2.1 INTRODUCTION

The purpose of this chapter was to review and consolidate the literature work in three areas of knowledge relevant to this study. Service quality measurement models, retail service quality scale and replication studies of retail service quality scale were consolidated from the research point of view.

The literature study reviewed the fundamental concepts of service quality. The understanding of service quality concepts was vital for the subsequent literature work like service quality measurement models. The core aspect of the dissertation the retail service quality and the literature work on retail service quality was also explained in literature work on retail service quality scale. In continuation with the literature work on retail service quality scale (RSQS), the literature work also provided a complete summary of literature review on service quality in retail. The summary of empirical researches using RSQS was also given and the gaps in literature work were discussed with its usefulness in development of research study that follows.

2.2 SERVICE QUALITY CONCEPT

It was difficult to measure service quality as compared to good’s quality. The difficulty to measure was due to fewer tangible cues available when consumers purchase services (Parasuraman et al 1985), fewer search
properties, but higher in experience and credence properties (Parasuraman et al. 1985), as compared to goods.

It also required higher consumer involvement in the consumption process (Grönroos 1984). Researchers operationalize the service quality construct either as a gap between expectation of service and perceived performance of service, or just perceived performance alone (Hurley and Estalami 1998).

On the other hand, service quality dimensions were seen as the criteria to assess service quality (Parasuraman et al. 1985). Feinburg and de Ruyter (1995) supported this idea as they postulate that the dimensions were instruments for measuring perceived service quality. They also insist that consumer-perceived service quality was usually seen as a multi-dimensional construct. The organization must define how the service quality was perceived by the consumer and determine in what way service quality was influenced for understanding the concept of service quality (Gronroos 2007a, p.57). Service quality had been defined by a number of researchers over a period of time with varied degree of support (Reeves and Bednar 1994).

Parasuraman et al. (1985, 1988) defined service quality as representing a global judgement about a delivery of a service and further indicated that service quality was the customer’s judgment of overall excellence of the service or the difference between customer’s expectation and the actual service performed or perceived. Although there was no uniformity in defining the Service quality, the opinion from the marketing researchers was that service quality must be considered from the consumers’ perspective (Cardozo 1965; Fiegenbaum, 1982; Schembri and Sandberg 2002).
Gronroos (1984) defined perceived service quality as a consumption process in which the customer was a part of the service process that lead to an outcome or result. According to Gronroos, the way the customer perceived the service process at the time of the service was more important than the outcome of the service. Customer’s expectation and perception of the service became important when the customer evaluate if the expectation exceeded by the perceptions (Siu and Cheung 2001; Kang and James 2004).

Parasuraman et al (1988) suggested that Service quality was viewed as a difference between the expectations and perception of the service and service quality as a comparison between customer’s expectations and perception of service quality. They developed a model based on the difference between the customer’s expectations and perception of service quality called SERVQUAL. Cronin and Taylor (1992) argued that service quality should be viewed as the customer’s attitude towards a service. This view supported the measurement of service quality based on the perception (performance only) of service quality.

Rust and Oliver (1994) stressed the point that the perceived service quality was similar in meaning to attitude which included the overall judgment of a product or service. Service quality reduces the costs, increases the customer satisfaction (Chen 2008; Howat et al 2008), increase customer loyalty and retention (Sureshchandar et al 2002; Wong and Sohal 2003; Bontis and Booker 2007; Prayag 2007; Howat et al 2008). Service quality also increases the customers’ repurchase intention (Perez et al 2007; Chen,2008) and makes the organization more profitable (Asubonteng, Mccleary and Swan, 1996; Buttle, 1996; Sivadas and Prewitt, 2000; McAdam et al 2003; Seth et al 2005; Edvardsson 2005).
Service quality had affected on the company performance positively. It had attracted new customers, enhanced the employee and customer satisfaction and thereby increased the image of the organization.

2.3 MEASUREMENT OF SERVICE QUALITY

An increasing interest in service quality research had led to development of instruments to measure service quality. A majority of service quality models suggested a multidimensional conceptualization of service quality that lead to the measurement of service quality from the viewpoints of customers (Akinci et al 2010). A detailed research in understanding the concept of service quality models was required to identify the service quality issues and provided a better quality performance (Seth et al 2005; Ahmad et al 2009). Much of the early research work in service quality had been dominated by two major schools; the Nordic school and the North American school (Karatepe et al 2005; Carlo and Garcia 2007). Research in service quality models has led to the contributions from different scholars. The major contribution to service quality models have come from

- **Nordic School**
  - Gronroos model (1978; 1982; 1984)
  - Lehtinen and Lehtinen three dimensional model (1991)

- **North American School**
  - Parasuraman, Zeithaml and Berry Gap model or Disconfirmation model (1985; 1988; 1991; 1994)

- **SERVPERF model (1992)**

- **Retail Service Quality Scale model (1996)**

- **Brady and Cronin Hierarchical model (2001)**
In the literature work, it was found that the research in service quality has contributed many thoughts in the evaluation of service quality. These researches have provided significant inputs to the measurement of service quality. The relevant service quality models were consolidated and given below.

