

EMPLOYEE SATISFACTION OR SERVICE CLIMATE: WHICH BEST PREDICTS CUSTOMER SATISFACTION?



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A popular framework of organizational effectiveness is the Service Profit Chain (Heskett, Jones, Loveman, Sasser & Schlesinger, 1994), which is built around the concept that customer loyalty and satisfaction are leading indicators of profit and revenue growth. Keeping with this perspective, the objective of this article is to examine the relative efficacy of the two predictors of customer satisfaction most often assessed through employee opinion surveys: employee satisfaction and climate for service.

Traditional measures of business success include revenue growth, earnings and return on assets. Such variables are lagging indicators, which some have characterized as a rear-view mirror approach to business performance management (Rucci, Kirn & Quinn, 1998). As a result, many management theorists have shifted their focus to a search for leading indicators of future financial success. By identifying indicators that predict performance, organizations can measure the effectiveness of their strategy proactively and make timely modifications to improve the likelihood of obtaining the desired business outcomes (Ittner & Larcker, 2003).

There is no question that employee and customer satisfaction are significantly linked. There is likewise no doubt that climate for service and customer satisfaction are significantly related. Both sets of findings are well documented. However, a remaining question is whether climate for service (a customer-centric measure) or employee satisfaction (an employee-centric measure) is the more potent predictor of customer satisfaction.

It would be reasonable to predict that customer-centric measures (e.g., climate for service) would be more strongly associated with customer satisfaction than employee-centric (e.g., employee satisfaction) items. Initial findings support this conclusion (Brooks, Wiley, & Hause, 2006; Lundby & Fenlason, 2004). We hypothesize that climate for service will be a relatively more potent predictor of customer satisfaction. For organizational researchers, a better understanding of the relative contribution of these two constructs should lead to improved models of organizational effectiveness and greater efficiency in employee surveying techniques.

We begin with a review of each of the two constructs and how they have been defined in the existing literature. Then, using case studies of two organizations, we will study the relative potency of climate for service and employee opinions in predicting customer opinions.

CLIMATE FOR SERVICE

Led initially by the work of Benjamin Schneider and his colleagues (Schneider, Parkington & Buxton, 1980), researchers have spent over two decades examining the effect of climate for service on organizational outcomes. The various definitions of climate for service all capture the essence of what Schneider defines as the employees' shared perceptions of the policies, practices and procedures that are rewarded, supported and expected concerning customer service (Schneider, Salvaggio & Subirats, 2002; Schneider, White & Paul, 1998).

Climate for service survey items ask employees to describe their experience in serving customers. Sample items ask if customers are adequately serviced, if customer complaints are resolved quickly, or if employees have the tools they need to adequately service their customers.

The general conclusion of research studies is that climate for service is significantly associated with a number of important customer outcomes, including satisfaction with service delivery, intent to repurchase or re-service and willingness to recommend (see Dietz, Pugh & Wiley, 2004; Schneider & Bowen, 1985; Schneider, White & Paul, 1998; Wiley, 1996). In addition to these attitudinal and behavioral outcomes, climate for service has also been shown to be a significant predictor of financial outcomes (Lundby, Dobbins & Kidder, 1995; Tornow & Wiley, 1991; Wiley & Brooks, 2000).

EMPLOYEE SATISFACTION

Employee satisfaction is one of the most common of all the constructs studied by I/O psychologists. According to Harter, Schmidt and Hayes (2002) there were at least 7,855 publications on the subject of job satisfaction between 1976 and 2000. Not surprisingly, Brown and Peterson (1993), in a meta-analysis of the antecedents and consequences of job satisfaction, declared that the construct of job satisfaction can be defined in many different ways. For example, Locke (1976) defined it as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences.” Churchill, Ford, and Walker (1974) defined the construct as “all characteristics of the job itself and the work environment

which salesmen find rewarding, fulfilling, and satisfying or frustrating and unsatisfying.”

Employee satisfaction survey items typically ask employees their attitudes and opinions about work. Such items might ask if employees are satisfied with their jobs and the company they work for, if employees intend to remain working for the company, and if employees like the kind of work they do.

Linkage research focusing on employee satisfaction has shown a significant association between employee satisfaction and other important outcomes, including customer satisfaction and financial success. While there are many examples to illustrate this important link, the most commonly cited is the work of Rucci, Kirn and Quinn (1998) and their development of the Service Profit Chain at Sears.

