Measuring Retail Service Quality: An Empirical Assessment of the Instrument

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Executive Summary

Retailing in India is growing at the rate of about 18-20 per cent per annum. As part of its strategy to gradually open it up to foreign competition, the government is also in the process of increasing foreign direct investment in the retail sector. At the same time, the urban consumer is becoming more discerning and demanding as far as the lifestyle is concerned. Urban Indian household income and purchasing power are also on the rise. Under such circumstances, the success of organized retailing in India mainly depends on delivery of services through quality improvements. In service organizations, customer-perceived service quality is considered as one of the key determinants of business performance. So far, in the Indian context, there is a dearth of tested instruments which can measure customer-perceived service quality of a retail store. At the same time, instruments developed in other countries have not been tested for their applicability in the Indian retail industry.

It is in this context that this paper reports on the application of Dabholkar, Thorpe and Rentz's (1996) retail service quality scale in measuring the gap between the customers' expectations and their perceptions about the service quality of retail stores in India. Statistical analyses were performed to test the dimensionality of service quality and to examine the reliability of the scale. Finally, the analysis of the gap scores was used to suggest relevant improvements in the retail store service quality.

The results indicate the following:

➢ Although the instrument was found to be quite reliable, the gap scores did not merge into five dimensions of service quality as proposed by the scale developers; rather, the gap scores roughly merged into nine dimensions.

➢ The instrument and the five dimensions of service quality may need considerable restructuring.

➢ A few statements which showed considerable reliability problems should be restated or substituted by more relevant statements.

➢ The instrument may not be applicable to the retail sector in India without further restructuring.

➢ Further research is necessary to understand retail store service quality in India.

The analysis of the gap scores indicates that the highest perceived service gap lies in the policies of the retail stores, particularly, parking facilities provided by them. Apart from this, all other statements also show a negative gap implying the need for considerable improvements in retail service quality. Therefore, as organized retailing develops in India, retail stores in India will have to improve the quality of their services significantly in order to compete successfully in the global marketplace. ❧

etailing in India is gradually inching its way towards becoming the next boom industry. According to ETIG (Economic Times Intelligence Group) estimates, the size of the organized retail industry was about Rs. 160 billion in 2001-02. The industry, which is currently growing at the rate of 18-20 per cent is expected to cross Rs. 370 billion sales mark by 2007 (Table 1). As a part of the government's strategy to gradually open up the retail sector to foreign competition, the 2005 budget has allowed 26 per cent foreign direct investment (FDI) in the sector. The retail arena today is very different — the opportunities are incredible but exploiting them is extremely tough. A successful retail enterprise needs to have a vast network of people and error-free processes in place.

Shoppers are aware of all the rules of the game. They can instantly sense a good buy and lap it up or sniff out a bad product and dismiss it. Their expectations are tough to meet but for retailers aiming to make a big sale, there is not much of a choice but to find ways to win customers over and keep them permanently happy. ETIG analysis of the NRS data over the last two years shows that the urban consumer is definitely becoming more discerning and demanding as far as lifestyle is concerned. As is evident from Table 2, the urban Indian

household income is on the rise clearly indicating that the purchasing power of urban India is increasing. This would create opportunities for organized retail as an increase in purchasing power would mean a higher demand for better shopping ambience, superior quality products, and improved service. Improved access to education and exposure to the latest trends through various media have also led to an increase in demand for lifestyle goods. The Indian consumers, like their international counterparts, are becoming increasingly demanding and knowledgeable. They are tough critics, savvy purchasers, value-driven spenders, and practical thinkers when it comes to shopping. The demands for their time at work and home have made them extremely selective about how they would want to spend their limited and precious leisure hours. Shopping today is much more than just buying — it is an experience in itself. To best utilize the available time, the Indian consumer is on the look-out for avenues that would give him the maximum value for his money and time spent.

It is against this background that this paper applied Dabholkar, Thorpe and Rentz's (1996) retail service quality scale in measuring the gap between the customers' expectations and their perceptions about the service quality of retail stores in India. The validity of the scale was assessed using data collected from these stores and statistical analysis was performed to test the dimensionality of service quality and to examine the reliability of the scale in India.

