

THE CONVERGENCE OF CUSTOMER SATISFACTION AND SERVICE QUALITY EVALUATIONS WITH INCREASING CUSTOMER PATRONAGE

Pratibha A. Dabholkar, University of Tennessee

ABSTRACT

Customer evaluations of services are critical to service providers. However, there is some ambiguity as to whether these evaluations should be measured as customer satisfaction or service quality and whether it makes a difference which type of evaluation is used. A conceptual framework is proposed to suggest that for customers who have recent associations with a service organization, it is helpful to measure both customer satisfaction and service quality because these constructs are distinct for recent customers and have additive predictive power for the future behavior of these customers. The framework also suggests that for customers who have a long-term association with a service organization, measuring either customer satisfaction or service quality may be sufficient because the constructs tend to overlap over time. An empirical study of retail customers supports the proposed framework. The implications of this framework and the findings of the study are discussed.

INTRODUCTION

The customer's continuing demand for quality services combined with growing competitive pressures within service industries make it critical that service organizations focus on providing service quality and customer satisfaction (Bateson 1989; Berry, Bennett, and Brown 1989). Given this background, it is not surprising that there has been growing interest in studying these two constructs (Bitner 1990; Bolton and Drew 1991, 1992; Oliver 1981; Zeithaml, Berry, and Parasuraman 1991). In addition, there has been much recent debate regarding the relationship and overlap between the constructs of customer satisfaction and service quality (Bitner and Hubbert 1994; Dabholkar 1993; Iacobucci, Grayson, and Ostrom 1994; Oliver 1993; Parasuraman, Zeithaml, and Berry 1994).

On a promising note, this debate has led to some consensus on a number of issues.

Researchers agree that viewing service quality and customer satisfaction as transactional or global depends on research objectives and that both constructs could be viewed in either frame of reference. There is also some agreement that both constructs could be measured with or without disconfirmation depending on research objectives. These agreements have removed artificial distinctions between customer satisfaction and service quality created by specifically conceptualizing and measuring the two constructs in different ways (e.g., one construct as transactional, the other as global; or one construct with disconfirmation, the other without). Having done so, we can now focus on determining true distinctions between customer satisfaction and service quality.

It may be noted that despite vigorous discussion on this issue, not much empirical research has been done to investigate the distinction between service quality and customer satisfaction. A study by Spreng and Singh (1993) on evaluations by banking customers did specifically examine this issue at the empirical level, but did not find discriminant validity between the two constructs. To their credit, Spreng and Singh did remove artificial distinctions by examining both service quality and customer satisfaction at the global level and both without disconfirmation.

The main issue to be resolved is whether customers distinguish between customer satisfaction and service quality in their own minds. In other words, there is a need to understand whether underlying psychological processes are different for the two constructs. A related issue is that it is possible that the two constructs overlap under certain conditions and are distinct under others (see Dabholkar 1995). The practitioners' principal concerns in this area relate to determining which of the two constructs best captures customer evaluations of service and whether measures of both constructs are needed to understand and predict customer behavior. The purpose of this paper is to propose and test a

conceptual framework that investigates these and related research issues.

A CONCEPTUAL FRAMEWORK

Given that the two streams of literature -- customer satisfaction and service quality -- evolved separately and as both streams have made significant contributions to knowledge of customer evaluations of services, the research question facing academics is not whether one construct is superior to the other, but rather whether the two constructs complement each other or are substitutable under certain conditions.

Overlap or distinction between the constructs could be determined in a number of ways. One way is to examine the literature to see if past researchers have suggested that psychological processes for the two constructs are different. Another way is to ask customers what these terms mean to them. A third way is to investigate if the antecedents or consequences are different for the two constructs, either from the literature or through customer interviews.

On examining the literature for psychological processes underlying the two constructs, certain differences become obvious. A number of authors and researchers view quality (see Garvin 1987) and more specifically service quality (see Bitner 1990; Zeithaml 1988) as cognitive evaluations. The explanations include the fact that service quality is attribute-based and that it represents evaluation of excellence or superiority. Both views suggest that service quality is likely to be viewed in an objective, cognitive manner.

