

SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality

The authors respond to concerns raised by Parasuraman, Zeithaml, and Berry (1994) about the relative efficacy of performance-based and perceptions-minus-expectations measures of service quality. They demonstrate that the major concerns voiced by these authors are supported neither by a critical review of their discussion nor the emerging literature. Several research issues relative to service quality measurement and strategic decision making also are identified.

Parasuraman, Zeithaml, and Berry (1994), hereafter referred to as PZB (1994), present a critique of the performance-based measure of service quality (SERVPERF) identified by Cronin and Taylor (1992). We begin our response by first expressing our appreciation for the opportunity to continue the discussion of how best to conceptualize and operationalize the service quality construct. We further concur with PZB (1994) that many of the issues discussed herein remain unresolved and similarly call for further research into the important areas of service quality and consumer satisfaction. However, the following discussion demonstrates that the criticisms PZB (1994) make of the SERVPERF model appear largely to lack substance.

Before we address PZB's (1994) comments on a point-by-point basis, it is appropriate to address two general points they raise. First, Cronin and Taylor (1992) do not "conclude that it is unnecessary to measure customer expectations in service quality research" (p. 111). Rather, our results suggest that the performance-minus-expectations is an inappropriate basis for use in the measurement of service quality. The reported results in no way contradict the importance of the unique effect that expectations can have on consumers' perceptions of service quality (cf. Boulding et al. 1993).

Second, our results do not actually suggest "that service quality fails to affect purchase intentions." In fact, a close examination of Table 5 in Cronin and Taylor (1992) indicates that in the SERVQUAL Model (Model 1), service quality has a statistically significant effect ($p < .05$) for two of the four industries (pest control and fast food). In the SERVPERF Model (Model 2), the effect is statistically significant ($p < .05$) in three industries (banking, pest control,

and fast food). However, as we discuss subsequently, our results do suggest "that consumer satisfaction exerts a stronger influence on purchase intentions than does service quality" (Cronin and Taylor 1992, p. 65). We now turn to a consideration of the specific issues raised by PZB (1994).

Conceptual Issues

Perceptions Expectations Conceptualization

The first issue raised by PZB (1994) involves the appropriateness of the perceptions-expectations gap conceptualization, which is the basis of the SERVQUAL scale. PZB (1994) state that their focus groups captured not only the attributes of service quality, but also the underlying psychological process by which consumers form service quality judgments. Essentially, on the basis of their focus group findings, PZB (1985, 1988) conclude that service quality judgments comprise of five underlying attributes that consumers evaluate on the basis of the expectancy-disconfirmation paradigm (Oliver 1980).

PZB (1994) imply that the literature we cite in the development of our research hypotheses is unconvincing and restate their arguments for conceptualizing service quality perceptions as being based on the expectancy-disconfirmation process. However, the SERVPERF conceptualization represents just one of a number of recent challenges to the SERVQUAL-based normal science exemplar of service quality (cf. Babakus and Boller 1992; Babakus and Mangold 1992; Boulding et al. 1993; Carman 1990; Oliver 1993). We refrain from defending our original literature support for testing alternatives to the SERVQUAL paradigm and instead direct our discussion toward the more direct question of the evidence that has emerged since the publication of the SERVPERF model. It is important to note that the emerging literature largely has supported the emerging per-

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formance-based paradigm over the disconfirmation-based SERVQUAL paradigm.

In perhaps the most telling evidence to date, one of the original coauthors of SERVQUAL recently reports results (Boulding, Kalra, Staelin, and Zeithaml 1993, p. 24) that appear to support the conclusions of Cronin and Taylor (1992) over that of PZB (1994):

Our results are incompatible with both the one-dimensional view of expectations *and the gap formation for service quality* [italics added]. Instead, we find that service quality is directly influenced only by perceptions [of performance].

Other recent studies bear out these conclusions. Peter, Churchill, and Brown (1992) present a compelling argument of why difference scores (such as those employed by the SERVQUAL scale operationalization) should be avoided. Brown, Churchill, and Peter (1992) specifically extend these arguments to an investigation of the SERVQUAL scale and conclude that there are serious problems in conceptualizing service quality as a difference score (see Brown, Churchill, and Peter 1992 for a comprehensive discussion of their criticisms). Babakus and Boller (1992) and Babakus and Mangold (1992) also report results supporting the use of performance-based measures of service quality over gap measures.