2.3.1 Contribution of Nordic School

Gronroos model

The main contribution to the Nordic school service quality research came from Gronroos. Gronroos mentioned that the perception of quality was a function of both the expectations a consumer has about the service encounter and the confirmation or disconfirmation of those expectations once the service had been delivered (Gronroos 1978; 1984).

Gronroos’ service quality model consisted of three dimensions: technical quality, functional quality and image (Gronroos 2007). The technical or outcome dimension was usually more objectively measured than the functional quality dimension (Palmer 2008) because it was the quality that can be quantified. Functional quality was defined as the relationship between how the service process occurred (Walker 1995), and the technical quality, which met the customer’s expectations (Gronroos 1984). Gronroos presented the image as a dimension and it was presented as a factor that influenced the technical and functional quality dimensions and did not refer to it as a dimension. Gronroos model was viewed as a three dimensional model or a two dimensional model depending on the inclusion or exclusion of image dimension (Gronroos 2007).
Gronroos indicated that the service quality depended on seven criterias. These criteria were

- **Attitude and Behaviour**: the way customers were dealt by the employees in a friendly manner (Process dimension)

- **Accessibility and Flexibility**: It refers to the convenient operating hours and organization’s service system for customers to receive the service (Process dimension)

- **Professionalism and Skills**: It refers to the ability of the employees in dealing with problem solving (Outcome dimension)

- **Reliability and Trustworthiness**: the ability of the service providers to deliver the promised service (Process dimension)
- **Reputation and Credibility**: It refers to the faith of a customer towards the service provider and the value for their money.

- **Servicescape**: physical aspects of the service provider which enhances the service experience (Process Dimension)

- **Service recovery**: the ability of the service provider to deal with service problems and the way to rectify the problematic situation (Process Dimension).

### Lehtinen and Lehtinen Three Dimensional Model (1991)

Lehtinen and Lehtinen of Nordic school had also contributed a three dimensional model of service quality (Lehtinen and Lehtinen 1991; Athanassopoulou 2000). The three dimensional model comprised physical quality dimension, interactive quality dimension and corporate quality dimension. Physical quality dimension refers the physical element of the service. The physical dimension further divided into two categories; the environment of the service firm and the equipment facilitating the service.

The interactive quality was the interaction between the human elements that involved the service provider. It may be the interaction between the employees of the service provider with the customers or interactions of the customers have with each other. Corporate quality dimension was the history of the organization and the people’s image towards the organization. The corporate quality dimension took time to evolve but the physical quality dimension could be improved depending on the service providers’ ability (Lehtinen and Lehtinen 1991).
2.3.2 North American School Models

The North American school models were more popular than the Nordic school models and the main contributor of the North American school was Parasuraman et al gap model (1988). In the literature review of service quality, the SERVQUAL model was mentioned as the fundamental method and instrument to measure service quality. The American school model which also called as disconfirmation model had been originally developed in 1985 and refined in 1985, 1991, 1993 and 1994 (Parasuraman et al 1988, 1991, 1993, 1994). The essence of gap model was that the service quality can be judged by the size and direction of the gap between the consumer perception of service and the consumer expectation of the service performance. The intent of the gap analysis model was to define a comprehensive set of service quality dimensions.

Parasuraman et al (1985) initially identified ten dimensions of service quality, namely reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles. For the service quality to be good, the performance or perceived level of service needed to be higher than the expected level of service (Parikh, 2006). Valarie Zeithaml et al (1990) conducted focus group interviews and evaluated customer service in different service industries to develop a list of service quality attributes which define service quality in general. The list falls into five categories (Table 2.1).
# Table 2.1 SERVQUAL Dimensions

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<tr>
<th>S.No</th>
<th>Dimensions</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>1</td>
<td>Tangibles</td>
<td>The appearance of physical facilities, equipment,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>appearance of personnel, and communication materials</td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>The ability to perform the promised service dependably and accurately</td>
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<tr>
<td>3</td>
<td>Responsiveness</td>
<td>The willingness to help customers and provide prompt service</td>
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<tr>
<td>4</td>
<td>Assurance</td>
<td>The knowledge and courtesy of employees and their ability to inspire trust</td>
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<tr>
<td></td>
<td></td>
<td>and confidence</td>
</tr>
<tr>
<td>5</td>
<td>Empathy</td>
<td>The caring and individualized attention the firm provides to its customers</td>
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Later Parasuraman et al (1991) improved and re-evaluated the scale, changed the description of some items, for example, replaced "should" instead of "would" at expectation part of the questionnaire, changed the statement sentences from negative tone into positive tone. Although having done much improvement, Parasuraman et al (1991) still emphasized that the SERVQUAL scale was the basic "skeleton" but not the perfect one and the scale should be modified when applied in different service settings.

