{service climate}_j) + \gamma_{03} (\text{type of work-unit}) + \gamma_{04} (\text{type of hotel industry}) + \gamma_{05} (\text{category of the hotel}) + u_{0j} + r_{ij}$$

For calculating the explained variance, three regression models were defined on the basis of the number of predictors included in each of them. The first model is a null model for each dependent variable (burnout and engagement), which does not contain any predictors, looking for how much variability is in the intercept relative to the total variability. Bryk and Raudenbush (1992) have noted that these models are directly equivalent to one-way random effects ANOVA, where one predicts the dependent variable as a function of group membership. The second regression model includes emotional dissonance at the individual level of analysis. Finally, the third regression model includes control variables (type of work-unit, type of hotel industry, and category), emotional dissonance (individual level), and service climate (work-unit level of analysis). All analyses were performed using SPSS/PASW 17 and NLME (Non linear mixed effects) and Multilevel packages for version 2.6.1 of R software.

Results

Table 1 contains the means, standard deviations, correlations and alpha coefficients of the main variables (emotional dissonance, service climate, burnout, and engagement). Significant relationships in the expected direction were observed among the variables. Service climate is negatively related to burnout and positively to engagement. Emotional dissonance is positively related to burnout and negatively to engagement. Burnout and engagement are also negatively related to each other.

A precondition to compute cross-level analysis (Gavin & Hofmann, 2002) is to look for significant

differences between work-units regarding the mean values of the dependent variables, burnout and engagement. For this purpose, two models were tested. First, an unconditional means model (null model), without predictors but including a random intercept variance term for work-units, looked for how much variability there was in the intercept relative to the total variability. The second model is calculated without the random intercept for intercept variance. Both models are compared through a test based on the chi-square distribution comparing 2 log likelihood values (one with and the other without random intercepts) to determine whether the intercept variance estimates (τ_{00}) are significantly different from 0. For burnout, results showed the superiority of the model with the random intercept (likelihood ratio difference = 31.6, $p < 0.0001$); for engagement, results also indicate a better fit for the model with the random intercept (likelihood ratio difference: 11.8, $p < 0.0001$). In addition, the ICC(1) value for burnout is 0.25, indicating that 25% of the variance in burnout may be explained by the work-unit membership. For engagement, the ICC(1) is 0.14, showing that 14% of the variance in engagement is explained by the work-unit where employees belong. ICC(2) values are 0.53 for burnout and 0.35 for engagement.

Table 2 shows estimate values for burnout and engagement. Step 1 shows results for the regression of burnout (engagement) over individual perceptions of emotional dissonance. The relationship parameters are 0.57 for burnout (and -0.24 for engagement). Step 2 describes the regression of burnout (and engagement) over individual-level emotional dissonance, service climate and the control variables (type of work-unit, type of hotel

TABLE 1
Means, Standard Deviations, Correlations and Alpha Coefficients

Variables	Mean	SD	1	2	3
1. Burnout	2	1.2			
2. Engagement	4.6	1	-0.43**		
3. Service Climate	5.1	1.3	-0.36**	0.39**	
4. Emotional dissonance	3	1.1	-0.18**	0.28**	-0.14**

** $p < 0.01$

Source: own work

TABLE 2
Models for Burnout and Engagement Cross Level Analysis

	Parameter		SE		df		T-test	
Step 1								
(Intercept)	2.28	(10.03)	0.31	(0.30)	359	(359)	7.35***	(37.62***)
Emotional Dissonance	0.57	(-0.24)	0.09	(0.08)	359	(359)	6.14***	(-3.04**)
Step 2								
(Intercept)	5.56	(6.61)	0.83	(0.7)	359	(147)	6.7***	(9.72***)
Emotional dissonance	0.51	(-0.18)	0.08	(0.07)	359	(147)	5.75***	(-2.43*)
Service climate	-0.87	(0.66)	0.12	(0.1)	147	(147)	-7.06***	(6.7***)
Type of work-unit	0.31	(-0.03)	0.22	(0.17)	147	(147)	1.44	(-0.17)
Type of hotel industry	0.39	(-0.15)	0.23	(0.19)	147	(147)	1.68	(-0.79)
Category of the hotel	0.15	(0.08)	0.23	(0.18)	147	(147)	0.67	(0.47)

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Note 1: Team, location and category were treated as dummy variables; For type of work-units: 0 = receptionists team, 1 = waiters team; For type of hotel industry: 0 = sun and sand hotel, 1 = conference hotel; For category of the hotel: 0 = three star hotel, 1 = four star hotel.