In contrast, researchers suggest that customer satisfaction has both cognitive and affective aspects (Pfaff 1977; Westbrook 1980; Woodruff, Cadotte, and Jenkins 1983; Yi 1990). The cognitive element springs from the view that customer satisfaction is after all an evaluation (Hunt 1977; La Tour and Peat 1979). The emotional aspect is based on the view that surprise is a central element in customer satisfaction (Oliver 1981; Westbrook and Oliver 1981). This view of customer satisfaction as a combination of cognitive and affective elements is borne out by empirical research. For example, Westbrook (1987) found satisfaction judgments to be determined by relevant product-related affective experiences in addition to

cognitive processes. Some researchers suggest that the affective response may overshadow the cognitive evaluation in customer satisfaction. Oliver (1989) suggests that the process of satisfaction is more likely to result in an affective or emotional response than a cognitive one. In a study on satisfaction with automobiles and pocket calculators, Oliver and Westbrook (1980) found that factor analysis did not discriminate between affective and satisfaction states.

A small qualitative study was conducted as another way to corroborate or repudiate the differences in the two constructs suggested in the literature. Students in a marketing class ($n=42$) were asked to create separate lists of words or phrases that suggested service quality and customer satisfaction to them. The majority of the phrases used for service quality were different from those used for customer satisfaction. The former list included words or phrases such as "high standard," "excellent," "top-notch," and "number one," clearly suggesting cognitive evaluations of the service when asked to think about service quality. The latter included, "I feel good," "I'm glad I went there," and "I'm happy," indicating affective evaluations of the service when asked to think about customer satisfaction.

In addition, there were some phrases that appeared to encompass disconfirmation / comparison with a standard such as, "they give me what I'm looking for," "I get what I want," and "I got more than I hoped for." Interestingly, these phrase appeared under both service quality and customer satisfaction. Thus, for one thing, the study suggests that customers can indeed think of both service quality and customer satisfaction with or without disconfirmation. More importantly, this third set of (disconfirmation) phrases which were much more cognitive than affective appeared under both constructs, thus supporting the literature that service quality evaluations are cognitive in nature, but that customer satisfaction evaluations have both cognitive and affective aspects.

This difference in the two constructs can be tied to a temporal frame of reference to suggest conditions for distinction and overlap between customer satisfaction and service quality as follows. Experience tells us that short term evaluations of services can be cognitive or

affective depending on whether emotion was aroused during recent service encounters. In fact, most service evaluations are likely to encompass both aspects -- cognitive and affective. Research using critical incidents (Bitner, Booms, and Tetreault 1990) confirms the same. Typically, the affective aspect of customer evaluations is expected to be short-lived for most situations. With the exception of extreme situations, customers would tend to remember their evaluations of service experiences cognitively over the long-term.

Service quality evaluations, whether made over the short term or the long term, would essentially be viewed as cognitive based on the literature and the qualitative study. Customer satisfaction evaluations, on the other hand, viewed as a combination of affective and cognitive elements, would have an affective aspect in the short term, but would become increasingly cognitive over time. This idea is similar to Oliver's (1981) notion that across several situations or over time, customer satisfaction is likely to decay into an attitude. This "attitude" is the same construct some researchers view as global customer satisfaction (Bolton and Drew 1992; Drew and Bolton 1991). Over time or across situations, the emotional aspect is no longer as strong and the surprise aspect is finite; thus, the situation is likely to be remembered cognitively. As a result, customer satisfaction with its combination of cognitive and affective aspects in the short term, would be somewhat different from service quality which would be purely cognitive. However, as customer satisfaction becomes increasingly cognitive over time, its overlap with service quality will increase. Hence, it is proposed that:

- H1:** For most service experiences,
- (a) service quality and customer satisfaction will be distinct (separate constructs) in the short term but
 - (b) the constructs will overlap (i.e., not be distinct) in the long term.

The above hypothesis is the crux of the paper and implies that while customer satisfaction and service quality evaluations are likely to be different in the short term (due to the underlying psychological processes), there is likely to be little difference between the two constructs in the global

frame of reference. This is not to say that there will be a total overlap between the concepts over time -- nor that there will be complete distinction during the short term. The extent of overlap would depend on the type of service as well as on the individual. Some services, such as savings accounts, may be evaluated with little emotional content and the overlap between customer satisfaction and service quality evaluations would be high at all times. This could explain why Spreng and Singh (1993) found no discriminant validity between customer satisfaction and service quality in a study of banking customers. Other services, such as health care, may have a strong emotional aspect even over time, which in turn may cause customer satisfaction and service quality evaluations to continue to remain distinct. Also, some individuals may be more likely than others to associate an emotional state with a particular service. In general, however, customer satisfaction and service quality are likely to converge over time and across situations as the affective part of the evaluation wears off and customer satisfaction evaluations become increasingly cognitive.