THE PRESENT STUDIES

We will present data collected from the employees and customers of two different organizations in order to compare climate for service and employee satisfaction as predictors of customer satisfaction. Each data set included employee opinion questions on a range of topics. Items focusing on satisfaction with job and workplace were combined into an employee satisfaction measure while items focusing on customer service were combined to form a climate for service measure in each data set (see items included in Figure 1). To do this, three subject matter experts with over 50 years of combined survey research expertise first reviewed definitions and sample items for each of the two constructs.

FIGURE 1: ITEMS FOR EMPLOYEE SATISFACTION AND CLIMATE FOR SERVICE

	Study 1	Study 2	Study 3
Employee Satisfaction	Considering everything, how satisfied are you with your job?	Considering everything, how satisfied are you with your job?	Considering everything, how satisfied are you with your job?
	How would you rate your overall satisfaction at the present time?	How would you rate your overall satisfaction at the present time?	How would you rate your overall satisfaction at the present time?
	I am seriously considering leaving in the next 12 months.	I am seriously considering leaving in the next 12 months.	I am seriously considering leaving in the next 12 months.
Climate for Service	Customer problems get corrected quickly.	Customer problems get corrected quickly.	External customer problems get corrected quickly.
	Company name delivers products or services in a timely manner.	Company name delivers products or services in a timely fashion.	Overall, how satisfied are customers with the quality of service they receive?
	Customers rate our products and services favorably.	How do you rate your company in providing service to its customers?	Where I work, we set clear performance standards for service quality.
	My manager emphasizes doing high quality work.	Where I work, we set clear performance standards for service quality.	Senior Management is committed to providing quality service to external customers.
	There is a strong emphasis on customer service at my company.	There is a strong emphasis on customer service at my company.	Company Name is doing a good job providing service to its external customers.
		In general, I am allowed to do what is necessary to satisfy customers.	I have the authority to do what is necessary to serve my customers.

Study 1 Method: Retail Eyewear

Sample

In the first study, we used survey data from employees and customers of 375 locations of a retail eyewear chain. The employee surveys were delivered to each location in bulk and then distributed to each employee. Upon completion, employees were instructed to deposit their surveys in postage-paid envelopes, which were then mailed directly to the research firm. Customer data was gathered via a telephone survey, in which customers were automatically invited to participate at the end of each transaction. Survey responses were collected from nearly 8,000 employees (73 percent response rate) and 18,000 customers (which equates to approximately 45 customer completions per store).

Measures

The employee opinion survey consisted of scaled questions measuring a number of topics common to such surveys (e.g., perceptions of senior leadership, job satisfaction, customer orientation). The items selected by the subject matter experts to represent employee satisfaction and climate for service are shown in Figure 1. Employees responded to both sets of items using 1-5 Likert rating scales anchored by “strongly agree” and “strongly disagree” or “very satisfied” and “very dissatisfied.”

From the customer opinion survey, we used a five-item measure of customer satisfaction and loyalty. Customers responded using a 1-5 scale anchored by “excellent/very likely” and “poor/very unlikely.”

Aggregation

Variables in linkage research are conceptualized at the group level; therefore, individual-level data must be aggregated to a higher unit of analysis. In other words, individual responses must be combined to provide ratings for the entire business unit. Before doing so—and consistent with previous linkage research (see Johnson, 1996; Schneider, et al., 1998)—two measures of agreement were calculated to assure that aggregation was statistically justifiable. First, average inter-rater agreement was computed using James, Demaree and Wolf’s (1984) rwg. This approach measures the amount of agreement among a single group of judges (employees, customers, etc.) on one single variable or multiple parallel items. Second, intraclass correlation was calculated using ICC (2) (Bartko, 1976; Shrout & Fleiss, 1979). ICC (2) measures the degree to which units can be reliably differentiated based on individual dimension scores (Johnson, 1996). Bartko described ICC (2) as a measure of the relative status of between-unit and within-unit variability using the average ratings of respondents within each unit.

To achieve an acceptable level of agreement, James (1982) recommends a minimum rwg value of .60 and Glick (1985) recommends a minimum ICC (2) value of .60. In our study, average rwg values for employee satisfaction and climate for

service were .77 and .93, respectively. The average rwg value for the customer satisfaction measure was .78. All three values exceeded the recommended cutoff and indicated agreement among employees and customers at each location. The average ICC (2) values for satisfaction and climate for service were .60 and .67, respectively. The average ICC (2) value for the customer satisfaction measure was .79. Thus, these values also exceeded the recommended cutoff and indicated sufficient agreement among employees and customers at each location to justify aggregation.