LITERATURE REVIEW

The retail environment today is changing more rapidly than ever before (Dabholkar, 1996). It is characterized by intensifying competition from both domestic and foreign companies, a spate of mergers and acquisitions, and more sophisticated and demanding customers who have great expectations related to their consumption experiences (Sellers, 1990; Smith, 1989). Consequently,

Table 1: The Great Indian Bazaar — Size of the Organized Retail Market

(Rs. billion)

	2001-02	2007	CAGR (%)
Large segments	88.50	231.09	21
Other segments	60.50	121.69	15
Non-store retailing	11.00	19.39	12
Total organized retail	**160.00**	**372.17**	**18**
Four Large Segments			
Food			
Chain stores	15.00	67.26	35
Single large stores and others	3.00	7.46	20
Total	**18.00**	**74.72**	**33**
Clothing			
Manufacturer retailers	13.50	27.15	15
Chain stores	14.50	39.19	22
Single large stores	21.50	37.89	12
Total	**49.50**	**104.23**	**16**
Consumer Durables			
Manufacturer retailers	6.50	13.07	15
Chain stores	4.50	13.73	25
Single large stores	5.50	11.06	15
Total	**16.50**	**37.87**	**18**
Books and Music			
Chain stores	2.50	9.28	30
Single large stores	2.00	4.98	20
Total	**4.50**	**14.26**	**26**

Source: ORG-Marg, ETIG estimates.

Table 2: Household Income Classification

(Number of households)

	1999	2001	Increase (%)
Up to Rs. 1,000	4,929	3,306	-33
Rs. 1,001-2,000	12,302	11,638	-5
Rs. 2,001-4,000	16,762	17,932	7
Rs. 4,001-6,000	9,767	12,534	28
Rs. 6,001-10,000	4,946	6,183	25
Rs. 10,000+	3,020	4,563	51

Source: NRS, 2002.

retailers today must differentiate themselves by meeting the needs of their customers better than their competitors. There is general agreement that a basic retailing strategy for creating competitive advantage is the delivery of high service quality (e.g., Berry, 1986; Hummel and Savitt, 1988; Reichheld and Sasser, 1990).

Since services are intangible, heterogeneous, and inseparable, it is difficult to measure service quality objectively. Over the years, many researchers have proposed and evaluated alternative service quality models and instruments for measuring service quality. Among these models, SERVQUAL (Parasuraman, Zeithaml and Berry, 1985) is the most prominent and the most widely used. The authors of this model proposed that the consumer's opinion of quality is formed by an internal comparison of performance with expectations. Good service quality means that the customers' perceptions of service performance meet or exceed their expectations of what the service firm should provide. Through in-depth interviews and focus group discussions with firms in four different service industries, Parasuraman, Zeithaml and Berry (1985) identified five determinants of service quality which include tangibles, reliability, responsiveness, assurance, and empathy.

The SERVQUAL scale has been widely used to measure service quality in different service contexts, such as professional services (Freeman and Dart, 1993), health care (Lam, 1997), tourism (Tribe and Snaith, 1988), business school (Pariseau and McDaniel, 1997) and information systems (Kettinger and Lee, 1994). It has also been widely tested for its validity and reliability (Babakus and Boller, 1992; Bolton and Drew, 1991; Cronin and Taylor, 1992, 1994). In spite of the fact that some of these studies failed to support the five-dimensional factor structures, Parasuraman, Berry and Zeithaml (1993) defended the five-factor structure of service quality on conceptual and practical grounds.

Although the SERVQUAL instrument has been applied in the study of service quality for many different types of services, it has been the subject of a number of criticisms. For example, Reeves and Bednar (1994) considered the strengths and weaknesses of SERVQUAL and related instruments. The issue of how best to conceptualize and operationalize service quality is still a subject of heated debate (Cronin and Taylor, 1994; Parasuraman, Zeithaml and Berry, 1994; Teas, 1994). However, it is generally agreed that service quality is a multi-dimensional or multi-attribute construct (Cronin

and Taylor, 1992; Parasuraman, Zeithaml and Berry, 1988).

The generalizability of SERVQUAL in different service industries has also been questioned. Babakus and Boller (1992) used the SERVQUAL scale to measure service quality in an electric and gas utility company. They found that the proposed five-factor structure of SERVQUAL is problematic and doubted the suitability of the SERVQUAL scale for measuring quality across a wide range of services. The applicability of SERVQUAL across different cultures is also an issue as SERVQUAL was developed in a Western environment and, due to cultural differences, it is likely that cultural factors will influence its applicability. Donthu and Yoo (1998) studied the effect of the cultural orientation of consumers on their service quality expectations. Based on Hofstede's dimensions of culture, they hypothesized and tested the influence of culture on consumer service quality expectations and found that consumers varied in both their overall expectations with regard to service quality and their expectations of each of the service quality dimensions as a result of cultural orientation.

Mattila (1999) also examined the impact of culture but on customer evaluations of complex services. She evaluated the trade-offs that Western and Asian customers were willing to make between personalized service and pleasant physical environment in the context of luxury hotels. She found that customers with a Western cultural background might be more likely to rely on tangible cues than their Asian counterparts and that the hedonic dimension of the consumption experience might be more important for Western consumers than for Asians.