The consumer gap was the difference between the customer's expectations of the services and the perception of the services (Zeithaml et al 2009). Understanding the customer gap was the key for improving service quality in an organization, however it cannot be closed without closing the other gaps.
Even though SERVQUAL was used to measure other gaps such as the management gap, the employee gap or the difference between the managers and customers, measuring the customer gap (gap 5) was the heart of the SERVQUAL model (Prayag 2007). Perception of service was that the customer’s opinion of the service or product (Foster, 2004) or the general judgment of a service (Sureshchandar et al 2002) which was affected by many factors such as the education level, background and others (O’Neill and Palmer, 2003).

The practical contribution of SERVQUAL instrument was that a measurement of service operational performance could be derived by calculating the difference between a consumer’s expectations about the service provider performance and the consumer’s actual judgment of the service provided (Parasuraman et al 1991).

The reliability and validity of the SERVQUAL scale was questioned by many researchers and the support for the SERVQUAL instrument was not universal (Woodside et al 1989; Carman 1990; Cronin and Taylor 1992).

As summarized by Van Dyke, Prybutok, and Kappelman (1999), the key concerns with SERVQUAL were

- the use of gap (difference between the service expectations and the service perceptions) scores (McAlexander, Kaldenburg, and Koenig, 1994; Cronin and Taylor, 1994; Hussey, 1999)
- the ability of SERVQUAL findings to measure and predict the service quality levels (Sureshchander et al 2002)
the lack of precise definition of the expectations construct (Teas, 1993; Boulding et al. 1993; Quester and Romaniuk, 1997) and

the ability of the SERVQUAL measures (Finn and Lamb, 1991; Lam and Woo, 1997; Llosa et al. 1998).

SERVPERF Model

Cronin and Taylor (1992) developed a "performance-based" service quality measurement scale called SERVPERF. A number of SERVQUAL criticisms were explored in the research of Cronin and Taylor (1992; 1994), who challenged the validity of using the gap scores, and the vagueness of service expectations questions in SERVQUAL. The major difference between SERVQUAL and SERVPERF was that SERVQUAL operationalized service quality by comparing the perceptions of the service received with expectations, while SERVPERF maintained only the perceptions of service quality. The SERVPERF scale consisted of 22 perception items excluding any consideration of expectations.

The SERVPERF scale was more appropriate than the SERVQUAL model gap score measures in terms of predicting behaviour or behavioral intentions, as the SERVPERF scale explained more of the variation in service quality than SERVQUAL (Kettinger and Lee 1996; Van Dyke et al 1999).

SERVPERF scale found to be more appropriate in measuring service quality in service situations because of removal of service expectations questions where consumers may have difficulty in forming precise pre-consumption expectations (Mick and Fournier 1998; Zeithaml, Parasuraman and Malhotra 2002).
The SERVPERF scale could also be used for testing the relationships between service quality and purchase intentions and consumer loyalty (Cronin and Taylor, 1992; 1994). Subsequent research studies that had compared the SERVQUAL and SERVPERF instruments also supported the Cronin and Taylor (1992) findings (Dabholkar et al 1996; Quester and Romaniuk, 1997; Brady et al 2002).

The most relevant criticism of SERVQUAL and SERVPERF was the lack of universality of the five dimensions of service quality. Although many research works indicated a support that a number of the scale measures of service quality developed and tested by the SERVQUAL instrument extend across a number of service encounters (Dabholkar et al 1996; Jevons and Pidgeon, 2001.

There were arguments that support the use of SERVQUAL over SERVPERF and vice versa (Jain and Gupta, 2004), however, the balance seems to be in favour of SERVPERF over SERVQUAL (Nadiri and Hussain, 2005). Many studies recommend the use of the perception of actual service performance measurement (SERVPERF) because it overcomes SERVQUAL problems (Lee and Lambert, 2000; Siu and Cheung, 2001; Nadiri and Hussain, 2005; Welsh and Raven, 2006). Other studies have found that measuring the perception or performance was more reliable and valid (Dabholkar et al 1996; Babakus et al 2004; Caro and Garcia, 2007).

Service Quality GAP model

Parasuraman et al (1985) proposed that the service quality was a function of the differences between the service expectations and performance along the quality dimensions. They developed a service quality model (Figure 2.2) based on gap analysis.
The various gaps visualized in the model are:

**Gap 1** : Difference between consumer’s expectation and management’s perceptions of those expectations, i.e. not knowing the expectation of the consumers.

**Gap 2** : Differences between management’s perception of consumers expectation and service quality specifications, i.e. improper service quality standards.

**Gap 3** : Differences between the service quality specifications and the service delivered to the consumers, i.e. the service performance gap.

**Gap 4** : Differences between service delivery and the communications to the consumers about the service delivery, i.e. whether the promises to the consumers through communication match the service delivery.