Results

Figure 2 shows the means, standard deviations and intercorrelations among the study variables. As can be seen, employee satisfaction and service climate measures are both significantly correlated with customer satisfaction, although the magnitude of the relationship is stronger for climate for service ($r_{xy}=.34$ versus $r_{xy}=.25$). The significant intercorrelation of employee satisfaction and climate for service is not surprising, given that employee opinions were collected on both constructs using the same instrument. Additionally, one would expect to find intercorrelation because both constructs have been related to customer satisfaction in previous studies.

FIGURE 2: ZERO-ORDER CORRELATION MATRIX FOR EMPLOYEE AND CUSTOMER MEASURES

Measure	Mean	SD	1	2	3
Customer Satisfaction	4.26	.08	-		
Employee Satisfaction	3.68	.36	.25**	-	
Climate for Service	4.24	.27	.34**	.62**	-

**p<.01

However, given that the two employee measures were not independent (as indicated by their significant association), a truer test of their relative association with customer satisfaction requires a multivariate technique. Thus, Figure 3 shows the results of a hierarchical regression analysis. In the first step, we regressed customer satisfaction onto two control variables. This is consistent with previous linkages studies in which researchers have shown that factors beyond the study variables of interest (e.g., location size, number of employees, time since store opening) can influence relationships through their effect on perceived customer intimacy (Dietz, Pugh, & Wiley, 2004).

In this study, we controlled for store size (square footage of retail space) because smaller retail locations might provide the opportunity for more intimate relationships among employees and customers, which could result in both more positive service climates and higher customer satisfaction. In addition, we controlled for store age (number of months since opening), because relationships are likely to be stronger in more stable locations/units. Data for the two control variables were obtained from the retail organization.

FIGURE 3: RESULTS OF REGRESSION ANALYSES WITH CUSTOMER SATISFACTION AS THE CRITERION

Predictor	Step 1	Step 2
Step 1. Square Footage Months Since Opening	-.021 -.091	
Step 2. Square Footage Months Since Opening Employee Satisfaction Climate for Service		-.013 -.057 -.063 .387**
R2	.012	.128
ΔR2		.116**
F	2.12	13.220**

Note: Standardization regression coefficients are shown. **p<.01

As can be seen, square footage and months since opening (entered at step 1) did not account for any significant variance in the dependent variable (customer satisfaction). In step 2, employee satisfaction and climate for service were entered simultaneously. While the overall F statistic in step 2 was significant (F=13.220, p<.01), climate for service was significantly associated with the dependent variable, while employee satisfaction was not.

Conclusion

Consistent with previous research, the results of Study 1 show that employee satisfaction and climate for service are both related to customer satisfaction. However, consistent with our hypothesis, the zero-order correlations and regression findings indicate that climate for service is a more powerful predictor. In the bivariate case, climate for service exhibited a significantly stronger correlation with customer satisfaction than employee satisfaction. In the multivariate case, service climate was significantly associated with customer satisfaction, while employee satisfaction was not. Taken together, the results from Study 1 indicate that climate for service has a stronger relationship with customer satisfaction than does employee satisfaction. In fact, employee satisfaction did not contribute any predictive power above and beyond climate for service.

Study 2 Method: Discount Footwear

Sample

In this second study, data were collected from employees and customers representing 248 locations of a discount retail footwear store. During company time, 4,600 employees voluntarily completed a survey for an overall response rate of 51 percent. At a later date, a random sample of nearly 28,000 customers participated in a mail survey.

Measures

Once again, subject matter experts identified a suitable set of items to measure employee satisfaction and climate for service. All of the items are shown in Figure 3. Responses were again

made on a 1-5 Likert-type rating scale anchored by “strongly agree” and “strongly disagree.”

Satisfaction ratings were obtained from customers on a 4-item scale. Customers rated each item using a 1-5 Likert-type rating scale anchored by “very satisfied” and “very dissatisfied.”

Aggregation

Once again, rwg (James, et al. 1984) was calculated for the employee and customer measures to validate aggregation of individual responses. Average rwg values for employee satisfaction and climate for service were .66 and .90, respectively, exceeding the recommended cutoff of .60 (James, 1982). The average rwg value for the customer satisfaction measure was .70, also exceeding the recommended cutoff. Taken together, the rwg values indicated adequate agreement among employees and customers at each store.

The average ICC (2) values for the employee satisfaction and climate for service measures were .50 and .43, respectively. While these values were below the recommended cutoff, Schneider, White, and Paul (1998), when faced with similar values, suggested that they were moderate for the statistic and not so low as to prohibit aggregation. However, they cautioned that this could make it more difficult to detect significant relationships among the study variables. In this particular instance, we did not have access to the individual-level (raw) customer data from this organization. While this made it impossible to compute an average ICC (2) value for the customer data, the average rwg value of .70 suggested sufficient within-unit agreement.