A second hypothesis is proposed based on the notion that if service quality and customer satisfaction are separate constructs (or if they have little overlap), they should provide additive predictive power for the customer's behavioral consequences; however, if the two constructs have significant overlap, then the predictive power added by one construct to the other should be minimal or incremental. Service quality evaluations are expected to be cognitive irrespective of time frame. Therefore, when there is an emotional aspect to the evaluation as in the short term, customer satisfaction will add predictive power over that of service quality. In the long term, however, when it is less likely that emotional evaluation is present, customer satisfaction will add little to the predictive validity of service quality. Hence, it is proposed that:

- H2:** For most service experiences, customer satisfaction will add more to the predictive power of service quality (in predicting behavioral consequences) in the short term than it will in the long term.

It is interesting to note that both hypotheses are also supported by another conceptual basis for distinction between customer satisfaction and service quality -- one that is related to the antecedents of the constructs. Oliver (1993) suggests that whereas service quality evaluations can be based on external information (such as store image and word-of-mouth) and can exist without actual experience of the service, customer satisfaction evaluations must be based on experiencing the service. Tying this idea with a temporal frame of reference, it is seen that recent customers have relatively little experience with the service and therefore their evaluations of service quality are based partly on external information and partly on experience, whereas their evaluations of satisfaction are based totally on experience. Hence for recent (or short term) customers, service quality and customer satisfaction would be distinct (H1a). However, with increasing patronage, customers will have many experiences to draw on, and service quality evaluations will be based increasingly on direct experience, thus converging with customer satisfaction evaluations over time (H1b). Finally, as customer satisfaction in the short term draws mainly on experience, service quality evaluations being based on experience as well as external information, will add predictive power over that of customer satisfaction evaluations. However, in the long term, service quality evaluations will draw increasingly on experience and will add little to the predictive power of customer satisfaction (H2).

METHOD

Data Collection and Sample Characteristics

Retail customers of two regional department store chains were used as the respondents for this study, which was part of a larger study examining various issues related to customer satisfaction and service quality. The data were collected, using a self-administered questionnaire, at six different stores located in similar trading areas. To ensure a diverse sample, respondents were selected from customers shopping during morning, afternoon, and evening hours on weekdays as well as weekends. Customers entering the store were requested to complete the questionnaire provided

they had previously shopped at the store.

The first set of data ($n=226$) was gathered during the same month at each of the stores. A second set of data ($n=162$) was collected three months later to cross-validate the results of the first study. In the first study, 78 customers had shopped at the store for less than two years and were considered relatively recent (or short term) customers, while 148 customers had shopped at the store for more than two years and were considered long-term customers. In the second study, 44 customers were considered relatively recent (or short term) customers, while 118 were considered long-term customers (using the same criteria as in the first study). There were 27 men (mean age=40.85) and 197 women (mean age=43.03) in the first study. The second study was somewhat better balanced across gender with 61 men (mean age=32.77) and 96 women (mean age=37.53). (A few people in each study did not answer the demographic questions.)

Measurement

Customer satisfaction was measured using three items from the literature. Two items were seven-point semantic differential scales with end-points pleased / displeased with the service at this store and completely satisfied / dissatisfied with the service at this store (see Hausknecht 1990; Westbrook and Oliver 1981). The third item was a seven-point delighted / terrible scale (see Andrews and Withey 1976; Westbrook 1980) widely used to measure customer satisfaction.

Service quality was measured using three items developed for this study. One item was a semantic differential scale following the statement, "The service I get at this store is ..." with endpoints excellent / very poor. Another item used a Likert scale following the statement, "This store provides superior service." The third item was a semantic differential scale following the statement, "The service provided by this store is of a ..." with endpoints high standard / low standard. All three items used seven-point scales.

Intentions to shop at the store in the future and intentions to recommend the store to others were each measured using two seven-point semantic differential items (likely/unlikely, possible/impossible) (see Fishbein and Ajzen 1975) and one

five-point intention item (definitely would/definitely would not) commonly used in consumer research.