Revisiting the conceptual foundations of the SERVQUAL model provides some insight into the conflicting results. Origins of the "gap" model can be found in the early writings on disconfirmation in the consumer satisfaction literature (Oliver 1977, 1980a, 1981). Oliver proposes that consumers make 1 "better-than-expected/worse-than-expected" (disconfirmation) judgments on the basis of a comparison of product performance to expectations in the determination of consumer satisfaction. Though conceptually consumers can make arithmetic or calculated comparisons between expectations and performance (as in a car's gas mileage), Oliver (1981; Oliver and Bearden 1985) argues that they may not because of measurement failure or effort or because the relevant performance dimensions cannot be quantified (e.g., aesthetics, pleasure). Thus, the perceived summary disconfirmation judgment is sufficient as a causal agent for satisfaction.

In situations in which expectation and performance data are available, at least to the researcher, it is possible to infer the consumer's disconfirmation through arithmetic means. Oliver (1980b), Oliver and Bearden (1985), and Swan and Trawick (1981) have tested variations of this inferential measure in models including a summary measure and have shown that the summary measure mediates the effect of the inferential measure on satisfaction. This would appear to be a reasonable finding because consumer perceptions, not calculations, govern behavior. In this context, the SERVQUAL gap measure is analogous to the inferential disconfirmation measure, and is thus an incomplete form of the summary comparative judgment consumers might use in quality decisions.

Thus, PZB's (1985, 1988) generalization of the satisfaction paradigm to service quality evaluations based on the qualitative evidence apparent in their focus group interpre-

tations could reflect the general ambiguity inherent in the service quality literature regarding the distinction between service quality and consumer satisfaction, rather than clear support for the efficacy of the PZB gap model. The ambiguity inherent in the service quality literature relative to these two closely related constructs also could reflect a similar ambiguity in consumers' and managers' understanding of the difference between service quality and consumer satisfaction—ambiguity that possibly is reflected in the focus groups conducted by PZB (1985). However, as is depicted in the previous discussion, this same ambiguity is not evident in the consumer satisfaction literature.

Given the arguments presented here, along with the growing body of literature criticizing the five-dimension conceptualization (cf. Babakus and Boller 1992; Babakus and Mangold 1992; Brown, Churchill, and Peter 1992; Oliver 1993; Patterson and Johnson 1993; Peter, Churchill, and Brown 1992), the assertion that "little if any theoretical or empirical evidence supports the relevance of the expectations-performance gap as the basis for measuring service quality" (Cronin and Taylor 1992, p. 56) appears creditable.

Two minor points relative to this discussion also should be addressed. PZB (1994) question our use of Bolton and Drew (1991) to support our performance-based measurement of service quality. Slightly farther down the page from the quote offered by PZB (1994) is a second: "(A) customer's assessment of overall service quality is also directly affected by perceptions of performance levels" (p. 383). In addition, PZB (1994) question our use of Mazis, Ahtola, and Klippel (1975) on the basis of the fact that the paper dealt with neither service quality nor tested performance-based measures incorporating expectations. A thorough reading of this article, however, does suggest that the inclusion of importance weights does not enhance the predictive ability of attitude models. Because the use of such weights was examined in our study, the reference does not appear inappropriate.

Attitude Formation Versus Attitude Measurement

The second conceptual issue raised by PZB (1994) is whether service quality measurement is properly associated with attitude formation or attitude measurement. We recognize that the SERVQUAL and SERVPERF scales are tools designed for the measurement of service quality; that is, the measurement of a specific long-term attitude at a single point in time. Indeed, much of the conceptual support for using performance-based measures of service quality attitudes over disconfirmation-based measures is derived from this distinction.

Specifically, a review of the existing literature identifies an apparent consensus regarding a fundamental distinction between service quality and consumer satisfaction: Service quality is a long-term attitude, whereas consumer satisfaction is a transitory judgment made on the basis of a specific service encounter (cf. Bitner 1990; Bolton and Drew 1991; Cronin and Taylor 1992; Oliver 1993; Patterson and Johnson 1993). This distinction is reflected in the conceptual domains of the relevant constructs. Service quality per-

ceptions reflect a consumer's evaluative perceptions of a service encounter at a specific point in time. In contrast, consumer satisfaction judgements are experiential in nature, involving both an end state and a process and reflecting both emotional and cognitive elements (Oliver 1993). Satisfaction judgments are believed to degenerate into overall service quality judgments over time (Cronin and Taylor 1992, Oliver 1993). Expectancy-disconfirmation judgments, however, (1) are distinct from both consumer satisfaction judgments and service quality perceptions, (2) involve calculated and subjective forms, and (3) can involve a number of referents. (See Oliver 1993 for a comprehensive discussion of the differences between service quality perceptions, consumer satisfaction judgements, and the role of expectancy-disconfirmation in consumer decision making processes.)

