

# SERVICE CLIMATE IN ORGANIZATIONS: VALIDATING THE ITALIAN VERSION OF THE SERVICE CLIMATE SCALE (ISCS)

SALVATORE ZAPPALÀ  
UNIVERSITY OF BOLOGNA

VICENTE MARTÍNEZ-TUR  
IDOCAL, UNIVERSITY OF VALENCIA

MARCO GIOVANNI MARIANI  
UNIVERSITY OF BOLOGNA

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Service climate refers to employees' perceptions of the organizational practices and behaviors that are expected and supported with regard to customer service. Service climate is considered to influence employee's attitudes and behaviors during service encounters with customers and, thus, indirectly influence customer satisfaction and loyalty. Using a 16-item scale, based on Schneider, White, and Paul (1998), this study validates the Italian version of the Service Climate Scale (ISCS). Data were collected in an Italian cooperative that offers health and social services in small rehabilitation centers and nursing homes. A total of 1,384 employees working in 135 centers answered a questionnaire. Results confirmed that construct, convergent, and discriminant validity are satisfactory, and that service climate is described by four factors: global service climate, customer feedback, customer orientation, and managerial practices. This study confirms that the scale proposed is a good measure of service climate in the Italian language.

Key words: Service climate; Organizational climate; Construct validity; Customer orientation; Social services.

*Correspondence concerning this article should be addressed to Salvatore Zappalà, Department of Psychology, University of Bologna, Viale Berti Pichat 5, 40100 Bologna (BO), Italy. Email: salvatore.zappala@unibo.it*

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Organizations have to prosper in a very competitive environment, securing financial performance and firm profitability, on the one hand, and customer satisfaction and loyalty, on the other. The service-profit chain proposed by Heskett, Jones, Loveman, Sasser, and Schlesinger (1994) describes the sequence from internal organizational policies and procedures that enable employees to deliver good services, to productive employees that provide good value to customers, to satisfied and loyal customers, to the profit and growth of the organization. Applying the ideas of the service-profit chain, service climate construct is considered an important element of the workplace that affects customer satisfaction. It was defined by Schneider, White, and Paul (1998) as "employee perceptions of the practices, procedures and behaviours that get rewarded, supported and expected with regard to customer service and customer service quality" (p. 151).

Service climate was introduced by Schneider (1975) as a specific type of organizational climate. Since that time, many studies have been conducted and, more recently, various meta-

analyses and literature reviews conclude that service climate influences employee service performance (Hong, Liao, Hu, & Jiang, 2013; Yagil, 2014), employees' attitudes, such as job satisfaction and organizational commitment (Hong et al., 2013), and customer experiences of satisfaction and loyalty (Bowen & Schneider, 2014). In addition, the meta-analysis of Hong et al. shows that 15 studies found that service climate is significantly related to the financial performance of the organization, with a mean correlation of .25. Yagil (2014), reviewing literature on service quality, concludes that "there is solid evidence of the financial profitability of a positive service climate" (p. 309).

Italian service firms represent more than 78% of all Italian firms and employ 67% of all employees (Istat, 2016); consequently, it is important that service firms measure, monitor, and improve service climate in order to maintain or even increase customers' satisfaction and the firm's stability and profitability.

Many measures have been developed and used at the international level. A widely used service climate measure was presented by Schneider and colleagues in 1998. Recent studies validated a scale based on a reduced version of the Schneider et al. measure (Carrasco, Martínez-Tur, Peiró, & Moliner, 2012; Potočnik, Tordera, Martínez-Tur, Peiró, & Ramos, 2011; Salanova, Agut, & Peiró, 2005), showing good construct and predictive validity (Carrasco et al., 2012). To the best of our knowledge, to date, no measure of service climate is available in the Italian language and no study on service climate has been published in Italy. To fill this gap and allow Italian scholars and practitioners to conduct research and assess service climate in companies, the present study aims to validate the Italian version of the Service Climate Scale (ISCS) described by Potočnik et al. (2011) and Carrasco et al. (2012). The contributions of the present study are twofold: first, to test the construct and concurrent validity of the service climate measure in the Italian cultural context; second, to examine whether the Italian version of the scale may be used to represent service climate at the team and/or organizational level. Climate has in fact been measured at the individual level, assessing what is called "psychological climate" (Schneider, Bowen, Ehrhart, & Holcombe, 2000), and also at the "organizational," unit, or branch level (Salanova et al., 2005; Schneider et al., 2000); thus, this study investigates how well ISCS assesses service climate at the collective or branch level.