Note 2: Results for engagement are in brackets.

Source: own work

industry and category of the hotel). Results pointed out a significant relationship of work-unit service climate (-0.87 ; $p < 0.001$) with burnout and (0.66 ; $p < 0.001$) with engagement, beyond the significant role of individual level emotional dissonance (0.51 ; $p < 0.001$, for burnout; -0.18 ; $p < .05$, for engagement) and the effects of the control variables (none of them significant), supporting our hypotheses.

Table 3 shows residual and explained variance for the three regression models for burnout and for engagement, respectively. Using the residual within-unit variance from Model 0 and Model

1, we calculated the explained variance for the Level 1 equation by using the formula $(1 - (\text{variance with predictor} / \text{variance without predictor}))$ from Raudenbush and Bryk (2002). Model 1 explains 5% of intragroup variance (σ^2) and 16% of between-group variance (τ_{00}) for burnout and 0.9% of intragroup variance (σ^2) and 7% of between-group variance (τ_{00}), for engagement. At Level 2, the model explains 5% of within-group variance (σ^2) and 57% of between-group variance (τ_{00}) for burnout, and 1% of within-group variance (σ^2) and 61% of between-group variance (τ_{00}) for engagement.

TABLE 3
Burnout and Engagement Analysis of Variance

	Residual Intra-group variance	Residual between-group variance	Explained intra-group variance	Explained between-group variance
Model 0 (no predictors)	4.34 (3.38)	1.43 (0.56)		
Model 1 (individual-level predictor)	4.13 (3.35)	1.2 (0.52)	0.05 (0.009)	0.16 (0.07)
Model 2 (individual and team-level predictors)	4.13 (3.33)	0.6 (0.21)	0.04 (0.16)	0.57 (0.62)

Note 1: Results for engagement are in brackets.

Source: own work

Discussion

Our study tested an additive model that considers the contribution of emotional dissonance (internal-individual level construct) and service climate (contextual-group level construct) as independent predictors of burnout and engagement.

Burnout and engagement, at the individual level, were significantly predicted by both emotional dissonance and service climate, with the work-unit measure of service climate being the most important predictor of well-being at work. Thus, our results confirmed the existence of a dual corridor of relations leading from emotional dissonance, on the one hand, and service climate, on the other, to well-being at work (burnout and engagement). As in previous research efforts (e.g., Van Dijk & Kirk-Brown, 2006), emotional dissonance plays a significant role in predicting well-being at work, but, in addition, work-unit service climate is able to predict additional variance. Thus, the role of service climate as a precursor of well-being in service work (e.g., Martin, 2008) is reinforced in our study.

One of the major contributions of this study is the comprehensive conceptual framework. This study integrates literatures from emotional labour and organizational climate in understanding well-being at work. The integration of different approaches allowed us to have a richer portrait of well-being at work in services, with the connection of internal and contextual variables. First, front-line workers follow rules in order to display emotions in their interactions with customers. This internal self-regulation process can produce a certain level of emotional dissonance when workers have to display emotions not felt, reducing their well-being at work. Our findings are congruent with the arguments underlying emotional self-regulation approaches (Babakus et al., 2009) and conservation of resources theory (COR) (Hobfoll, 1988, 1989). With regard to self-regulation theory, it is confirmed that the tension associated with the gap between felt emotions and emotions displayed (emotional dissonance) increases burnout (Bakker & Heuven, 2003) and reduces engagement (Stringer et al., 2009). In addition, and according to the COR