Results

The reliabilities of the scales were measured for both studies. Cronbach's alpha values for scales in the first study were 0.84 for customer satisfaction, 0.78 for service quality, and 0.84 for intention to recommend the store, and 0.78 for intention to shop at the store in the future. Cronbach's alpha values for scales in the second study were 0.85 for customer satisfaction, 0.81 for service quality, and 0.88 for intention to recommend the store, and 0.83 for intention to shop at the store in the future. Thus, reliabilities were close to or above 0.80 and in the range recommended by Nunnally and Bernstein (1994). Exploratory factor analysis using varimax rotation (and mineigen=1) was conducted to provide a preliminary test of the central hypothesis in the paper. The data collected in both studies were divided into short term and long term customers, thus creating four sub-samples. In both studies, two factors emerged for short term customers as predicted with customer satisfaction items loading on one factor and service quality items loading on another, thus supporting hypothesis H1a (see Table 1). Also, in both studies, only one factor was found for long term customers as predicted, thus supporting hypothesis H1b (also see Table 1). In effect, four separate tests provided preliminary support for the central hypothesis proposed in this paper.

Next, a more rigorous design based on confirmatory factor analysis was set up so that each sub-hypothesis (H1a and H1b) would be tested in four different ways as follows. Eight sets of confirmatory factor analyses using maximum likelihood estimators were conducted by first specifying one factor for each of the four sub-samples (long term and short term customers for the two studies) and then specifying two factors for each sub-sample. The results are presented in Table 2.

Adjusted goodness-of-fit (AGFI) values for the model predicting customer satisfaction and service quality as one factor were 0.65 (study 1) and 0.41 (study 2) for short term customers, i.e., the one

factor model had poor fits for short-term customers in both studies as predicted. Thus, short term customers failed to view customer satisfaction and service quality as one factor, supporting hypothesis H1a.

Table 1
Exploratory Factor Analysis Using Varimax Rotation on Customer Satisfaction (CS) and Service Quality (SQ)

Study 1

	Short Term (n=78)		Long Term (n=148)	
	Factor 1	Factor 2	Factor 1	Factor 1
CS1	0.94*	0.27	CS2	0.91*
CS2	0.93*	0.32	CS1	0.88*
CS3	0.89*	0.31	SQ1	0.86*
SQ2	0.21	0.88*	CS3	0.83*
SQ1	0.27	0.87*	SQ3	0.77*
SQ3	0.40	0.76*	SQ2	0.55
Variance explained by each factor:				
	2.81	2.39		3.92

Study 2

	Short Term (n=44)		Long Term (n=118)	
	Factor 1	Factor 2	Factor 1	Factor 1
CS1	0.94*	0.28	CS1	0.93*
CS2	0.93*	0.30	CS2	0.93*
CS3	0.92*	0.26	CS3	0.90*
SQ2	0.16	0.93*	SQ1	0.85*
SQ3	0.32	0.87*	SQ3	0.82*
SQ1	0.35	0.74*	SQ2	0.60
Variance explained by each factor:				
	2.85	2.41		4.29

* values > 0.74

For the model predicting customer satisfaction and service quality as two factors, AGFI values were 0.82 (study 1) and 0.50 (study 2) for short term customers. Clearly in study 1, the two factor model had a good fit for short-term customers as predicted. Thus, short term customers viewed customer satisfaction and service quality as separate factors, supporting hypothesis H1a. In

Table 2
Confirmatory Factor Analysis on Customer Satisfaction (CS) and Service Quality (SQ)
Using Maximum Likelihood Estimation

<u>Model</u>	<u>Length of Patronage</u>	<u>Study</u>	<u>AGFI</u>	<u>Conclusion</u>
CS and SQ as 1 factor	Short Term	Study 1 (n=78)	0.65	Poor fit as predicted
		Study 2 (n=44)	0.41	Poor fit as predicted
	Long Term	Study 1 (n=148)	0.81	Good fit as predicted
		Study 2 (n=118)	0.82	Good fit as predicted
CS and SQ as 2 factors	Short Term	Study 1 (n=78)	0.82	Good fit as predicted
		Study 2 (n=44)	0.50	Fit is not really good, but it is better than for 1 factor as predicted
	Long Term	Study 1 (n=148)	0.73	Fit is not necessarily poor, but it is worse than for 1 factor as predicted
		Study 2 (n=118)	0.41	Poor fit as predicted

study 2, the fit was not really good (AGFI=0.50), but it was better than the fit for the same data testing the one factor model (AGFI=0.41). It may be noted that the sample size for this particular test (short term customers in study 2) was rather small

(n=44) which may have prevented finding a better fit for the two factor model. Overall, three out of four tests clearly supported hypothesis H1a and the fourth test offered some support.