In short, recent conceptual advances suggest that the disconfirmation-based SERVQUAL scale is measuring neither service quality nor consumer satisfaction. Rather, the SERVQUAL scale appears at best an operationalization of only one of the many forms of expectancy-disconfirmation (cf. Boulding, et al. 1993; Oliver 1993; Zeithaml, Berry, and Parasuraman 1993). In Cronin and Taylor (1992), it is suggested that performance-based measures better reflect long-term service quality attitudes in cross-sectional studies. We stand by our original position because disconfirmation and consumer satisfaction judgments are both process constructs that share a similar reliance on the consumer experiencing a service encounter, whereas performance perceptions are not constrained to actual consumer experiences. Such a distinction is consistent with Patterson and Johnson's (1993) comparison of consumer satisfaction and service quality paradigms.

The Relationship Between CS and SQ and Comparison Standards for Expectancy Disconfirmation

The final conceptual arguments raised by PZB (1994) concern the closely related issues of the (1) causal relationship between service quality and consumer satisfaction and (2) the appropriate comparison standard for expectancy-disconfirmation. We begin first by apologizing for apparently misinterpreting the nature of the relationship between service quality and consumer satisfaction implicit in the SERVQUAL paradigm as being consistent with our empirical results.

Second, PZB (1994) argue that Cronin and Taylor (1992) imply that the debate over the appropriateness of the various comparison norms used in the measurement of expectations is resolved. We recognize the unresolved nature of the debate over the appropriate comparison standards against which perceptions are compared in expectancy-disconfirmation measures (cf. Boulding et al. 1993; Gardial, Clemons et al. 1993; Gardial, Woodruff et al. 1993). The intent of the quote cited by PZB (1994) was to suggest that the distinction between service quality and consumer satisfaction *in their work* was not clear. Though the research of Boulding et al. (1993) and Gardial, Woodruff et al. (1993) has furthered our understanding of appropriate comparison standards, we concur with PZB (1994) that fur-

ther research into this area is warranted. In short, PZB's (1994) interpretation of the finality of our arguments involving comparison standards is unintended and we thank the authors for allowing us the opportunity to prevent further misinterpretation of our original work.

In sum, the weight of the emerging literature supports the efficacy of performance-based measures of service quality in general and the SERVPERF scale specifically as the appropriate exemplar of service quality operationalization. The next section addresses PZB's (1994) criticisms of Cronin and Taylor's (1992) empirical analyses.

Empirical Issues

Dimensions of Service Quality/Factor Analysis Procedures

PZB (1994) correctly question whether we allowed the five dimensions of service quality to be intercorrelated. We did neglect to correctly depict the correlations in Figure 1 of the original article (Cronin and Taylor 1992). However, the actual analysis did correctly account for the intercorrelations as conceptualized in Figure 1 of this article (see Table 1 for the intercorrelations).

Further evidence that the correlations between the dimensions were accounted for is evident in the degrees of freedom reported in Table 1 of the 1992 article (p. 61). We included 22 variables in the confirmatory factor analysis, resulting in 253 parameters. In the TD matrix, all 22 diagonal elements were freed, in the LX matrix the first element for each dimension was fixed at 1 and the remaining 17 were freed, and in the PHI matrix the diagonal elements (the variances of the latent variables) were fixed at 1 and the off-diagonal elements were freed, thus resulting in 204 degrees of freedom as reported in Table 1 of Cronin and Taylor (1992). Because the off-diagonal elements of the PHI matrix are actually covariances of the five latent variables, freeing those elements is equivalent to allowing the five dimensions to be intercorrelated. In addition, when the dimensions are considered with the diagonal elements of the PHI matrix freed, there is no appreciable change in the results (see Table 2).