**Gap 5** : Differences between the consumer’s perceived service and the consumer’s expectation about the service.

Parasuraman et al (1985) refined their research on Gaps model and proposed a scale named SERVQUAL for measuring customer’s perceptions of service quality. The original ten dimensions of service quality was merged and the five dimensional service quality model was proposed: Reliability, Responsiveness, Tangibles, Assurance (communication, competence, credibility, courtesy and security) and Empathy which captures access and helps in understanding the customers. In addition to this empirical research, the authors characterised and further delineated the four gaps identified in their research of 1985. This leads to the extended service quality model (Figure 2.2).
Figure 2.2 – Parasuraman Gaps Model

Source: Parasuraman et al. (1985)

Figure 2.3 Parasuraman Gaps Model 2

Source: Zeithaml et al. (1988)
Performance Only Model

Cronin and Taylor (1992) in their Performance only model investigated the conceptualization and measurement of service quality and its relationship with consumer satisfaction and purchase intentions. They compared the computed difference in scores with perception and concluded that perceptions were better predictors of service quality than the expectations.

They have difference in opinion on Parasuraman et.al. (1985) SERVQUAL model, with respect to conceptualization and measurement of service quality and developed performance only measurement service quality called SERVPERF. They had illustrated that service quality was a form of consumer attitude and the performance only measurement of service quality and was an enhanced means of measuring service quality. In contrast to the SERVQUAL model which measured service quality through satisfaction and attitude, Cronin and Taylor stated that the service quality can be conceptualized as “similar to an attitude”, and can be operationalized by the adequacy-importance model. In particular, they maintained that performance instead of “Performance-Expectation” determined service quality and service quality was evaluated by perceptions only without expectations and without importance weights according to their proposed formula:

\[ SQ = \sum_{j=1}^{k} P_{ij} \]

where

- \( SQ \) = overall service quality;
- \( K \) = the number of attributes;
- \( P_{ij} \) = performance perception of stimulus i with respect to attribute j.
Attribute and Overall Affect Model

Self-service was familiar with almost all the services owing to high cost of labor in service deliveries. Based on this concept, Dabholkar (1996) proposed two alternative models of service quality for technology-based self-service options.

The Dabholkar attribute model in Figure 2.4(a) was based on what consumers expect from the self-service option. It was based on the cognitive approach to decision making, where consumers would use a compensatory process to evaluate attributes associated with technology based self-service option in order to form expectations of service quality.

The Overall Affect Model in Figure 2.4(b) was based on the consumers’ feeling towards the use of technology in self-service option. It was based on the affective approach to decision making where consumers would use overall predispositions to form self service quality expectation for a technology based self-service option.

In both the attribute models, the expected service quality influences the intentions to use technology-based self-service options.

Figure 2.4 Dabholkar Attribute Overall Affect Model
Retail Service Quality and Perceived Value Model

The influence of service quality on value and willingness to buy in a specific service encounters were through two alternative models (Sweeney et al 1997) and hence the value can be defined as the comparison between what consumers get and what they give, suggested that value as a comparison of benefits and sacrifices (Zeithaml et al 1988). Sweeney et al. (1997) proposed a model in which constructs used was “value for money”.

Model 1 : This model highlighted that in addition to product quality and price perceptions, functional service quality and technical service quality perceptions were directly influence the value perceptions.

Model 2 : In this model, it was proposed that the functional service quality perceptions directly influenced consumers’ willingness to buy. Functional service quality perceptions also influenced technical service quality perceptions, which in turn influenced the product quality perceptions and neither of the two directly influenced the value perceptions.

Based on these analyses, it was possible to make a significant improvement in this model (Figure 2.5) by allowing technical service quality to influence perceived value directly.
Antecedents and Mediator Model

Antecedents and Mediator model (Dabholkar et al 2000) included an examination of its antecedents, consequences and mediators to provide a deeper understanding of conceptual issues related to service quality. This model examined the conceptual issue in service quality as the relevant factors and was considered as components or antecedents and the relationship of customer satisfaction with behavioral intentions.
2.3.3 Other Service Quality Measurement Models

Service Quality Three-component Model

The model of Rust and Oliver (1994) model originated from the Nordic model of Gronroos, but they assigned two original dimensions – technical dimension (in this model: service- product) and functional quality (in this model: service delivery) – the dimension of service environment.

Brady and Cronin Hierarchical Model

Brady and Cronin (2001) endorsed that the American school and the Nordic school were the most adopted conceptualization of service quality by researchers. They have integrated the Nordic school model and the North American model while taking into account of Rust and Oliver (1994) perception of service quality and proposed a new hierarchical model (2001).
Brady and Cronin had also adopted the views of Dabholkar et al (1996) that service quality was a multidimensional and multilevel construct. Brady and Cronin in their hierarchical model integrated the concepts of service quality and suggested that the proposed model consisted of three dimensions. The three dimensions were: Interaction Quality, Physical Environment Quality and Outcome Quality. Each of these dimensions consisted of three sub-dimensions and the overall evaluation of dimensions formed the perception of the service quality. The Brady and Cronin hierarchical model was presented in Figure 2.7.