An interesting feature of the empirical studies which have analysed SERVQUAL is the wide variety of empirical factor structures obtained. These factor structures vary primarily in the number of interpretable factors which consistently differed from the five-factor structure reported by Parasuraman, Zeithaml and Berry (1988) and Parasuraman, Berry and Zeithaml (1991). Cronin and Taylor (1992), for instance, argued that SERVQUAL is uni-dimensional while Babakus and Boller (1992) reported a two-factor structure. A three-factor solution was reported by Schneider, Wheeler and Cox (1992) and Cliff and Ryan (1994). Brensinger and Lambert (1990) reported a four-factor solution. Six to eight empirical factors were reported by Carman (1990). Lately, even the developers of the scale have produced evidence confirm-

ing the doubts expressed about the five-dimension configuration (Parasuraman, Zeithaml and Berry, 1994).

The considerable variation in empirical factor structures reported in the literature hampers our understanding of service quality and casts doubts over the use of the SERVQUAL instrument in future research. It also shows that a considerable amount of research still needs to be done concerning the dimensionality of service quality in general, and SERVQUAL in particular, as called for by its developers (Parasuraman, Zeithaml and Berry, 1994).

Dabholkar, Thorpe and Rentz (1996) proposed an instrument based on SERVQUAL which measures service quality in a retailing environment. This instrument also captures, apart from the common dimensions that are likely to be shared by pure service environments and retail environments, additional dimensions of retail service quality relevant to the retail environment. However, very few studies have utilized the instrument for evaluating service quality of retail stores. Like SERVQUAL, the reliability and validity of this instrument could also be questioned. Only one study by Boshoff (1997) was found which evaluated the reliability and validity of the instrument in South African retail environment. Although the study found the instrument to be valid and reliable for measuring retail service quality in South Africa, its applicability in India must be investigated through a formal research. To fill this research gap, this study replicates Dabholkar, Thorpe and Rentz's (1996) work and evaluates their retail service quality instruments' validity and reliability.

RETAIL SERVICE QUALITY AND THE INSTRUMENT

Dabholkar, Thorpe and Rentz (1996) proposed that retail service quality has a hierarchical factor structure. While consumers think of retail service quality at three levels — a dimensional level, an overall level, and a sub-dimensional level, Dabholkar, Thorpe and Rentz (1996) proposed five dimensions — physical aspects, reliability, personal interaction, problem solving, and policy. They also gave sub-dimensions of each dimension to combine related attributes into sub-groups.

The first dimension — physical aspects — encompasses the appearance of the physical facilities and the convenience offered to the customer by the layout of the physical facilities. Retail literature suggests that store appearance is important to retail customers (e.g., Baker,

Dhruv and Parasuraman, 1994). It also suggests that customers value the convenience of shopping that physical aspects such as store layout offer (Gutman and Alden, 1985; Hummel and Savitt, 1988; Mazursky and Jacoby, 1985; Oliver, 1981). Therefore the sub-dimensions of this dimension are appearance (statements 1 to 4 in the scale[*]) and convenience (statements 5 and 6 in the scale).

The second proposed dimension is reliability. It has two sub-dimensions and other variations. Customers view reliability as a combination of keeping promises (Dabholkar, Thorpe and Rentz, 1996). Westbrook (1981) found that availability of merchandise is also a measure of reliability. So, the sub-dimensions of reliability are promises (statements 7 and 8 in the scale) and doing it right (statements 9 to 11 in the scale).

The third proposed dimension is personal interaction. It has two sub-dimensions — service employees inspiring confidence (statements 12 to 14 in the scale) and being courteous/helpful (statements 15 to 20 in the scale). These sub-dimensions are very closely related and capture how the customer is treated by the employee.

The fourth proposed dimension is problem solving which addresses the issues of handling of goods returned and exchanges as well as complaints. Service recovery is recognized as a critical part of good service (Hart, Heskett and Sasser, 1990; Kelley and Davis, 1994). Recognizing and resolving problems should emerge as a separate factor in customer evaluation. Westbrook (1981) found that customers were quite sensitive to how service providers attend to problems and complaints. Westbrook (1981) and Mazursky and Jacoby (1985) also mention that the ease of returning and exchanging merchandise is very important to retail customers. This dimension does not have any sub-dimension.