PZB (1994) raise two additional questions relative to the factor analyses presented in Cronin and Taylor (1992). First, they suggest that because the variance captured by the SERVQUAL item "is much lower than that for the SERVPERF items ... the former could be a richer construct" (p. 113). This interpretation is unusual and problematic. Second, in contrast to their earlier position that the dimensions of service quality should reflect their inherent intercorrelation, PZB (1994) suggest that the rotated factor loadings identified in Table 2 of Cronin and Taylor (1992) could inflate the variance explained by a factor because an oblique rotation could attribute variance to one factor that also is explained by one or more additional factors. Why this issue is raised by PZB (1994) is puzzling, given that they have consistently suggested that the dimensions of service quality are intercorrelated (PZB 1988, 1991, 1994) and that the factor analysis procedure utilized in Cronin and Taylor (1992) is identical to that used in PZB (1988).

FIGURE 1
Service Quality as Conceptualized by Parasuraman, Zeithaml, and Berry (1988) and Examined by Cronin and Taylor (1992)

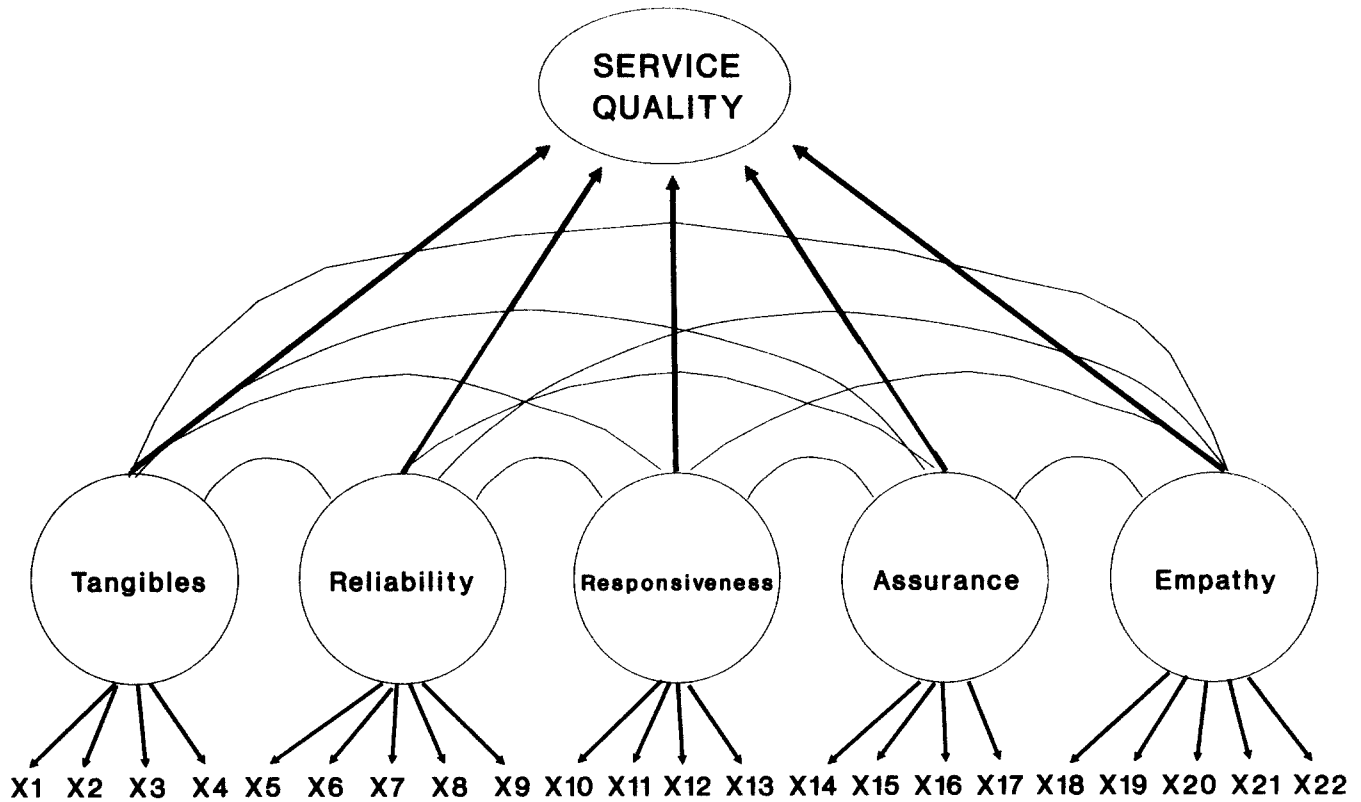


TABLE 1
The Intercorrelations of the Five-Factor Conceptualization of Service Quality

Tangibles	1.000	.703	.458	.614	.478
Reliability	.457	1.000	.661	.744	.533
Responsiveness	.240	.680	1.000	.644	.687
Assurances	.523	.854	.566	1.000	.559
Empathy	.256	.854	.772	.539	1.000

Note: Cell entries below the diagonal are for banks and those above are for pest control.