theory, emotional dissonance involves an effort by front-line employees in service encounters that is very difficult to restore (Grandey, 2003), producing a loss of resources that can lead burnout (Wright & Cropanzano, 1998). Second, service climate is a contextual factor perceived as supportive thus increasing well-being at work. The links we observed from service climate to well-being at work are also consistent with the COR theory. Service climate informs front-line employees about the existence of supportive conditions and recognition of their efforts in attending to customers (Lam et al., 2010), increasing resources and reducing the possibilities of health problems at work. When employees perceive that they have enough resources to accomplish their tasks, this may be a source of support that overcomes the possible internal resource depletion suffered as a consequence of the emotional labour that characterizes service delivery, thus avoiding burnout and boosting engagement. It is especially remarkable that service climate is more important than emotional dissonance in predicting burnout and engagement. Our findings indicate that front-line employees are very sensitive to information about contextual factors, which reinforces the idea that specific climates are useful in predicting critical outcomes such as well-being. As Schneider et al. (1992) argued, focused climates have stronger relationships with specific outcomes. In our case, well-being of front-line employees is especially connected with efforts of organizations to support service quality delivered by employees in their interactions with customers.

Another contribution of this research is the joint consideration of individual and work-unit level constructs. Scholars constantly argue that work and organizational outcomes are related to processes and structures that belong to different levels (individuals, groups, and so on). Because of this, researchers are increasing their efforts to develop multilevel data analysis approaches to address the lack of research involving hierarchical structures (Kozlowski & Klein, 2000). This study, therefore, help in bridging the gap from individual measures of burnout and engagement to work-unit measure of service climate, taking into account simultaneously the presence of individual

experiences of emotional dissonance. Employee experiences of well-being are based, in part, on individual emotions (and the resulting emotional dissonance) that are related to personality, previous work trajectories, and other facets of life. However, and in spite of emotional dissonance, work-units differ in the degree to which they shared perceptions about service climate. This is a contextual facet of service environments that plays an independent role in well-being experiences in service work.

An added contribution from this study is a better picture of well-being at work through the use of independent and burnout and engagement measures stimulating additional investigation considering their differential roles. For the case of engagement, the magnitude of the relation with service climate triples that corresponding to emotional dissonance. Assuming that it is also valuable to understand the processes of the emergence of positive employee well-being at work, rather than just had the reducing burnout, our results indicate that the role of service climate is critical. The creation of a situational context where service climate is reinforced stimulates positive well-being among front-line employees in work-units.

Taking into account results from this study describing the relationship between service climate, emotional dissonance, burnout and engagement, it is possible to glimpse practical tips to better support front-line employees' well-being. At the individual level, a properly oriented front-line employee selection process may help to detect potential employees oriented toward social interactions with customers, reducing periods of emotional dissonance at work. It is also possible to develop strategies to overcome the consequences of emotional dissonance through training or coaching. Moreover, practices such as appropriate job descriptions may help to adequate profiles taking into account the emotional demands of each role. Implementation of newcomer peer monitoring may also help to overcome dissonant feelings through team support.

Practical implications also arise from the organizational and group properties. The role of supervisors is important in linking organizational demands and employee expectations. Job-related

information should flow between the two levels (organization and employees) in a continuous process of revision. Furthermore, managing a work context that favours employee conditions for job-delivery and acknowledging a job well-done is helpful in reducing burnout and increasing engagement.

As described in the study, the measures involved the employees' perceptions of their own levels of emotional dissonance, burnout, engagement and shared perceptions of service climate. Thus, relationships between variables could be inflated as a result of common method variance. In order to tackle this shortcoming, future research could include other measures which describe the perceptions of co-workers or supervisors, or include objective service performance measures. Furthermore, in this study the observations are cross-sectional, and they do not allow us to make any predictions over time. It seems necessary for future research to design and perform longitudinal studies.

We have observed significant links from emotional dissonance and service climate to well-being at work. However, other variables and processes could be incorporated in the future in order to obtain a richer multilevel approach to front-line well-being. For example, personality (e.g., optimism or trait affect) may contribute to the understanding of well-being from an individual perspective. Composition of work-units (e.g., complementary capabilities) may enrich our view from a work-unit level. The consideration of this type of variables probably offers a better picture of front-line employee well-being by considering simultaneously different levels of the organization.

In spite of its limitations, this study represents a further step in the consideration of variables pertaining to different traditions and levels of construct in understanding the well-being of front-line employees. The present study confirmed that emotional dissonance and service climate are additive significant predictors of burnout and engagement, describing two separate independent corridors. The present endeavor also contributes to previous research by considering critical concepts related to the service work environment in a model which considers the multilevel nature of organizations.

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