#### CLIMATE AND SERVICE CLIMATE IN ORGANIZATIONS

The concept of organizational climate has been defined in many different ways (Verbeke, Volgering, & Hessels, 1998), and scholars have also outlined the historical roots of organizational climate thinking and research (D'Amato & Mayer, 2005). The term "climate" was first proposed by Lewin, Lippit, and White (1939) in the study where they identified three different leadership styles. They concluded that the climate of a setting is the overall meaning that individuals develop from the experiences and behaviors they observe in that social setting (Bowen & Schneider, 2014). Other conceptual models have supported Lewin's idea that organizational climate refers to how the organizational environment is perceived and interpreted by employees (Yoon, Beatty, & Suh, 2001). Thus, employees' perception of their organizational environment provides a cognitive map of organizational functioning and helps workers to determine their behavior in relation to the different organizational goals.

Schneider (1975) suggested that the concept of organizational climate is generic and inclusive, and that the climate concept needs a focus, a target; in other words, the construct should refer to a climate for something. The *something* of interest has been, for instance, climate for safety (Zohar, 2000), climate for innovation (West & Anderson, 1996), or climate for service (Schneider et al., 2000). These specific climates refer to strategic aspects and outcomes that are critical to the survival of organizations (Schneider, Wheeler, & Cox, 1992). For example, service climate is critical in the services sector because it describes to what extent employees perceive that service quality is important and rewarded and, subsequently, how committed they are to providing good service and, consequently, improving customer evaluations of service quality.

Service climate is defined as employees' perceptions of the practices, procedures, and behaviors that are expected, supported, and rewarded with regard to customer service and its quality (Schneider et al., 1998). The assumption is that employees perceive the individual everyday events related to service and assemble them into a macroperception of service climate (Dietz, Pugh, & Wiley, 2004).

Employees' perception of expected attitudes and behaviors shape their customer oriented attitudes and behaviors (Hong et al., 2013; Mechinda & Patterson, 2011). The perceptions that customers have of the service experiences influence customer reports of service quality, customer satisfaction, and customer loyalty. Research, in fact, shows that employees' perceptions of service climate are directly related to customer perceptions of service quality (Schneider & Bowen, 1985; Schneider et al., 1998; Way, Sturman, & Raab, 2010). Other studies have shown that service climate mediates the relationship between employees' work engagement and employees' performance and customer loyalty (Salanova et al., 2005).

The link between service climate and customer experiences has been demonstrated in many cross-sectional (e.g., Salanova et al., 2005; Schneider & Bowen, 1985) and longitudinal (Schneider et al., 1998; Schneider, Salvaggio, & Subirats, 2002) studies. In addition, the impact of customer experiences on companies' financial results has also been observed in various studies (Hong et al., 2013; Schneider, Macey, Lee, & Young, 2009).

#### DIMENSIONS OF SERVICE CLIMATE

Schneider et al. (1998) developed a four-dimension measure to assess service climate. The first dimension, *global service climate*, represents a general summary of the existing service climate in the organization. By contrast, the other three dimensions refer to specific practices. The second dimension, labeled *customer feedback*, describes how much the organization values customer feedback, in order to change what is not working well. The third dimension, *customer orientation*, refers to organizational efforts to meet customers' needs and expectations for quality service. The fourth dimension, *managerial practices*, focuses on procedures that motivate or reward employees for their attention to service performance. According to Schneider et al., the first dimension is not a composite of the other three service climate dimensions, but rather it represents the "molar" aspects of service climate. The other three dimensions are in some way significantly related to the global service climate; however, customer orientation and managerial practice play a more significant role and are more strongly related to global service climate than customer feedback is (Schneider et al., 1998).