Tangibles	1.000	.316	.197	.282	.165
Reliability	.638	1.000	.686	.525	.449
Responsiveness	.319	.495	1.000	.620	.686
Assurances	.589	.846	.503	1.000	.575
Empathy	.395	.490	.573	.645	1.000

Note: Cell entries below the diagonal are for dry cleaners and those above are for fast food.

Cronin and Taylor (1992) actually suggest that both SERVQUAL and SERVPERF can be treated unidimensionally after a five-factor solution failed to fit the SERVQUAL items in any of the four industries. Here we confess that some of Cronin and Taylor's (1992) wording is potentially confusing, though the treatment of the SERVQUAL items is quite consistent with the extant literature. For example, Carman (1990) also demonstrates that the SERVQUAL scale fails to exhibit the predicted five-factor structure

TABLE 2
Confirmatory Factor Analysis Parameter Estimates For Five-Factor (Intercorrelated) Conceptualization of Service Quality

Parameter	Banks	Pest Control	Dry Cleaning	Fast Food
Chi Square	333.26	464.08	395.01	346.10
d.f.	199	199	199	199
<i>p</i>	.000	.000	.000	.000
GF1 ^a	.867	.810	.828	.862
AGFI ^b	.831	.758	.781	.824
RMSR ^c	.204	.247	.257	.255

^aGoodness of fit

^bAdjusted goodness of fit

^cRoot mean square residual

when tested for a tire store, placement center, and dental clinic.

Cronin and Taylor (1992) in effect use the two sets of items (SERVQUAL and SERVPERF) as two *indices* rather than as two factor-based scales after failing to identify a consistent factor structure across the four industries examined in the study. The difference is that an index is an exact linear combination of observed items. The dimensionality of the items of an index used as an observed variable is not relevant. The point of the comparison of the two models is to determine which of the indices is the superior measure of service quality. The conclusions drawn in the research are not

invalidated by the psychometric properties of the items that comprise the indices. If in fact the superiority of the SERVPERF approach pertains in some way to those psychometric properties of the measure, the fact remains—it is a better measure of service quality.

Validity

PZB (1994) assert that Cronin and Taylor (1992) claim that the performance-only SERVPERF measures have greater validity because of their content and discriminant validity, and they present a lengthy comparison of the convergent and discriminant characteristics of the SERVQUAL and SERVPERF measures. Though we appreciate the demonstration of the superior convergent and discriminant power of the SERVPERF measures, PZB (1994) have not accurately depicted our basis for attributing greater validity to SERVPERF. We assert that SERVPERF has greater construct validity based on our review of the literature and the fact that the SERVPERF measures also exhibit convergent and discriminant validity. Nowhere in Cronin and Taylor (1992) is there any consideration or comparison of the convergent or discriminant validity of the SERVQUAL measure. Our implication is simply that, on the basis of a review of the extant literature, SERVQUAL fails to exhibit construct validity.

Regression Analyses

PZB (1994) suggest that the dependent measure utilized in Cronin and Taylor's (1992) regression analyses is performance based. The exact wording of the question is: "The quality of XYZ's services is (very poor (1) to excellent (7))" (Cronin and Taylor 1992, p. 67). PZB's argument that "shared method variance" can account for the greater explanatory power of the SERVPERF measures thus is dubious because (1) Likert scale items were used for the SERVQUAL and SERVPERF measures, whereas a semantic differential item was utilized for the overall service quality measure (i.e., different measurement methods) and (2) it is not obvious that the dependent measure is "performance based."