The fifth proposed dimension — policy — captures aspects of service quality that are directly influenced by store policy. For example, when customers evaluate a store on the basis of convenient hours, it is viewed as whether the store's policy is responsive to customers' needs. Westbrook (1981) and Mazursky and Jacoby (1985) report that an important criterion on which customers evaluate stores is the credit and charge account policies of the store. Customers also appear to value parking availability for retail shopping (Oliver, 1981). This dimension does not have any sub-dimension.

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[*]Please see Table 7 for a description of the items in the scale.

Based on the above dimensions, the proposed measurement tool by Dabholkar, Thorpe and Rentz (1996) may be suitable for studying retail businesses that offer a mix of services and goods, such as department or specialty stores, gathering benchmark data regarding current levels of service quality, and conducting periodic 'checks' to measure service improvement. The instrument could also serve as a diagnostic tool to determine service areas that are weak and that need attention. However, in spite of its wide applicability and rigorous development, the use of the instrument should be properly tested under different contexts in order to determine its validity and reliability. Therefore, the study had three research objectives:

- to assess the internal reliability of the retail service quality instrument proposed by Dabholkar, Thorpe and Rentz
- to evaluate the validity of the scale
- to carry out the gap analysis and identification of areas for improvements in retail service quality.

METHODOLOGY

Sample

Population was defined as active retail shoppers. The sample consisted of 102 retail shoppers in a mall intercept-type situation. A little over half of the respondents (53%) were female. Respondents were mostly between the ages of 22 and 50 (72%). Close to half (48%) were housewives. Sixty-five per cent of the respondents were married. Almost seventy per cent of the respondents had at least higher secondary education. Personal interviews were conducted immediately after the completion of the shopping experience. Retail shoppers were selected for analysis because they offer a mix of merchandise and service while individual retail shops were identified on a convenience-sampling basis. In all, 29 retail stores were selected from Gujarat and the surrounding states. The retail stores varied in their size from small grocery stores to hypermarkets and were selected across industries such as food, clothing, consumer durables, books, music, etc.

Shoppers were selected randomly and interviewed while they waited in a queue to pay for their goods. Some of them were interviewed while they were having refreshments after they had finished their shopping. This allowed for sufficient time to interview them without interfering with their shopping. The instrument pro-

posed by Dabholkar, Thorpe and Rentz (1996) was used as the questionnaire which employed a 5-point Likert scale (1-strongly disagree, 5-strongly agree).

Data Analysis and Results

In order to test the reliability of the overall instrument, Cronbach's coefficient α was computed using data on the perceptions, the expectations, and the differences between the perceptions and the expectations. The reliability coefficients are shown in Table 3. The results show that the overall reliability of the instrument in all the three cases is quite satisfactory as the instrument has 28 items. It was, therefore, divided into smaller parts (based on Dabholkar, Thorpe and Rentz's (1996) proposed dimensions) and the reliability of each part was tested. The results suggest that out of five dimensions of perceptions, two dimensions have α value less than 0.6. These are physical aspects and problem solving. The statements related to physical aspects in the scale (1-6) are not very specific and are rather confusing. For example, the first statement, "This store has modern-looking equipment and fixtures," does not make it clear as to which equipment and fixtures it is pointing to. Similarly, problem solving statements in the scale (21-23) have got low reliability (0.4678) for perceptions statements and high reliability (0.7917) for expectations statements. This may be due to the fact that the respondents could not correlate the statements with their recent experience and the perceptions statements focused on their recent experience. Further, two dimensions of expectations — physical aspects and policy have got a low α value. The policy statements have faced considerable reliability problem in all the internal reliability checks. As organized retailing has recently grown in India and customers are not much aware of the modern retailing experience, they might have failed to understand the statements rightly.

Overall, the results do indicate that there are very few reliability problems in using the instrument to measure service quality. As compared to expectations

Table 3: Reliability Coefficients

Dimension	Perceptions (P)	Expectations (E)	Gap (P-E)
Physical aspects (1-6)	0.5864	0.4828	0.5830
Reliability (7-11)	0.7942	0.6193	0.7104
Personal interaction (12-20)	0.8976	0.8292	0.8678
Problem solving (21-23)	0.4678	0.7917	0.4838
Policy (24-28)	0.6047	0.4718	0.5502
Overall (28 items)	**0.9081**	**0.8229**	**0.8772**

responses, the perceptions responses have quite high reliability.

Factor Analysis

In order to test the validity of the five-factor structure in retail service quality for Indian retail stores, an exploratory factor analysis on perceptions, expectations, and gap scores for respondents was performed. This was performed separately on perceptions, expectations, and gap scores for checking the applicability of gap analysis for the factor structure (Zhao, Bai and Hui, 2002) using the principal components factoring method and varimax rotation with Kaiser normalization. Other rotation methods were also used to improve the factor loading. The results of the factor analysis are shown in Tables 4, 5, and 6 respectively.