AGFI values for the model predicting

Table 3
Predictive Validity of Customer Satisfaction (CS) and Service Quality (SQ)

<u>Model</u>		<u>Short Term</u>		<u>Long Term</u>	
		<u>R²</u>	<u>Change in R² on adding CS</u>	<u>R²</u>	<u>Change in R² on adding CS</u>
I. Intention to Recommend (INTR)					
<u>Study 1</u>	SQ → INTR	.39	.09	.29	.04
	SQ → INTR CS → INTR	.48		.33	
<u>Study 2</u>	SQ → INTR	.19	.33	.31	.10
	SQ → INTR CS → INTR	.52		.41	
II. Intention to Shop (INTS)					
<u>Study 1</u>	SQ → INTS	.37	.05	.33	.07
	SQ → INTS CS → INTS	.42		.40	
<u>Study 2</u>	SQ → INTS	.13	.37	.26	.20
	SQ → INTS CS → INTS	.50		.46	

customer satisfaction and service quality as one factor were 0.81 (study 1) and 0.82 (study 2) for long term customers, i.e., the one factor model had good fits for long-term customers in both studies as predicted. Thus, long term customers did view customer satisfaction and service quality as one factor, supporting hypothesis H1b.

For the model predicting customer satisfaction and service quality as two factors, AGFI values were 0.73 (study 1) and 0.41 (study 2) for long term customers. Clearly in study 2, the two factor model had a poor fit for long-term customers as predicted. Thus, long term customers failed to view customer satisfaction and service quality as separate factors, supporting hypothesis H1b. In study 1, the fit was not necessarily poor (AGFI=0.73), but it was considerably worse than the fit for the same data testing the one factor model (AGFI=0.81). Again overall, three out of four tests clearly supported hypothesis H1b and the fourth test provided a fair amount of support. Overall, the eight separate confirmatory factor analysis results indicate strong support for the central hypothesis proposed in the paper.

Finally, to test hypothesis H2, multiple regression was performed on the four sub-samples. (Some of these sub-samples were too small to meaningfully conduct structural equations analysis.) The two dependent variables, intentions to recommend the store to others and intention to shop at the store in the future, were used separately for these analyses. In each case, first only service quality was used as an independent variable, and then customer satisfaction was added as another predictor variable. The variance explained by the independent variables, R^2 , was used to measure predictive power. The results are presented in Table 3.

Examining the regression results for intentions to recommend the store to others in study 1, R^2 in the short term is 0.39 with service quality alone and 0.48 with both service quality and customer satisfaction as predictor variables. Therefore, customer satisfaction adds 0.09 to the variance explained. In the same study, for long term customers, R^2 is 0.29 with service quality alone and 0.33 with both service quality and customer satisfaction as predictor variables. Therefore, customer satisfaction adds only 0.04 to the variance explained, which is less than the variance

explained by the addition of customer satisfaction in the short term. These results are not as dramatic as expected but offer some support for hypothesis H2.

The regression results for intentions to recommend the store to others in study 2 show that R^2 in the short term is 0.19 with service quality alone and 0.52 with both service quality and customer satisfaction as predictor variables. Therefore, customer satisfaction adds 0.33 to the variance explained. In the same study, for long term customers, R^2 is 0.31 with service quality alone and 0.41 with both service quality and customer satisfaction as predictor variables. Therefore, customer satisfaction adds only 0.10 to the variance explained. This is much stronger support for hypothesis H2 in that customer satisfaction adds considerably more (three times as much) to the variance explained in the short term (0.33) than it does for long term customers (0.10).

With regard to the regression results for intentions to shop at the store in the future in study 1, H2 is not supported. The change in R^2 on adding customer satisfaction to service quality as a predictor variable is practically the same for both short term and long term customers, 0.05 and 0.07 respectively, and in fact increases slightly in the long term.

In the case of intentions to shop at the store in the future in study 2, R^2 in the short term is 0.13 with service quality alone and 0.50 with both service quality and customer satisfaction as predictor variables. Therefore, customer satisfaction adds 0.37 to the variance explained. In the same study, for long term customers, R^2 is 0.26 with service quality alone and 0.46 with both service quality and customer satisfaction as predictor variables. Therefore, customer satisfaction adds 0.20 to the variance explained. Thus, the evidence is strongly in favor of hypothesis H2, as the addition of customer satisfaction adds almost twice as much to R^2 in the short term (0.37), as it does in the long term (0.20).