PZB (1994) also suggest that the overall pattern of regression coefficients in Cronin and Taylor's (1992) Table 4 support their five-factor dimensionality. The interpretation offered is suspect for several reasons. First, it is inappropriate to assign the 22 individual items to the five factors when the bulk of empirical evidence presented in the extant literature rejects the five-factor structure and further suggests that the five dimensions are intercorrelated (cf. Babakus and Boller 1992; Babakus and Mangold 1992; Carman 1990; Cronin and Taylor 1992; Parasuraman, Zeithaml, and Berry 1988, 1991). Second, the importance weighted measures should not be included in the comparison because one cannot disaggregate the importance, performance, and interaction effects. When only the unweighted measures are considered, the pattern of significant regression coefficients reported by PZB (1994) changes dramatically as is shown following:

		SERVQUAL	SERVPERF
Segment 1	Tangibles	2/16	2/16
Segment 2	Reliability	7/20	6/20
Segment 3	Responsiveness	2/16	2/16
Segment 4	Assurances	3/16	5/16
Segment 5	Empathy	4/20	2/20

A final point made by PZB (1994) involves the derivation of the importance weights used in the regression analysis. PZB contend first that the weights should be calculated for the dimensions and not for the individual measures (i.e., 5 "weights" as opposed to 22). Our contention is that the five-factor dimensionality is problematic; therefore, interpretability is enhanced by asking respondents to assign weights to each measure.

PZB (1994, p. 115) also contend that asking respondents to indicate the importance of individual items is "not meaningful because a primary purpose of regression analysis is to derive the importance weights indirectly." Multiple regression calculates beta coefficients on the basis of the ability of an independent variable to predict changes in a dependent variable. Mathematically (i.e. indirectly) calculating the ability of a predictor to explain variation in a dependent measure simply is not the same as directly asking consumers to indicate their perception of the importance of a specific aspect of service. In addition, the importance weights failed to contribute significantly to the predictive ability of either the SERVQUAL or SERVPERF measures, so the efficacy of the issue is especially dubious.

Relationships Among Service Quality, Consumer Satisfaction, and Purchase Intentions

Initially, the point should be made that the purpose of Cronin and Taylor (1992) was to test a performance-based alternative to SERVQUAL's gap formulation. Our consideration of the relationships between overall service quality, consumer satisfaction, and purchase intentions was undertaken to emphasize the importance of the measurement issues relative to service quality. We are in agreement with PZB's (1994) suggestion that the directionality of the service quality/satisfaction relationship is still in question and that future studies of these relationships should incorporate multi-item measures.

PZB (1994) also correctly indicate that we suggest that "only" consumer satisfaction has a significant effect on purchase intentions. However a review of the t-values presented in Table 5 suggests that overall service quality has a statistically significant ($p \leq .05$) effect on purchase intentions in two industries (pest control and fast food) for Model 1 (SERVQUAL) and in three industries (banking, pest control, and dry cleaning) for Model 2 (SERVPERF). In contrast, consumer satisfaction has a statistically significant ($p \leq .01$) effect for either model in all four industries. Thus, the correct interpretation of our results is that consumer satisfaction appears to have an effect on purchase intentions, which is more frequently statistically significant, and the effect tends to achieve a greater level of statistical significance when both constructs have a significant effect on purchase intentions. Consumer satisfaction, thereby, appears to be a "richer" construct for use in predicting pur-

chase intentions. This should hardly be surprising given that it has long been assumed that consumers do not always purchase the highest "quality" product due to cost, budget, availability, and other constraints.

We also take exception to PZB's (1994) interpretation of the methodological issues related to our examination of the structural models identified in Figure 2 of Cronin and Taylor (1992). First, PZB (1994) correctly point out that a one degree of freedom model fits better, by definition, than a two degree of freedom model, and so on. However, their logic misses the point of our analysis, which is to compare two models that are identical except that SERVQUAL is used in one and SERVPERF in the other. The degrees of freedom are not a relevant issue because we are comparing apples to apples (i.e., a one degree of freedom model to an identical one degree of freedom model, which substitutes 22 SERVPERF measures for 22 SERVQUAL items). They also raise the "shared-method variance" argument here again, which, as we indicate previously, is simply not supported by a close examination of the research methods utilized.