Service Climate Scale is “a frequently used measure of service climate” (Bowen & Schneider, 2014, p. 7). Hong et al. (2013), in their meta-analysis, also found that “fifty-eight percent of the identified studies (34 studies) used Schneider, White and Paul’s (1998) scale to measure service climate” (p. 244). However, a close inspection of many of these studies shows that, with the exception of the studies by Schneider et al. (1998; 2002) which used the whole 22-item scale, many of the other studies just used the 7-item global service climate subscale or an adapted version of these seven items. Authors that used only the global service climate subscale are, for instance, Auh, Menguc, Fisher, and Haddad (2011); Chuang, and Liao (2010); de Jong, de Ruyter, and Lemmink (2004); and Dietz et al. (2004). However, some Spanish studies have used and validated the four-factor Service Climate Scale, although with a more manageable number of items (Carrasco et al., 2012; Potočnik et al., 2011). The present study aims to validate the Italian version of this latter instrument.

### AIM AND RATIONALE OF THE PRESENT STUDY

Based on previous research on service climate (Schneider et al., 2002; 1998), a reduced 16-item version of the Service Climate Scale was validated and used with employees working in the hotel sector (Carrasco et al., 2012; Potočnik et al., 2011). In both studies, confirmatory factor analysis (CFA) resulted in the expected four-factor model. The present study investigates the psychometric properties of this service climate measure in the Italian language.

As in Carrasco et al. (2012), the validation process was conducted in three steps. In the first step, construct validity was checked using CFA to test the dimensionality of the Service Climate Scale. A four-dimensional model was expected to show an adequate and better fit than a one-factor model (with all items loading in a single service climate factor) and a two-factor model (differentiating between the global service climate dimension, on the one hand, and all the other items loading in a factor of service practices, on the other hand). To reinforce the examination of construct validity, scale validity was also examined, taking into account item-factor loadings and construct reliability estimates.

In the second step, following Carrasco et al. (2012), we assessed construct validity, considering both the relationships among the four dimensions of service climate and the nomological validity (Edwards, 2003). In the former case, as in Schneider et al. (1998), we expected global service climate to be significantly related to the other three specific service practices. The nomological validity was assessed by testing whether service climate was related, as expected, to similar and divergent constructs. We used service quality and employee burnout to test, respectively, convergent and discriminant validity (Edwards, 2003).

Service quality is a close construct to service climate, and has been defined as the overall characteristics of a product or service that have the capacity to satisfy stated or implied needs (Kotler, Keller, Brady, Goodman, & Hansen, 2009). As both constructs refer to efforts to offer good service and satisfy customers, a positive relationship was expected between these two constructs. Burnout, however, is characterized by a low level of energy and poor identification with one’s work, suggesting a reduced perception of service climate. In addition, burnout characteristics are the opposite of work engagement (Bakker, Demerouti, & Sanz-Vergel, 2014), which has been observed to be related to service climate (Bowen & Schneider, 2014). Thus, we expected a negative relationship between service climate and burnout. In addition, as service quality is a closer construct to service cli-

mate than burnout, we expected that, in the nomological network, the magnitude of the relationships would be greater for service quality (convergent validity) than for burnout (discriminant validity).

Finally, in the third step, we assessed whether service climate can be aggregated at the organizational level. In organizational literature, many constructs assume different connotations at different levels. Individual perceptions of organizationally rewarded behaviors constitute what is called “psychological climate”; however, as employees in the same organization are subjected to the same processes and policies, they may develop a shared sense of climate, which is called “organizational climate” (Schneider et al., 2000). Previous studies have examined service climate at the individual (Martin, 2008) and organizational levels (Salanova et al., 2005). To investigate service climate at the collective level, scale instructions invite respondents to refer the proposed items to situations happening in their team, department, or organization; scores of employees working in the same unit or organization are then aggregated, on the assumption that employees working in the same service have a shared perception of service climate. Thus, our final aim investigates whether the aggregation of service climate scores at the organizational level is statistically justified.

## METHOD

### Participants

The present study was conducted in an Italian cooperative society that offers health and social services for young, disabled, and elderly people. Customers are hosted in rehabilitation centers and nursing homes distributed in five Italian regions in the north of Italy. A total number of 1,384 employees (out of about 2,600 employees) working in 135 centers answered a questionnaire. The response rate was about 53%. To answer our third-step question (aggregate respondents at the center level), we considered only centers where at least three employees answered the questionnaire. Employees working in administrative offices were dropped. Thus, for the present study, we took into account a total of 1,221 respondents working in 89 centers, with an average of 14 employees per center ( $SD = 10.4$ ). Most respondents (63.2%) worked in centers for older people, 28.2% in centers for young people, and the remaining 8.6% in centers for disabled people. Female respondents made up 91.6% of the sample, and employees' average age was 41.6 years ( $SD = 9.9$ ).