![Figure 2.7 Brady and Cronin Hierarchical Model](image)

According to Carrillat et al (2007), Brady and Cronin’s hierarchical model had not persuaded researchers that it was superior to SERVQUAL or SERVPERF. Both SERVQUAL and SERVPERF dominated literature with 46% of the articles that cited SERVQUAL or SERVPERF for the past five years, which indicated that they were still very popular (Carrillat et al 2007).
G.S. Sureshchandar, C. Rajendran, T.J. Kamalanabhan Service Quality Model

One of the latest service quality models which also used the dimensions of the SERVQUAL model was developed by G.S. Sureshchandar et al (2001). In their model, the authors concluded that in the SERVQUAL list, the 22 items were reasonably good predictors of service quality (Sureshchandar et al, 2001). At the same time, however, these statements were organized around two major character groups: the material characteristics of the service and the subjective / personal connections of the service procedure. They argued that the SERVQUAL model only concentrated on one part of the service quality. It neglects areas, such as the characteristics of the service, particularly the core service elements, systematization/standardization of service delivery as well as the supplier’s image, goodwill, and social responsibility.

Their model of service quality was based on five critical dimensions such as

- Core service
- Human elements of service delivery
- Non-human elements, standardization
- Tangibles of service
- Social responsibility.

They have also developed a measurement method consisted of 41 statements by leaving out some of the SERVQUAL statements and by inserting new statements connected to the new dimensions. They have applied the scale preferred by Cronin and Taylor (1992), which exclusively measured the actual performance of the supplier.
2.4 RETAIL SERVICE QUALITY

In contrast to the service quality within pure service encounters, (Carman 1990; Dean 2002), retailing involved the combination of goods and services (Shostack, 1977). Service quality in retailing was different from other service environments (Finn and Lamb 1991; Gagliano and Hathcote 1994). Since the retail service was unique in nature, measuring retail service quality will have to be different from the conventional service quality measurement. The theoretical focus of the retail service quality research differed from service quality research, as it can be viewed at both integrated level (Westbrook 1981) and the attribute level (Oliver 1981).

The considerable variation in empirical factor structures reported in the literature raised doubts over the use of the SERVQUAL instrument in retail research, refinement was needed while applying SERVQUAL in specific companies and industries. Similar concerns were voiced by Dabholkar et al (1996) when they noted that SERVQUAL which was developed primarily to assess service quality for pure service environments, failed to measure service quality for retail stores.

Retail offerings were a mix of merchandise and service, and the experience of customers in retail stores thus involved in such activities as negotiating their way through the store, finding the merchandise, interacting with a variety of store personnel, and returning unsatisfactory merchandise which had a direct influence on the customers’ evaluation of service quality.

Although measures of service quality in pure service environments and retail environments were likely to share some common dimensions, it had been argued that measures of retail service quality must take additional dimensions into consideration. Only a limited number of studies have been attempted to measure service quality in retail settings, so there was a significant gap in the literature regarding this area of research.
One of the earliest studies that tested the reliability and validity of SERVQUAL scale within pure retail setting was by Carman (1990). He found that the factor structure of the SERVQUAL instrument extended to a retail setting, but a number of individual items did not load on the expected factors, thus questioning the construct validity (Churchill 1979; Andrews 1984). Based on the study, Carman (1990) suggested that the use of SERVQUAL instrument was questionable, as retailing had greater number of visible indicators of quality that the SERVQUAL items did not incorporate.

Finn and Lamb (1991) tested the SERVQUAL instrument in four different retail store settings, but because they were unable to find a good fit between their data and the five-factor structure of the instrument, the authors concluded that SERVQUAL without modification could not be used as a valid measure of service quality in a retail setting.

The early retail service quality measurement literature indicated the limitation of using the existing service quality models and scale instruments, particularly SERVQUAL. Although some items of SERVQUAL scale had been used in service quality in a retail setting (Dabholkar et al 1996; Wong and Sohal 2002; 2003), there was limited support that it should be used in measuring retail service quality, as it does not cover the range of activities found within a retail setting.

To overcome the above mentioned constraint in service quality model, Dabholkar et al (1996) developed the retail service quality scale (RSQS) for measuring service quality in the retail setup (Table 2.2). The RSQS had a five dimensional structure of which three dimensions comprise of two sub-dimensions each. Dabholkar et al (1996) replicated their own study and found all the RSQS dimensions and sub-dimensions to be valid in the USA. The RSQS five dimensional model is depicted in Figure 2.8.
### Table 2.2 - Retail Service Quality Scale (RSQS)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Dimensions</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physical Aspects</td>
<td>Retail store appearance and store layout</td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>Retailers keep their promises and do the right things</td>
</tr>
<tr>
<td>3</td>
<td>Personal Interaction</td>
<td>Retail store personnel are courteous, helpful, and inspire confidence in customers</td>
</tr>
<tr>
<td>4</td>
<td>Problem Solving</td>
<td>Retail store personnel are capable to handle returns and exchanges, customers’ problems and complaints</td>
</tr>
<tr>
<td>5</td>
<td>Policy</td>
<td>Retail store’s policy on merchandise quality, parking, operation hours, and credit cards</td>
</tr>
</tbody>
</table>

**Source:** Dabholkar, Thorpe and Rentz. A Measure of Service Quality for Retail Stores: Scale Development and Validation, Journal of the Academy of Marketing Science, Winter 1996

![Dabholkar et al Retail Service Quality Model](image_url)

**Figure 2.8 Dabholkar et al Retail Service Quality Model**
All dimension and sub-dimensions are correlated amongst each other – but not depicted for the sake of clarity.