Practical Issues

We also are pleased to support an emphasis on practical issues involving the measurement of service quality. PZB (1994) specifically suggest that disconfirmation measures (1) provide richer information than do the performance-based measures we propose and (2) have a greater diagnostic value for managers. Because the preceding discussion of the recent literature identifies that the SERVQUAL operationalization of service quality (performance-expectations) appears largely unsupported on both conceptual and empirical grounds (cf. Babakus and Boller 1992; Babakus and Mangold 1992; Brown, Churchill, and Peter 1992; Oliver 1993; Patterson and Johnson 1993; Peter, Churchill, and Brown 1992), we suggest that the more relevant question in terms of practical considerations is whether the SERVPERF scale provides a reliable and valid scale for operationalizing the service quality construct.

As previously discussed, the performance-based measures of service quality captured by the SERVPERF scale can provide a longitudinal index of the service quality perceptions of a service firm's constituencies. In other words, the SERVPERF scale can provide managers with a summed overall service quality score that can be plotted relative to time and specific consumer subgroups (e.g., demographic subcategories, individual constituencies). As such, the SERVPERF scale provides a useful tool for measuring overall service quality attitudes by service managers. However, we suggest that great care should be exercised by managers of service firms in attempts to derive more specific information from data derived using the SERVPERF scale for strategic decision-making.

Specifically, service quality measures clearly exhibit a factor structure that varies across service industries (cf. Babakus and Boller 1992; Brown, Churchill, and Peter 1992; Cronin and Taylor 1992). It was this finding that led to our original argument for using the SERVQUAL and SERVPERF scales as indexes to allow the comparison of re-

sults across alternative models and service industries. We have unpublished results that further demonstrate that the SERVPERF scale exhibits the same factor instability inherent in the SERVQUAL difference scores across service industries. Consequently, we caution marketers to assess the factor structure implicit in data sets derived from SERVPERF measures to ensure that the hypothesized five-factor structure identified by PZB (1988) can be replicated specific to their own research setting. If not, appropriate steps should be taken to ensure that only information implicit in their own specific data set is used for strategic decision making.

On the basis of the preceding discussion, we remain unconvinced that including consumer expectations in measures of service quality is a position managers should support. However, this is not to say that these same measures cannot impart valuable information for managers if their unique effect on purchase behaviors and performance perceptions are conceptualized properly (cf. Boulding et al. 1993). We also suggest that one currently unexplored area for gaining additional information from the SERVPERF scale could be in the use of performance-importance maps (Hawes and Rao 1985). That is, maps can be developed for specific data sets that plot consumers' perceptions of the importance of individual scale items relative to perceptions of service firm performance for each performance attribute.

Summary

The preceding discussion addresses the concerns raised by PZB (1994) on a point-by-point basis. The conclusion of this discussion is that (1) the criticisms identified by PZB (1994) appear related more to issues of interpretation than issues of substance and (2) the emerging literature clearly supports the original conclusions of Cronin and Taylor (1992) over the PZB (1994) defense of the SERVQUAL exemplar. We acknowledge that the ground breaking work of PZB (1985, 1988, 1991, 1994) has made a significant contribution to service quality research. We also second their call for continued study of research models that integrate service quality, consumer satisfaction, and, we would add, service value.

PZB (1994) present a research agenda to aid in meeting these research goals. Though we do not directly address their proposed goals, we would ask marketing researchers and practitioners to consider one key point in further investigations of service quality and its relationship to consumer satisfaction, service value, and purchase behavior/intentions. PZB (1994) suggest that the service quality and consumer satisfaction constructs can be examined at both the transaction-specific and global levels of analysis.

Though such an extension in the literature could allow the reconciliation of their paradigm with emerging evidence, we suggest it ultimately will be at the expense of clarity of understanding, the discriminant validity of the relevant measures, and the predictive ability of models of consumer decision making. We remain troubled that expectancy-disconfirmation, though originally developed to explain consumer satisfaction judgments (Oliver 1980), has been extended to both represent a unique construct (Bolton

and Drew 1991, Oliver 1993) and measure service quality perceptions (PZB 1985, 1988).

The point is that it may be time for service marketers to investigate the possibility of a commensurable agreement as to the domains of service quality, consumer satisfaction, expectancy disconfirmation, and service value. We suggest that a useful starting point, consistent with what is currently

known, would be to restrict the domain of service quality to long-term attitudes and that of consumer satisfaction to transaction-specific judgments. We suggest that by limiting the domains of service quality and consumer satisfaction, such a restriction could enhance our understanding of how these constructs interact in consumer decision-making processes.

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