### Procedure

The survey was approved by the human resources department and the general management of the cooperative. Considering that the cooperative's centers are geographically distributed in five regions, and that employees are used to using online surveys to interact with their central offices, the survey was made available online on the cooperative intranet. Managers and employees of the centers were informed about the study by e-mail, and participation was voluntary. The study was presented as an academic investigation about attitudes toward customers and the workplace. Employees entered the online system using their personal code. It was possible to answer the online survey for one month; after this period the online system was closed. Researchers did not receive employees' personal data, and the cooperative did not receive information about the questionnaires' scales and how to compute them.

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## Measures

In addition to sociodemographic scales and type of service, the questionnaire consisted of three scales.

*Service Climate Scale (SCS).* It was measured using the Italian version of the scale validated by Carrasco et al. (2012) and based on the original version by Schneider et al. (1998). The SCS is composed of four dimensions (global service climate, customer feedback, customer orientation, and managerial practices) with a total of 16 items, with four items in each dimension. Items are scored on a 7-point scale (from 1 = *completely disagree* to 7 = *completely agree*), and low scores indicate low service climate.

*Service Quality Scale.* A short seven-item version (Molina, Moliner, Martínez-Tur, Cropanzano, & Peiró, 2015) of the Service Quality Scale developed by Sánchez-Hernández, Martínez-Tur, Peiró, and Ramos (2009) was used. Respondents were asked to assess the quality of the service provided in their center, including both functional service quality, such as responsiveness or reliability of the service, and relational service quality, in terms of empathy (sample items, respectively, are: “Employees of this center . . . assist customers with the necessary speed; . . . behave in a friendly and sincere way with customers”). Items were scored on a 7-point scale (from 1 = *completely disagree* to 7 = *completely agree*), and low scores represent low service quality. For this research, the seven items were aggregated in a single index ( $\alpha = .90$ ;  $M = 5.63$ ;  $SD = 1.06$ ).

*Burnout.* It was assessed using the Italian validated translation (Borgogni, Galati, Petitta & Centro Formazione Schweitzer, 2005) of the Maslach Burnout Inventory-General Survey (Schaufeli, Leiter, Maslach, & Jackson, 1996). The instrument consists of 16 items measuring the three dimensions of burnout: emotional exhaustion (five items; e.g., “I feel emotionally drained by my work”), cynicism (five items; e.g., “I have become less interested in my work since I started this job”), and (reduced) personal accomplishment (six items; e.g., “I feel I am making an effective contribution to this organization”). Items were scored from 0 (*never*) to 6 (*always*). For this validation study, all items were aggregated in a global burnout index ( $\alpha = .86$ ;  $M = 1.41$ ;  $SD = .95$ ), with higher scores indicating higher burnout.

Because the original scales measuring service climate and service quality were in Spanish (Carrasco et al., 2012; Molina et al., 2015; Potočnik, et al., 2011; Salanova et al., 2005), a translation procedure from Spanish into Italian was implemented. The procedure was the following: scales were translated into Italian by two experts who were familiar with the service construct and the Spanish language; the two experts’ versions were compared to produce a single version. Then, this version was translated into Spanish by a native Spanish speaker who was not familiar with the original items. Finally, taking into account the entire translation process, the final version of the scale was established.

## Statistical Analyses

For descriptive analysis we used IBM SPSS Statistics 23; construct validity was examined through CFA, and dimensionality of measures was tested using the structural equation models of M-PLUS 6.12 (Muthén & Muthén, 2012).



Because data screening showed deviations from univariate and multivariate normality, MLR-maximum likelihood was performed for model estimation (Loehlin, 1992). MLR estimates parameters with standard errors and a mean-adjusted chi-square test statistic, which are robust in the presence of nonnormality. The MLR chi-square statistic is also referred to as the Satorra-Bentler chi-square (Muthén & Muthén, 2012).

We considered comparative fit index (CFI) values of .90 to be acceptable, and values of .95 or higher to indicate excellent fit (Hu & Bentler, 1999). For the root mean square error of approximation (RMSEA), values up to .08 represent reasonable errors of approximation (Browne & Cudeck, 1993).