2.4.1 Research work in Retail Service Quality Model

Boshoff and Terblanche (1997) investigated the reliability and validity of the RSQS in South African retail environment. Analysis of the data revealed that the instrument was a valid and reliable (Cronbach alpha values ranged from 0.68 to 0.90 for the five dimensions) which measured retail service quality in South Africa. The instrument was found to be suitable for studying the service quality of South African retail industry comprising of department stores, specialty stores and hypermarkets that offered a mix of goods and services.

Brent McKenzie (2006) found in his research that within a transition economy such as Estonia, retail service quality was best represented by the three factors of physical aspects, personal interaction and problem solving in contrast to the five factor model purported by Dabholkar et.al (1996).

Carman (1990) tested SERVQUAL to tyre retailers (a retail setting, offering a mix of merchandise and services) and identified nine factors of service quality, using principal axis factor analysis followed by oblique rotation. On the basis of his findings he concluded that the five dimensions of SERVQUAL were not generic, and suggested that the instrument can be adapted by adding new items or factors according to different situations.

Finn and Lamb (1991) tested SERVQUAL in different types of retail stores (department stores and discount stores). Their confirmatory factor analysis was unable to provide a good fit to the proposed five-factor structure of SERVQUAL for either of these commercial formats making them conclude
that the instrument could not be used as a valid measure of service quality in retail companies without modifications, although they were unable to provide an acceptable alternative measure.

Gagliano and Hathcote (1994) extracted four factors- Personal attention, Reliability, Tangibles and Convenience while investigating service quality in retail clothing sector. Two of these factors, Personal attention and Convenience had no correspondence to SERVQUAL. The five determinants did not factor out as expected. The authors concluded that the original SERVQUAL scale was not an effective tool for measuring service quality in apparel specialty stores.

Guiry et al (1992) modified the original 22 item SERVQUAL to a 51 item instrument by dropping 7 items from SERVQUAL and adding 36 new items designed to measure service attributes at the retail store level. The exploratory factor analysis carried out by them revealed seven dimensions namely Personal Service during interaction with employees, Merchandise Assortment, Store Transaction Procedure Reliability, Employee Availability in the store before interaction, Tangibles, Store Service Policy Reliability and Price. The authors concluded that the number as well as the composition of the dimensions needed to be modified while studying service quality of retail stores.

Kim and Jin (2002), tried to determine whether RSQS could be validated in the context of discount stores for US and Korean customers. The authors found that among the five items designed to measure retail service quality, Policy was unreliable in both countries. This could have been because the Policy dimension was simply not present in customers’ perception of service quality for discount stores. By using only three dimensions of retail service quality - Physical aspects, Reliability, and Personal attention, RSQS appeared to provide a good fit to the data for both the US and Korean
samples. However, measurement equivalence did not exist across the two samples even though the factor structure remained the same. The authors therefore, concluded that RSQS could not be viewed as a reliable and valid measure for cross-cultural comparisons.

Mehta et al (2000) explored the usefulness of RSQS as a tool for measuring the service quality of different retail environments in Singapore. The authors tested the reliability of the scale and found the Cronbach alpha values to be ranging from 0.52 to 0.86 and 0.75 to 0.92 for the five dimensions of RSQS in the context of supermarket and electronic goods retailers, respectively. However, strong inter-correlation existed between the various dimensions of the RSQS for both supermarket and electronic goods retailers. For supermarkets, Physical aspects and Personal interaction were significant in explaining the variance of the RSQS scale under stepwise regression, while the dimension of Personal interaction alone was significant in contributing to the overall variance for the RSQS scale for an electronic goods retailer. On the basis of these findings, the authors finally concluded that the RSQS scale was a better measure of service quality for a supermarket retailer than for an electronic goods retailer.

Siu and Cheung (2001) used RSQS for studying a well-known departmental store chain in Hong Kong. Principal component factor analysis with varimax rotation performed on 25 items of RSQS (3 items were deleted in a pretest) failed to identify the five dimensions of RSQS, instead six service quality dimensions emerged from their study. These were Personal interaction, Physical appearance, Promises, Policy, Convenience and Problem solving. The fact that, the Reliability dimension did not factor out and was consistent with the findings of the study conducted by Mehta et al (2000) in the context of supermarkets in Singapore. Siu and Cheung
concluded that though RSQS could be applied for studying retail stores in Hong Kong some modifications were required.

Siu and Chow (2003) used Siu and Cheung’s (2001) adapted version of RSQS to examine the service quality of a Japanese supermarket in Hong Kong and its impact on customer satisfaction and future consumption behavior. Few items were deleted as the Cronbach alpha showed that they were inconsistent with other items in the same dimension. The remaining 23 items were reduced into five dimensions of Personal Interaction, Trustworthiness, Physical Aspect, Policy and Reliability. The original dimension of Problem Solving as given in the retail service quality scale was integrated into the Personal Interaction construct while a new factor emerged in this study, which was labeled as Trustworthiness. The integration of Problem solving dimension with the Personal interaction dimension was similar to that of Kim and Jin (2002) study of US and Korean customers.