Thus, study 2 clearly supports hypothesis H2, whereas for study 1, there is no support in the case of intentions to shop at the store in the future and equivocal support for intentions to recommend the store to others. It is not clear why H2 is so well supported in study 2 but not in study 1. Perhaps

the characteristics of the respondents in the two samples may offer a clue. Respondents in the first sample were 6-7 years older on average than those in study 2, and consisted of 88 percent women and 12 percent men compared with 62 percent women and 38 percent men in the second study. A tentative explanation may be that women retain the affective aspect of their evaluation for a longer time. Clearly, further research is needed before drawing any age or gender related conclusions regarding this issue.

DISCUSSION

There has been much debate in the literature regarding the overlap and distinction between customer satisfaction and service quality. However, in the past, distinctions between the two constructs were conceptualized and measured by viewing one construct as transactional and the other as global, or one construct with disconfirmation and the other without. In other words, distinctions between customer satisfaction and service quality were a product of the specific conceptualization and/or measures used, rather than true distinctions based on how consumers think about these two forms of service evaluations.

Although there has been some consensus in recent years that such distinctions are artificial, and that both customer satisfaction and service quality can be viewed as transactional or global (and with or without disconfirmation) depending on research objectives, little conceptual work has been done to determine true distinctions between the constructs. Dabholkar (1995) takes a step in this direction by proposing overlap or distinction between customer satisfaction and service quality under different contingencies.

In this paper, yet another way is proposed to examine overlap or distinction between customer satisfaction and service quality. The conceptual framework is tied to a temporal frame of reference, wherein customer satisfaction and service quality tend to be distinct factors in the short term, but tend to overlap in the long term. The framework is based both on an examination of the literature as well as on a qualitative study which suggest differences in psychological processes underlying evaluations of customer satisfaction (a combination of cognitive and

affective evaluations) and service quality (purely cognitive evaluations). Tying these differences to a temporal frame, for relatively recent experiences, customer satisfaction and service quality are more likely to emerge as separate factors because the incidents are fresh in the consumer's mind and the affective component is more likely to be retained. However, if both evaluations are viewed / measured in the long term, there may not be much difference between customer satisfaction and service quality because the affective aspect of evaluation will dissipate over time. A second conceptual argument viewing customer satisfaction as experience based and service quality as a combination of experience and external information based (but becoming more experienced based over time) also supports the proposed framework.

The hypotheses were tested by conducting a study of retail store evaluations followed by a second study to cross-validate the results. The main hypothesis which sets up customer satisfaction and service quality as two separate factors in the short term and as one factor in the long term, was supported both by exploratory factor analysis and a rigorous eight-test approach using confirmatory factor analysis. The fact that customer satisfaction and service quality were found to be distinct constructs for recent customers but not for long term customers explains why previous studies measuring customer satisfaction and service quality at the global level have failed to find discriminant validity between the constructs. The second hypothesis, suggesting that customer satisfaction would add predictive power to service quality in the short term but not in the long term, was supported for both dependent variables in study 2, but received only equivocal support in study 1. The difference in age and gender distribution in the two studies may have contributed to these results. The additive predictive power of the constructs in the short term had not been specifically tested before. The results suggest that this is an issue worth exploring in future studies.

Some researchers (Cooper, Cooper, and Duhan 1989; Drew and Bolton 1990) have expressed concern that even if customer satisfaction and service quality are different conceptually, it may be difficult to capture these

differences empirically, especially if both are measured as transactional or global (or both with or without disconfirmation). Hausknecht (1990) writes that the emotional aspect of satisfaction may not be well measured by existing scales that are mainly cognitive and suggests that better scales be developed to capture the cognitive and affective aspects of customer satisfaction. The fact that customer satisfaction and service quality as measured in this paper consistently emerged as separate factors in the short term addresses this measurement issue. The study has shown that existing measures can be used to find distinction between customer satisfaction and service quality for recent customers, at least for certain services. Nevertheless, future research could attempt to improve measures of customer satisfaction to better capture its cognitive and affective aspects.