Results

Figure 4 shows the means, standard deviations and intercorrelations among the variables in study two. Once again, climate for service exhibited a stronger association with customer satisfaction (rxy=.26, p<.01) than employee satisfaction (rxy=.17, p<.01).

FIGURE 4: ZERO-ORDER CORRELATION MATRIX FOR EMPLOYEE AND CUSTOMER MEASURES

Measure	Mean	SD	1	2	3
Customer Satisfaction	3.40	.10	-		
Employee Satisfaction	3.83	.48	.17**	-	
Climate for Service	4.28	.34	.26**	.60**	-

**p<.01

Figure 5 shows the results of a hierarchical regression analysis. A control variable (number of staff) was entered in the first step to control for the effect that business volume, measured by full-time equivalent (FTE), might have on customer-employee intimacy. After entering the control variable, employee satisfaction and climate for service were entered simultaneously in the second step.

FIGURE 5: RESULTS OF REGRESSION ANALYSES WITH CUSTOMER SATISFACTION AS THE CRITERION

Predictor	Step 1	Step 2
Step 1. FTE	-.239**	
Step 2. FTE		-.220
Employee Satisfaction		-.021
Climate for Service		-.230**
R2	.057	.116
ΔR2		.059**
F	14.88**	10.68**

Note: Standardization regression coefficients are shown. **p<.01

As can be seen in the table, FTE (entered at step 1) accounted for a significant amount of the variance in customer satisfaction. In step two, employee satisfaction and climate for service were entered simultaneously. As in Study 1, the overall F statistic in step two was significant (F=10.68, p<.01), but only climate for service accounted for significant variance in the dependent variable.

Conclusion

Consistent with previous research, employee satisfaction and climate for service both were shown to have a significant relationship with customer satisfaction. However, consistent with our hypothesis, climate for service exhibited a significantly stronger association with the customer outcome measure than employee satisfaction. The results of the regression analysis also support this finding. Specifically, climate for service was significantly associated with customer satisfaction, while employee satisfaction was not. Taken together, the results from study two also suggest that climate for service has a stronger relationship with customer satisfaction than does employee satisfaction. Employee satisfaction did not contribute any predictive power above and beyond climate for service.

GENERAL DISCUSSION

Results of the two studies presented here clearly suggest, as hypothesized, that climate for service is the more potent predictor of customer satisfaction. While employee satisfaction was significantly correlated with customer satisfaction in both of the studies, the magnitude of that association was clearly weaker. In multivariate tests of the two constructs, climate for service consistently emerged as the more potent predictor.

There are both practical and theoretical implications of these findings. In practical terms, research has clearly shown that customer satisfaction drives higher levels of customer loyalty and ultimately stronger bottom-line financial performance. Determining the more potent leading indicator of customer

satisfaction will help organizations more efficiently pinpoint changes in strategy and operations that will have the greatest impact on customer loyalty and financial performance. Given that organizations have limited time and resources to devote to research, adopting a survey model with the greatest predictive power is of substantial economic and strategic value.

This question also has value in theoretical terms. While there is support for both the employee satisfaction and climate for service constructs as predictors of organizational success, we now find ourselves with two models of organizational effectiveness, each founded upon similar research methodologies and outcomes but with different predictive capacity. Clarifying the role of these two models is an appropriate step forward in this line of research and should enable organizational researchers to depict the interplay of these variables more accurately.

Our research suggests that linkage research models that incorporate both constructs may be stronger than either alone. For example, while the relationship between climate for service and customer satisfaction is clear, research is also clear regarding the significant relationship between employee satisfaction and retention (Hellman, 1997). Thus, where an organization has a dual objective of retaining qualified talent and satisfying customers, measuring both constructs and addressing organizational and business unit weaknesses would be prudent.

CONCLUSION

We embarked on this research to better understand the relative potency of two popular constructs within the field of survey research, employee satisfaction and climate for service as predictors of customer satisfaction. The findings have implications for both researchers and practitioners. For researchers, a better understanding of these two constructs could lead to the development of superior models of organizational performance. For practitioners, this research has tangible implications for the types of questions that should be asked when developing or evaluating strategies to achieve different organizational objectives. Where the goal is an enhanced customer experience, the results seem apparent. Across these two studies, climate for service is more potent than employee satisfaction in predicting customer satisfaction. ■

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