Subhashini Kaul (2005) tested the applicability of RSQS in the Indian specialty apparel store context. Confirmatory factor analysis of the component structures using AMOS 4.0 indicated that the RSQS dimensions were not valid in India. According to her “none of the component models of the RSQS dimensions fit the data, indicated that the RSQS factor structure was not applicable to the Indian retail setting”. Analysis of the data revealed that the Indian consumer did not distinguish between service attributes related to Reliability and Policy. Findings of the study further resulted that RSQS has four dimensions structure in Indian retailing which had raised doubts about the validity of RSQS as a measure of service quality in Indian retailing.

Sureshchander et al (2001) raised the question of whether service quality scales such as SERVQUAL addressed the critical aspects of service
quality apart from an examination of the face validity of the items. The RSQS was possibly not just inaccurate but also ‘incomplete’ in the Indian context. The authors also stressed that future research needs to be done to examine not only the factor structure of service quality but also for developing a scale that captures the entire store service construct. Developing a scale for measuring service quality in Indian retail would fulfill the urgent strategic need of Indian retailers. The retailers would then be able to identify service quality areas requiring improvement. Such a scale would be able to track improvements in specific areas of service and unless this is possible, any service quality scale will have limited application for the retailers. Unfortunately, without extensive adaptation, RSQS was not suitable to address these needs.

Vazquez et al. (1995), in their research by using principal component factor analysis identified five dimensions of service quality such as Product Presentation, Shopping Convenience, Awareness of Promotions, Quality of Assortment, Personal Interaction, Pricing Policy, and Retailers Recognition of Prestige. A total of 24 items were identified of which 12 were from SERVQUAL while 12 new items were added by the authors.
### Table 2.3 Summary of Literature Review on Service Quality in Retail

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Service Industry</th>
<th>Dimensions and Attributes</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carman</td>
<td>1990</td>
<td>Tyre retailing,</td>
<td>Identified nine factors of</td>
<td>Five dimensions of SERVQUAL were not generic, and suggested that the instrument be adapted by adding new items or factors as pertinent to different situations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>offering a mix</td>
<td>service quality</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>of merchandise</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>and services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finn and Lamb</td>
<td>1991</td>
<td>Department stores</td>
<td>No such dimension were</td>
<td>Confirmatory factor analysis was unable to provide a good fit to the proposed five-factor structure of SERVQUAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and discount</td>
<td>given by the researcher</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guiry et al</td>
<td>1992</td>
<td>Retail store</td>
<td>Proposed 51 Items instrument</td>
<td>Number as well as the composition of the dimensions were to be modified while studying service quality of retail stores.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>by dropping 7 items and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>adding 36 new items</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gagliano and</td>
<td>1994</td>
<td>Retail-clothing</td>
<td>Extracted four factors out</td>
<td>Original SERVQUAL scale was not an effective tool for measuring service quality in apparel specialty stores.</td>
</tr>
<tr>
<td>Hathcote</td>
<td></td>
<td>sector</td>
<td>of which two have no</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>correspondence to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SERVQUAL</td>
<td></td>
</tr>
<tr>
<td>Vazquez et al</td>
<td>1995</td>
<td>Investment</td>
<td>Proposed a new set of five</td>
<td>24 items were identified where 12 were from SERVQUAL and researcher added 12 new items</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Banker</td>
<td>dimensions</td>
<td></td>
</tr>
<tr>
<td>Boshoff and</td>
<td>1997</td>
<td>Department stores</td>
<td>Retained five dimension of</td>
<td>Found RSQS a reliable and valid instrument to measure retail service quality.</td>
</tr>
<tr>
<td>Terblanche</td>
<td></td>
<td>and specialty</td>
<td>RSQs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>stores</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 2.3 (Continued)