Following the procedure used by Carrasco et al. (2012) to evaluate the dimensionality of service climate, we tested the proposed four-dimension model of service climate (global service climate, customer feedback, customer orientation, and managerial practices) and compared this model to two alternatives: a two-factor model (differentiating between global service climate, on the one hand, and the rest of the items loading in a factor of service practices, on the other) and a one-factor model (with all items loading in a single service climate factor). To examine the construct validity more in depth, we tested the nomological validity by examining correlations with service quality and burnout. We also tested scale convergence by examining the item-factor loadings and construct reliability estimates, and discriminant validity by examining the correlations among service climate factors and the comparison between variance-extracted estimates and the square of the correlation estimates between service climate factors. Cronbach's alpha was used to test reliability, and to test the possibility of aggregating the service climate items at the organizational level, we computed the interrater agreement index,  $r_{wg(j)}$  (James, Demaree, & Wolf, 1984), and the intraclass correlations coefficients, ICC1, and ICC2 (Bliese, 2000; James, 1982).

## RESULTS

### Dimensionality and Scale Convergent-Discriminant Variability

Descriptive statistics of service climate items showed means between 5.07 and 6.00, with standard deviations between 1.59 and 1.75. Skewness and kurtosis indexes showed a nonnormal distribution of the items' data (see Table 1).

This result supported our decision to use the Satorra-Bentler chi-square to verify structural equation models using CFA. As mentioned earlier, three models were computed (see Table 2). The four-factor model was compared to a two-factor model (one factor for global service climate and the second factor for the rest of the dimensions) and the one-factor model. The calculation of AIC and BIC indices supported the superiority of the proposed four-factor model compared to the two competing models. Moreover, the indexes of the CFA for the four-factor solution indicated a quite good fit between the model and the data (Satorra-Bentler  $\chi^2 = 712.535$ ;  $df = 98$ ;  $p = 0.00$ ; TLI = .92; CFI = .93; RMSEA = .07; SRMR = .05). This result was obtained with a model that did not include the correlations between the error terms of the items.

TABLE 1  
Service climate items: Descriptive statistics ( $N = 1,221$ )

	Min	Max	$M$	$SD$	Skewness		Kurtosis	
					Statistic	$SE$	Statistic	$SE$
<i>Global service climate</i>	1.25	7.00	5.47	1.164	-1.037	.070	0.748	.140
I lavoratori possiedono le capacità di fare un buon lavoro e di offrire un servizio di eccellente qualità [Employees in our organization have knowledge of the job and the skills to deliver superior quality work and service]	1.00	7.00	5.72	1.259	-1.344	.070	1.521	.140
Viene riconosciuto ed apertamente apprezzato il lavoro ben fatto e l'erogazione di un servizio di ottima qualità [Employees receive recognition and rewards for the delivery of superior work and service]	1.00	7.00	5.07	1.707	-0.900	.070	-0.141	.140
Il livello di qualità del servizio offerto è eccellente [The overall quality of service provided by our organization to customers is excellent]	1.00	7.00	5.46	1.409	-1.214	.070	1.134	.140
I lavoratori fanno affidamento sulle risorse disponibili per svolgere un buon lavoro ed offrire un servizio di ottima qualità [Employees are provided with tools, technology, and other resources to support the delivery of quality work and service]	1.00	7.00	5.65	1.347	1.287	.070	1.426	.140
<i>Customer feedback</i>	1.00	7.00	5.73	1.239	-1.348	.070	1.633	.140
Si chiede l'opinione degli utenti per valutare la qualità del servizio [Customers are asked their opinions in order to evaluate the service quality]	1.00	7.00	5.51	1.576	-1.172	.070	0.792	.140
I lavoratori sono informati sulle opinioni degli utenti riguardo il servizio [The employees are informed about the customers' opinions of service quality]	1.00	7.00	5.55	1.636	-1.267	.070	0.876	.140
I lavoratori sono informati sulle lamentele degli utenti e/o dei loro familiari [The employees are informed about customer complaints]	1.00	7.00	6.00	1.373	-1.745	.070	2.871	.140
Si tengono in considerazione le opinioni e/o le lamentele dei clienti per migliorare il servizio [Customer's opinions and complaints are taken into account in an effort to improve]	1.00	7.00	5.88	1.393	-1.655	.070	2.633	.140
<i>Customer orientation</i>	1.00	7.00	5.72	1.272	-1.525	.070	2.267	.140
Si prendono le decisioni considerando sempre l'utente [The decisions made always take the customer into consideration]	1.00	7.00	5.62	1.504	-1.240	.070	1.009	.140
La priorità è di soddisfare le necessità e le richieste degli utenti [The most important thing is to fulfil the needs and requests of the customers]	1.00	7.00	5.89	1.430	-1.546	.070	1.958	.140