Table 4 indicates that the 28 items do not match the five-factor structure as described by Dabholkar, Thorpe and Rentz (1996). In fact, the analysis obtained gives a nine-factor structure instead of five factors. Also, the factors do not load according to the factor structure given by them. For example, the third statement on physical aspects does not load on the same factor as the other five statements on physical aspects. Items in different dimensions have become mixed and many items have a high loading for a number of factors. The table clearly indicates that the gaps between perceptions and expectations do not support the five dimensions of retail service quality as suggested by Dabholkar, Thorpe and Rentz (1996). Other rotation methods such as Equamax rotation with Kaiser normalization also failed to improve the factors' loading and factor structure.

Table 5 shows the factor analysis results of customer perceptions. The results indicate that the customer perceptions scores do not support the five dimensions of service quality as proposed by Dabholkar, Thorpe and Rentz (1996). Overall, the analysis gave seven dimensions instead of the proposed five-factor structure. Even

Table 4: Results of Factor Analysis of Gap Scores (Rotated Component Matrix)

Statement	Component								
	1	2	3	4	5	6	7	8	9
1						.824			
2		.303			.594		-.383		
3									.920
4	.562	.427							
5		.535			.465				
6		.711	.364						
7		.758							
8		.805							
9								.794	
10			.572					.378	
11	.618				.396				
12	.557			.597					
13	.520	.310		.332				.523	
14	.741		.358						
15	.391		.583	.336					
16				.824					
17	.312	.357	.514	.342				-.326	
18	.726					.318			
19			.827						
20			.615	.518					
21				.542		.376	-.455		
22					.735				
23			.424	.553	.349				
24			.402		.331	.359			
25					.466	.702			
26					.805				
27		.388				.504	.331		
28							.910		

Notes:
(a) Factor loadings below 0.3 are not shown in this table.
(b) Extraction method Principal component analysis.
(c) Rotation method Varimax with Kaiser normalization.

within these dimensions, the statements were not found loaded according to the proposed factor structure. The only item that properly loaded was reliability. This dimension seeks customers' agreement on the promises kept by the store and the store's practice of doing things rightly. Except statement 9, all other statements were found highly loaded on this dimension.

Table 6 shows the results of exploratory factor analysis of expectations scores. Like the gap scores and the perceptions scores, the expectations scores also do not conform to the five-factor structure. Instead of five dimensions, the factor analysis found eight dimensions. Again, within these dimensions, the statements were distributed totally differently than proposed by Dabholkar, Thorpe and Rentz (1996). For example, instead of statements 7 to 11 loading on one dimension, 7 and 8 were loaded on one dimension and 9, 10, and 11 were loaded on different dimensions. This means that the respondents do not consider statements 7 to 11 as store-reliability statements. Similarly, statements 10 and 17 were very well loaded on the same dimension which

seeks response for merchandise availability (statement 10) and employee availability (statement 17). These two should definitely be considered as sub-dimensions of the parent dimension — resource availability. Apparently, this result does not support the five-dimension structure of retail service quality. Alternative methods such as Kaiser normalization were tried to improve factor loading for the expectations scores but even these failed to improve the factor loading.

Overall, the results of factor analysis presented in Tables 4, 5, and 6 shows that the gaps between perceptions and expectations do not match the five factors of service quality. In fact, these results indicate potential problems in using the gap model to measure service quality at the factor level using the same factor structure proposed by Dabholkar, Thorpe and Rentz (1996).

Suggestions for Improvement Based on Gap Analysis

As factor analysis did not support the five-factor structure of service quality, the gap scores for individual

Table 5: Results of Factor Analysis of Perceptions Scores (Rotated Component Matrix)

Statement	Component						
	1	2	3	4	5	6	7
1				.806			
2			.714				.389
3	.351						.657
4	.360		.437				
5			.787				
6		.775					
7		.822					
8		.871					
9		.494					-.687
10		.716					
11		.533	.526				
12	.458				-.436	.528	
13	.463	.661					
14	.646		.519		-.401		
15	.768						
16	.389					.733	
17	.327				.427	.309	.532
18	.779	.372					
19	.858						
20	.760						
21				.791		.302	
22	.550		.669				
23	.581		.343				
24	.392					.681	
25			.363	.800			
26	.315		.824				
27		.560			.411		.372
28					.854		

Notes: As indicated in Table 4.