The study has several implications for managers. Although it is possible to measure customer satisfaction and service quality at any time and at any level (transactional or global), managers should measure both types of evaluations for relatively new customers, but either one may be adequate for long term customers. By measuring both customer satisfaction and service quality for recent customers, managers could capture what customers think of their service as well as how they feel about it (while the customers are still trying to decide their own future associations with the service company). Emotions related to an experience could play a substantial role in driving future behavior, making it critical for managers to determine whether customers are evaluating their service at an emotional level. Managers can also aim at increasing the positive affect associated with their service delivery and minimizing any negative affect. They could achieve this by training employees to be sensitive to what customers are feeling as they experience the service.

By measuring both customer satisfaction and service quality in the short term, managers could also increase predictive ability, i.e., they could better predict future customer behavior than if they were to measure only one type of evaluation. For long term customers, measuring one type of evaluation may be all that is needed. If long term customers are satisfied, they are very likely to perceive high service quality as well. It is possible

that loyal (or long term) customers are not as critical in their evaluations since they have already made a commitment to the service provider. Whichever format is used to measure overall evaluation, evaluations of the service by long term customers would tend to be mainly cognitive.

Certain services (e.g., basic banking) may not evoke much emotional evaluation, thus rendering customer satisfaction and service quality indistinct irrespective of time frame. On the other hand, other services (e.g., emergency medical care) may have strong emotional aspects associated with their delivery which persist over time so that customer satisfaction and service quality evaluations may be distinct even over time. The framework proposed in this study could be tested in other service industries and situations to determine contexts where it is particularly applicable.

A limitation of this study is that it only includes satisfied customers (assuming that dissatisfied customers would not return to the store). Therefore, it excludes evaluations of customer satisfaction and service quality at the low end of the scales and focuses on moderately positive to highly positive evaluations. According to the proposed framework, highly dissatisfied customers should view customer satisfaction and service quality as distinct constructs in the short term (especially as a great deal of emotion may be part of their dissatisfaction). However, given the research design, it was not possible to verify the hypotheses in the case of dissatisfied customers. Future research could explore this issue.

Another possible limitation may be that by defining short term customers as those who have shopped at the store for two years or less, there was a greater chance that even short term customers may have begun to view customer satisfaction in an increasingly cognitive way. A better time period would have been one year or less (or even six months) so that affective aspects of the evaluation would still be retained in the consumer's mind. However, this was not possible due to the sample distribution in both studies. Despite this problem, the results did support the separation of the two constructs in the short term as predicted. Perhaps future studies could explore if there is a range of time during which the two forms of evaluations would begin to merge. It is likely that this time period would differ by service

industry and by customer.

Future studies could test the hypotheses proposed in this paper in different ways. In qualitative studies like the one reported in this paper, respondents could be asked to list words for service quality and customer satisfaction within a given time frame. Researchers could determine whether different words/phrases are offered for the two constructs in the short term whereas the same phrases emerge in reference to the long term. Another way to test the proposed framework would be to conduct a longitudinal study to see if there is convergence between the two constructs over time. This would require tracing both types of evaluations for a given set of customers over time. In addition, longitudinal studies could measure actual behavior and word-of-mouth over time. A third way to test the hypotheses proposed in this paper would be to use the critical incident approach to determine if customers feel the emotional aspect over the short term but not over the long term. This would involve getting customers to relate how they evaluated a service close to the time it was delivered and how they evaluate it at present.

Future research should be consistent in removing artificial distinctions between the two constructs (both conceptually and in measurement) and should explore other bases for distinction and overlap between customer satisfaction and service quality. Researchers could explore antecedents and consequences of the two constructs both in the literature and in qualitative research to investigate areas of similarity and distinction. An attempt is made in this paper to tie the temporal frame of reference to basic antecedents of customer satisfaction and service quality. Future studies could explore all possible antecedents and consequences of the two constructs. For example, in qualitative studies such as the one conducted in this paper, respondents could be asked to list antecedents and consequences for the two constructs according to their understanding of the meanings of these constructs. The lists could then be examined to find similarities and differences between the two constructs. A time dimension could be added to this qualitative investigation for further insights on the overlap and distinction between customer satisfaction and service quality.

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Send correspondence regarding this article to:

Pratibha A. Dabholkar
 Department of Marketing and Logistics/Transportation
 University of Tennessee
 307 Stokely Management Center
 Knoxville, TN 37996 USA