(Table 1 continues)



Table 1 (continued)

	Min	Max	<i>M</i>	<i>SD</i>	Skewness		Kurtosis	
					Statistic	<i>SE</i>	Statistic	<i>SE</i>
In questo centro la soddisfazione dell'utente è la cosa più importante [In this hotel, customer satisfaction is of the utmost importance]	1.00	7.00	5.92	1.375	−1.671	.070	2.614	.140
La direzione della struttura dà più importanza alla soddisfazione delle esigenze degli utenti che a qualsiasi altro fattore [The management of this structure gives more importance to satisfying customers' needs than to any other factor]	1.00	7.00	5.46	1.493	−1.171	.070	0.956	.140
<i>Managerial practices</i>	1.00	7.00	5.55	1.504	−1.438	.070	1.532	.140
Il mio superiore o coordinatore riconosce e apprezza il lavoro ben fatto e l'ottimo servizio [My immediate boss recognizes and appreciates a job well done and excellent service]	1.00	7.00	5.53	1.720	−1.287	.070	0.796	.140
Il mio superiore o coordinatore si impegna molto nel miglioramento del lavoro e del servizio in questo centro [My immediate boss is committed to improving the work and the service]	1.00	7.00	5.67	1.614	−1.449	.070	1.411	.140
Il mio superiore o coordinatore ci motiva continuamente per realizzare un buon lavoro ed erogare un servizio eccellente [My immediate boss constantly motivates us to do a good job and provide excellent service]	1.00	7.00	5.45	1.747	−1.238	.070	0.634	.140
Il mio superiore o coordinatore considera più importante erogare un servizio di ottima qualità che qualsiasi altra cosa [My immediate boss thinks providing excellent service quality is more important than anything else]	1.00	7.00	5.57	1.551	−1.389	.070	1.522	.140

*Note.* Italian items were translated from the Spanish version of the Service Climate Scale, as reported by Carrasco et al. (2012); *SE* = standard error.

TABLE 2  
Fit indexes for structural models ( $N = 1,221$ )

Model	$\chi^2$ SB	df	CFI	TLI	RMSEA [90% CI]	SRMR	AIC	BIC
4-factor	712.535	98	.931	.916	.072 [.067, .077]	.051	57532.560	57808.361
2-factor	1838.209	103	.805	.773	.117 [.113, .122]	.065	59468.518	59718.782
1-factor	2015.150	104	.785	.752	.123 [.118, .127]	.069	59761.584	60006.740
Cut-off values			> .90	> .90	< .080	< .080		

Note.  $\chi^2$ SB = Satorra-Bentler chi-square; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; CI = confidence interval; SRMR = standardized root mean squared residual; AIC = Akaike information criterion; BIC = Bayesian information criterion.

Table 3 shows the standardized regression coefficients of the items in the four factors and the intercorrelations among the factors. The first factor had a correlation of .79 with the second, .76 with the third, and .78 with the fourth. All the standardized regression coefficients of the first-factor items were statistically significant ( $p < .01$ ) and above .62. The second factor had a correlation of .81 with the third factor, and .74 with the fourth. All the standardized regression coefficients of the second-factor items were statistically significant ( $p < .01$ ) and above .72. The third factor had a correlation of .71 with the fourth factor. All the standardized regression coefficients of the third-factor items were statistically significant ( $p < .01$ ) and above .77. The fourth factor showed standardized regression coefficients that were statistically significant ( $p < .01$ ) and above .75.