Table 6: Results of Factor Analysis of Expectations Scores (Rotated Component Matrix)

Statement	Component							
	1	2	3	4	5	6	7	8
1		.471	.316					-.530
2		.830				.305		
3								.880
4	.354					.741		
5	.869							
6						.736		
7							.884	
8							.877	
9	.792							
10					.771			.335
11		.319	.835					
12	.744							-.367
13	.535		.658	.336				
14	.379		.655					
15	.794				.313			
16			.392	.644				
17	.401		.361		.562			
18			.771					
19					.916			
20		.331		.458	.445		.422	
21				.832				
22				.889				.329
23	.546			.516	.408			
24		.631			.428			
25		.841						
26		.447	.517			-.373		
27	.506	.755						
28						-.733		

Notes: As indicated in Table 4.

items in the questionnaire were analysed using the simple averages of the scores for all items. Gap analysis at the dimension level was not done due to the inapplicability of the same factor structure indicated by the factor analysis discussed earlier. The results are shown in Table 7.

From Table 7, it is clear that a negative gap was found in all items except item 24. This indicates that the service quality of retail stores at an overall level falls far behind the customer expectations. The highest gap (-1.13) among all the items was found to be in item 25 which is quite greater than the gaps in other statements. Though big retail stores promise comfortable parking of their vehicles in their communication to customers, this happens only in non-peak hours. During peak hours, the parking facilities fall short of customers' requirements. This may be due to lack of proper planning and design of parking facilities. In most of the cities in India, prevalent multi-storied parking is still not well adopted and the ground level parking takes a lot of space which multiplies the parking problem. The second largest gap

(-1) among all the items was found to be in item 7 and the lowest gap (0.08) was found to be in item 24 which shows that while stores are indeed successful in ensuring availability of high quality goods, they have, however, failed in fulfilling promises. Proper maintenance of customer information database can help in reducing this gap.

Overall, in spite of the lack of proper factor structure as revealed by the analysis of data, the simple gap analysis of the item average scores points out to the need for considerable improvements in the retail stores' service quality in all aspects.

LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

This study was carried out mainly in Gujarat and the surrounding states and, therefore, the results obtained may not be generalizable to the country as a whole. The small sample size of 102 may also be error-prone. Factor analysis with such a small sample would have questionable applicability. The results show that most of the

Table 7: Gaps between Perceptions and Expectations (P-E) for Customers (n=102)

	Items	Gap (P-E)
1	This store has modern-looking equipment and fixtures	-0.575760
2	The physical facilities at this store are visually appealing	-0.393940
3	Materials associated with this store's service (such as shopping bags, catalogues or statements) are visually appealing	-0.555560
4	This store has clean, attractive, and convenient public areas (e.g., rest rooms)	-0.535350
5	The store layout at this store makes it easy for customers to find what they need	-0.636360
6	The store layout at this store makes it easy for customers to move around in the store	-0.636360
7	When this store promises to do something by a certain time, it will do so	-1.000000
8	This store provides its services at the time it promises to do so	-0.949490
9	This store performs the service right the first time	-0.252530
10	This store has merchandise available when the customers want it	-0.010100
11	This store insists on error-free sales transactions and records	-0.191920
12	Employees in this store have the knowledge to answer customers' questions	-0.686870
13	The behaviour of employees in this store instils confidence in customers	-0.494950
14	Customers feel safe in their transactions with this store	-0.404040
15	Employees in this store give prompt service to customers	-0.636360
16	Employees in this store tell customers exactly when services will be performed	-0.606060
17	Employees in this store are never too busy to respond to customers' request	-0.131310
18	This store gives customers individual attention	0.010101
19	Employees in this store are consistently courteous with customers	-0.232320
20	Employees in this store treat customers courteously on the telephone	-0.313130
21	This store willingly handles returns and exchanges	-0.828280
22	When a customer has a problem, this store shows a sincere interest in solving it	-0.646460
23	Employees in this store are able to handle customer complaints directly and immediately	-0.565660
24	This store offers high quality merchandise	0.080808
25	This store provides plenty of convenient parking for customers	-1.131310
26	This store has operating hours convenient for all its customers	-0.323230
27	This store accepts most major credit cards	-0.333330
28	This store offers its own credit cards	-0.717170

items proposed by Dabholkar, Thorpe and Rentz (1996) are relevant in measuring retail store's service quality in the Indian context and there are no major reliability problems except a few statements as pointed out in the discussion. The real problem was found to be in the factor structure. The factor analysis gave a very different factor structure as compared to the proposed structure. Most of the items did not merge according to the dimensions proposed by Dabholkar, Thorpe and Rentz (1996). This was more noticeable for the items pertaining to the physical aspects. This dimension also showed significant reliability problems. Therefore, the statements of this dimension could be modified or dropped and then the scale could be re-evaluated for its validity. For example, as proposed by Dabholkar, Thorpe and Rentz (1996), the first six items should merge in a single dimension labelled as physical aspects. The factor analysis of this study showed that, for gap scores, only two out of the six items merged in a single dimension. Similarly, for perceptions scores, only three and for expectations score only two items merged in a single dimension. The reason for this inconsistency may be because of gener-