Adequate scale convergence validity was supported by the item-factor loadings, which were considerable, ranging from .62 to .93, and all of them were highly significant ( $p < .001$ ), suggesting scale convergence (Anderson & Gerbing, 1988). Regarding discriminant validity, correlations among factors showed that overlap exists among the service climate factors (ranging from .71 to .81; see Table 3), but values did not exceed the cutoff point of .85 proposed by Shipp, Burns, and Desmul (2010). Taking into account that significant correlations were also found by Schneider et al. (1998; ranging from .50 to .74), Potočník et al. (2011; ranging from .48 to .69), and Carrasco et al. (2012; ranging from .48 to .61), and considering that CFA confirmed the superiority of the four-factor model (see Table 2), we concluded that the factors describe different (but related) facets of service climate. Cronbach's alpha indexes (see Table 3) show good internal homogeneity, ranging between .82 (for the first factor) and .93 (for the fourth factor).

### Nomological Validity

The dimension of global service climate was regressed on the three specific service climate dimensions to determine the contribution of the specific dimensions to the global one. As expected, the results revealed that global service climate was significantly related to each of the three specific dimensions of service climate,  $F(3, 1217) = 519.65$ ,  $p < .001$ ,  $R^2 = .56$ ; customer orientation:  $\beta = .21$ ,  $p < .001$ ; customer feedback:  $\beta = .23$ ,  $p < .001$ ; managerial practices:  $\beta = .40$ ,  $p < .001$ .

TABLE 3  
Standardized confirmatory factor analysis (CFA) loading estimates, variance extracted, and reliability  
( $N = 1,221$ )

	Factor 1	Factor 2	Factor 3	Factor 4
1. Employees in our organization have knowledge of the job and the skills to deliver superior quality work and service	.62			
2. Employees receive recognition and rewards for the delivery of superior work and service	.78			
3. The overall quality of service provided by our organization to customers is excellent	.81			
4. Employees are provided with tools, technology, and other resources to support the delivery of quality work and service	.72			
5. Customers are asked their opinions in order to evaluate the service quality		.73		
6. The employees are informed about the customers' opinions of service quality		.78		
7. The employees are informed about customer complaints		.72		
8. Customer's opinions and complaints are taken into account in an effort to improve		.81		
9. The decisions made always take the customer into consideration			.82	
10. The most important thing is to fulfil the needs and requests of the customers			.87	
11. In this hotel, customer satisfaction is of the utmost importance			.88	
13. The management of this company gives more importance to satisfying customers' needs than to any other factor			.77	
14. My immediate boss recognizes and appreciates a job well done and excellent service				.91
15. My immediate boss is committed to improving the work and the service				.93
16. My immediate boss constantly motivates us to do a good job and provide excellent service				.92
17. My immediate boss thinks providing excellent service quality is more important than anything else				.75
Variance extracted	.54	.58	.70	.77
Cronbach's alpha	.82	.85	.90	.93
Correlation index of Factor 2	.79			
Correlation index of Factor 3	.75	.81		
Correlation index of Factor 4	.78	.74	.71	

Note. Factor 1 = Global Service Climate; Factor 2 = Customer Feedback; Factor 3 = Customer Orientation; Factor 4 = Managerial Practices.

Correlations between service climate dimensions, burnout, and service quality are shown in Table 4. Correlations were positive with service climate and negative with burnout, indicating

both convergent and discriminant validity. In addition, as expected, absolute scores were greater for service quality than for burnout.

TABLE 4  
Correlations between service climate dimensions, burnout, and service quality

	Global service climate	Customer feedback	Customer orientation	Managerial practice	Burnout
Burnout	-.45	-.37	-.39	-.48	
Service quality	.74	.56	.59	.59	-.50

Note. All correlations are significant at  $p < .01$ ;  $N = 1,114$ .

### Aggregation at the Organizational Level

In addition to individual perceptions of service climate, typically defined as psychological climate, it has been proposed that individuals who work together develop a common shared perception of the organizational climate over time (in this case, organizational service climate). In order to assess within-group agreement and between-group differentiation, we computed the inter-rater agreement indexes  $r_{wg(j)}$  (James et al., 1984), the ICC1, and ICC2 (Bliese, 2000; James, 1982).

The  $r_{wg(j)}$  indicates inter-rater agreement or, in other words, the degree to which raters provide the same rating and, thus, can be considered interchangeable. ICC1 indicates the percentage of variance in individual perceptions that can be explained by group membership, whereas ICC2 indicates the reliability of the group means and whether groups can be reliably differentiated on the variable of interest (Bliese, 2000).