alized wording of the statements and a lack of specificity. For example, the statement, "this store has modern-looking equipment and fixtures," is too general and needs modification. Further, the second statement, "the physical facilities at this store are visually appealing," is very general and lacks clarity. Dropping or restating this statement would have improved the factor structure and the reliability of this part of the questionnaire. The last statement proposed under the policy dimension, "this store offers its own credit cards," seems premature in the Indian retail environment where credit cards have only recently started getting widespread acceptance and very few retail stores have their own credit cards. This statement can be dropped as well and this would lead to a more relevant policy dimension for the Indian retail environment. This would also help in improving the overall reliability of policy-related statements. Therefore, it would be advisable to redefine the factors according to the results obtained under the Indian conditions and then carry out the gap analysis for accurate responses from the respondents and also for more pertinent suggestions for improvements. Also, similar studies with

relatively large sample, rigorously derived across all the states of India, which would measure the validity and reliability of the proposed instrument by Dabholkar, Thorpe and Rentz (1996) would complement this study.

CONCLUSION

The five-factor structure of service quality developed by Dabholkar, Thorpe and Rentz (1996) indeed had a major impact on the business and academic communities. Although this study shows that the data collected do not support their five-factor structure, the five dimensions are still useful as a foundation for discussion and determination of areas for improvement in the service quality of retail stores.

This study also found that the gap model of service quality does not perform as well as the perceptions-based performance measures of service quality in terms of its factor structure. Furthermore, it identified that although the instrument does not follow the factor structure given by Dabholkar, Thorpe and Rentz (1996), the overall reliability of the instrument is quite acceptable. Therefore, once the factors are appropriately modified,

the instrument can very well be utilized under the Indian conditions as well.

Future researchers may address the following important questions:

- What is the dimensionality of service quality in India?
- How do Indian consumers evaluate service quality?
- How do cultural factors influence customer evaluation of service quality?
- How can service quality measurement questionnaires be designed and adapted in order that they suit and provide accurate reflections of a local environment?

As organized retailing develops in India, retail stores in India will have to improve the quality of their services significantly in order to compete successfully in the global marketplace. It is, therefore very important to know how customers evaluate service quality and what can be done to measure and improve it. Further research in the area of service quality under such circumstances would soon be in great demand and would be contributing to retail development in India. ⱴ

REFERENCES

Babakus, E and Boller, G W (1992). "An Empirical Assessment of the SERVQUAL Scale," *Journal of Business Research*, 24(3), 253-268.

Baker, Julie; Grewal, Dhruv and Parasuraman, A (1994). "The Influence of Store Environment on Quality Inferences and Store Image," *Journal of the Academy of Marketing Science*, 22(4), 328-339.

Berry, Leonard L (1986). "Retail Businesses are Service Businesses," *Journal of Retailing*, 62(1), 3-6.

Bolton, R N and Drew, J H (1991). "A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes," *Journal of Marketing*, 55(1), 1- 9.

Boshoff, Christo and Terblanche, Nic S (1997). "Measuring Retail Service Quality: A Replication Study," *South African Journal of Business Management*, 28(4), 123-128.

Brensinger, R P and Lambert, D M (1990). "Can the SERVQUAL Scale be Generalized to Business-to-business Services?" Paper presented at the Summer Marketing Educator's Conference, American Marketing Association.

Carman, J M (1990). "Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions," *Journal of Retailing*, 66(1), 33-55.

Cliff, A and Ryan, C (1994). "Do Travel Agencies Measure Up to Customer Expectation? An Empirical Investigation of Travel Agencies' Service Quality as Measured by SERVQUAL," Proceedings of the Tourism Down Under Conference, Massey University, Palmerston North, New Zealand, December, 553-578.

Cronin, Jr. J J and Taylor, S A (1992). "Measuring Service Quality: A Reexamination and Extension," *Journal of Marketing*, 55(3), 55-68.

Cronin Jr. J J and Taylor, S A (1994). "SERVPERF versus SERVQUAL: Reconciling Performance-based and Perceptions-Minus-Expectations Measurement of Service Quality," *Journal of Marketing*, 58(1), 125-131.

Dabholkar, P A; Thorpe, D I and Rentz, J O (1996). "A Measure of Service Quality for Retail Stores: Scale Development and Validation," *Journal of the Academy of Marketing Science*, 24(1), 3-16.