In general, Table 5 shows that aggregation at the center level is statistically supported. The  $r_{wg(j)}$  values indicate good agreement among employees of the centers, and ICC1 shows that between 15% (customer orientation) and 21% (customer feedback) of the variance in individual perceptions is explained by center-membership. Finally, even ICC2 shows that when service climate means are aggregated at the center level, these scores are quite reliable.

TABLE 5  
Aggregation indexes for service climate dimensions

	$r_{wg(j)}$	ICC1	ICC2
Global service climate	.78	.16	.73
Customer feedback	.76	.21	.79
Customer orientation	.76	.15	.72
Managerial practices	.66	.17	.75

Note.  $r_{wg(j)}$  = interrater agreement (James et al., 1984); ICC1 and ICC2 = intraclass correlation coefficients (Bliese, 2000; James, 1982).

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## DISCUSSION

Literature shows that service climate has a relevant impact on employees' performance, as well as on customers' satisfaction and loyalty and, finally, on firm financial performance. Therefore, the main goal of this study was to develop a valid measure in the Italian language, ready to be used by the community of Italian practitioners, scholars, and organizations working in the services field. Accordingly, this study described and validated the Italian version of the Service Climate Scale (ISCS) previously validated by Potočnik et al. (2011) and Carrasco et al. (2012). This measure is based on concepts and measures developed by Schneider and colleagues (1998; 2002), and it assesses the four dimensions of global service climate, customer feedback, customer orientation, and managerial practices. Our results are strongly consistent with those obtained by Potočnik et al. and Carrasco et al., and they confirm the adequate construct validity of the ISCS. The four dimensions are conceptually and statistically differentiated, although inter-correlations among them are higher in the Italian sample than in other studies (Carrasco et al., 2012; Potočnik, et al., 2011; Schneider et al., 1998). For sake of parsimony it could be reasonable to aggregate all the service climate items into a single dimension. However, there is very limited tradition in this sense. Alternatively, some studies, for instance Salanova et al. (2005), used only the Global Service Climate Scale; other studies (e.g., Potočnik et al., 2011), instead, used the whole four-dimension scale. Using the four-dimension scale may be useful for practitioners who may get specific information to intervene to raise service climate. In addition, as in Carrasco et al. (2012), results of our CFA show that the one- or two-factor solutions are not statistically acceptable. However, considering that also other studies observed that the four dimensions are well inter-correlated (Carrasco et al., 2012; Potočnik et al., 2011; Schneider et al., 1998), future studies should take into account the level of correlations among factors and examine more in depth this issue.

The four dimensions show satisfactory nomological validity, with evidence of both convergent and discriminant validity. Results suggest that it is reasonable to aggregate the service climate dimensions at the unit or branch level, thus supporting the idea that this service climate scale can assess both individual and collective perceptions. Finally, model fit, reliabilities, and factor loadings have similar magnitudes to those obtained in previous studies (Carrasco et al., 2012; Potočnik et al., 2011; Schneider et al., 1998).

This study has some limitations. First, the current validation of the ISCS is restricted to a single sector, the social services sector. Although this type of organization shares a number of important characteristics with other service organizations (e.g., interaction between contact employees and customers), the study should be replicated in other service sectors in order to confirm the generalizability of the ISCS. Second, the sample is mainly composed of women. Therefore, again, in order to test the generalizability of the measure, the study should be replicated using samples that are more balanced in terms of gender or mainly composed of men. Third, nomological validity is limited to the two constructs used in this study. Thus, it is important to consider additional constructs in order to extend the nomological network of the service climate construct. In this regard, it would be interesting to consider objective data (e.g., the financial performance of the organizations) or customer satisfaction. Fourth, all the data were based on self-reports, and the study used a cross-sectional design; thus, all the measures were collected at the same time point, which creates possible problems related to common-method bias. However, CFA results indicated that it is not an important problem in our sample because the four-factor model shows a better fit to the data than the model with a single general dimension (see Podsakoff,

McKenzie, Lee, & Podsakoff, 2003). Finally, in this study each center consisted, on average, of 14 employees, which can be considered a single large team. In the future, larger centers or branches that include more teams should be considered in order to investigate how much service climate reflects a branch and/or a team level measure.

Despite these limitations, the present study offers a first validation of the ISCS, and it shows that this scale makes it possible to accurately measure the four components of service climate at the collective level as well. Although it is a first validation, this study suggests that this instrument is valid and reliable enough to be used in the Italian context for both research and professional practice.

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