Donthu, N and Yoo, B (1998). "Cultural Influences on Service Quality Expectations," *Journal of Service Research*, 1, 178-186.

Freeman, K D and Dart, J (1993). "Measuring the Perceived Quality of Professional Business Services," *Journal of Professional Services Marketing*, 9, 27-47.

Gutman, Jonathan and Alden, Scott D (1985). "Adolescents' Cognitive Structures of Retail Stores and Fashion Consumption: A Means-end Chain Analysis of Quality," in Jacoby, Jacob and Olson, Jerry C (eds.), *Perceived Quality: How Consumers View Stores and Merchandise*, Lexington, MA: Lexington Books, 99-114.

Hart, Christopher W L; Heskett, James L and Sasser Jr., W Earl (1990). "The Profitable Art of Service Recovery," *Harvard Business Review*, 68(4), 148-156.

Hummel, J W and Savitt, Ronald (1988). "Integrated Customer Service and Retail Strategy," *International Journal of Retailing*, 3(2), 5-21.

Kelley, Scott W and Davis, Mark A (1994). "Antecedents to Customer Expectations for Service Recovery," *Journal of the Academy of Marketing Science*, 22(1), 52-61.

Kettinger, W J and Lee, C C (1994). "Perceived Service Quality and User Satisfaction with the Information Services Function," *Decision Sciences*, 25(5/6), 737-766.

Lam, S K (1997). "SERVQUAL: A Tool for Measuring Patients' Opinions of Hospital Service Quality in Hong Kong," *Total Quality Management*, 8(4), 145-152.

Mattila (1999). "The Role of Culture in the Service Evaluation Process," *Journal of Service Research*, 1(3), 250-261.

Mazursky, David and Jacoby, Jacob (1985). "Forming Impression of Merchandise and Service Quality," in Jacoby, Jacob and Olson, Jerry C (eds.), *Perceived Quality: How Consumers View Stores and Merchandise*, Lexington, MA: Lexington Books, 139-153.

Oliver, Richard (1981). "Measurement and Evaluation of Satisfaction Processes in Retail Settings," *Journal of Retailing*, 57(3), 25-48.

Parasuraman, A; Zeithaml, V A and Berry, L L (1985). "A Conceptual Model of Service Quality and Its Implications for Future Research," *Journal of Marketing*, 49(4), 41-50.

Parasuraman, A; Zeithaml, V A and Berry, L L (1988). "SERVQUAL: A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64(1), 12-40.

Parasuraman, A; Berry, L L and Zeithaml, V A (1991). "Refinement and Reassessment of the SERVQUAL Scale," *Journal of Retailing*, 67(4), 420-450.

Parasuraman, A; Berry, L L and Zeithaml, V A (1993). "Research Note: More on Improving Service Quality Measurement," *Journal of Retailing*, 69(1), 140-147.

Parasuraman, A; Zeithaml, V A and Berry, L L (1994). "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research," *Journal of Marketing*, 58(1), 111-124.

Pariseau, S E and McDaniel, J R (1997). "Assessing Service Quality in Schools of Business," *International Journal of Quality and Reliability Management*, 14, 204-218.

Reeves, C A and Bednar, D (1994). "Defining Quality: Alternatives and Implications," *Academy of Management Review*, 19(3), 419-445.

Reichheld, Frederick F and Sasser Jr., W Earl (1990). "Zero Defections: Quality Comes to Services," *Harvard Business Review*, 68(5), 105-111.

Schneider, B; Wheeler, J K and Cox, J E (1992). "A Passion for Service: Using Content Analysis to Explicate Service Climate Themes," *Journal of Applied Psychology*, 77(5), 705-716.

Sellers, P (1990). "What Customers Really Want," *Fortune*, 121(13), 58-68.

Smith, T (1989). "Nurturing a Customer Service Culture," *Retail Control*, October, 15-18.

Teas, R K (1994). "Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment," *Journal of Marketing*, 58(1), 132-139.

Tribe, J and Snaith, T (1988). "From SERVQUAL to HOL-SAT: Holiday Satisfaction in Varadero, Cuba," *Tourism Management*, 19, 25-34.

Westbrook, Robert A (1981). "Sources of Consumer Satisfaction with Retail Outlets," *Journal of Retailing*, 57(3), 68-85.

Zhao, X; Bai, C and Hui, Y "An Empirical Assessment and Application of SERVQUAL in a Mainland Chinese Department Store," *Total Quality Management*, 13(2), 241-254.

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The better an organization is, the less obvious it is. It's the results, not the structure or management that should be apparent.

Dee Hock