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Type of Retailer</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mehta et al</td>
<td>2000</td>
<td>Electronic Goods Retailers and supermarkets</td>
<td>The dimensions of RSQS are relatively good in case of supermarket</td>
<td>Found RSQS a better instrument to measure service quality for a supermarket retailer than for an electronic goods retailer.</td>
</tr>
<tr>
<td>Fogarty et al</td>
<td>2000</td>
<td>Four small retail businesses within provincial cities in South East Queensland.</td>
<td>No suggestion for any such new dimension is given</td>
<td>Analyses suggested that the five factors can be treated as five different stages of service quality, rather than as five qualitatively different dimensions.</td>
</tr>
<tr>
<td>Siu and Cheung</td>
<td>2001</td>
<td>Departmental stores</td>
<td>Six dimensions of service quality</td>
<td>Failed to identify the five dimensions of RSQS. The original Reliability dimension was not fit for study.</td>
</tr>
<tr>
<td>Sureshchander et al</td>
<td>2001</td>
<td>Retail stores in India</td>
<td>Some dimension and attributes need to be modified</td>
<td>Shoppers mentioned several service aspects, such as ‘mailers sent by store’ and ‘loyalty programs’ as being ‘missing’ from the scale without extensive adaptation, RSQS is possibly not just inaccurate but also ‘incomplete’ in the Indian context.</td>
</tr>
<tr>
<td>Kim and Jin</td>
<td>2002</td>
<td>Discount stores</td>
<td>Only three dimension- Physical aspects, Reliability and Personal attention were found valid</td>
<td>Found the five items designed to measure service quality to be unreliable. Policy dimension was simply not present in customers’ perception of service quality for discount stores.</td>
</tr>
<tr>
<td>Siu and Chow</td>
<td>2003</td>
<td>Supermarkets</td>
<td>Proposed new set of five dimensions</td>
<td>Cronbach alpha values show that the dimension ‘Problem solving’ was integrated to ‘Personal Interaction’, where a new dimension emerged as ‘Trustworthiness’.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Industry/Departments</td>
<td>Service Quality Description</td>
<td>Notes</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------</td>
<td>----------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Subhashini Kaul</td>
<td>2005</td>
<td>Specialty Apparel stores</td>
<td>Service quality has a four dimensions structure in Indian retailing</td>
<td>RSQS dimensions were not valid in India.</td>
</tr>
<tr>
<td>Larsen and Esbjerg</td>
<td>2006</td>
<td>Fruit and vegetable departments in retail chain</td>
<td>New set of dimension should be included</td>
<td>The perception of service quality in Fruit and vegetable department is different than the other two departments because of experience and credence quality.</td>
</tr>
<tr>
<td>Promita Goswami and Mridula S. Mishra</td>
<td>2007</td>
<td>Kirana stores, supermarkets, and hypermarkets</td>
<td>A separate scale to be developed for Kirana stores</td>
<td>Customer patronage to grocery stores was found to be positively related to location, helpful, trustworthy salespeople, home shopping, cleanliness, offers, quality and negatively related to travel convenience. Karana’s do well on location but poorly on cleanliness, offers, quality, and helpful trustworthy salespeople. The converse is true for organized retailers.</td>
</tr>
</tbody>
</table>

Table 2.4 Summary of Empirical Researches Using RSQS

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Setting</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boshoff and Terblanche</td>
<td>1997</td>
<td>Department stores, speciality stores and hypermarkets in South Africa</td>
<td>RSQS found to be a valid and reliable measure of retail service quality.</td>
</tr>
<tr>
<td>Mehta, Lalwani and Han</td>
<td>2000</td>
<td>Supermarket and Electronic goods retailers in Singapore</td>
<td>RSQS scale was a better measure of service quality for a supermarket retailer than for an electronic goods retailer</td>
</tr>
<tr>
<td>Kim and Jin</td>
<td>2001</td>
<td>Discount stores in US and Korea</td>
<td>Five items designed to measure Policy found to be unreliable in both countries. Personal interaction and Problem solving combined into a single construct named Personal attention. Measurement equivalence did not exist across US and Korean samples. RSQS could not be viewed as a reliable and valid measure for cross-cultural comparisons.</td>
</tr>
<tr>
<td>Siu and Cheung</td>
<td>2001</td>
<td>Departmental store chain in Hong Kong</td>
<td>Three items deleted in a pretest. Five factor structure of RSQS could not be identified; instead six service quality dimensions emerged from the study.</td>
</tr>
<tr>
<td>Siu and Chow</td>
<td>2003</td>
<td>Japanese supermarket in Hong Kong</td>
<td>Five items deleted due to low Cronbach alpha values. Problem Solving dimension as given in the retail service quality scale was integrated into the Personal Interaction construct while a new factor emerged from the study, called Trustworthiness.</td>
</tr>
<tr>
<td>Subhashini Kaul</td>
<td>2005</td>
<td>Specialty apparel stores in India</td>
<td>RSQS dimensions not valid in India. Indian retailing found to have a four dimension structure. At the sub dimensions level, a four factor structure instead of six factors was supported.</td>
</tr>
</tbody>
</table>

2.5 GAPS IN THE LITERATURE

The challenges in measuring retail service quality exhibited many issues raised in measuring service quality. Thus, the theoretical framework of the Dabholkar et al (1996) was exemplary in the development and validation of a scale for measuring retail service quality and their use of qualitative research methods in order to understand the dimensions of a marketing construct was strongly supported in the literature (Carson, Gilmore, Perry and Gronhaug, 2001; Netemeyer et al 2003). Furthermore, the literature work suggested that any theoretical model of retail service quality had potential cultural limitations (Svensson, 2001), and that none of the existing retail service quality measurement model was valid within all retail settings (Mehta et al 2000; Siu and Cheung, 2001; Kim and Jin, 2002; Ellis et al 2003).

As supported by the literature the fundamental genesis of this research was that retail service quality was best defined as a multi-dimensional construct (Brady and Cronin, 2001), and that the dimensions were best identified using multiple scale items (Jacoby, 1978; Churchill, 1979).

The review of literature had provided a thorough knowledge about the research into the development and testing of a conceptual model of the retail service quality construct. As understood from the literature, the relevance of an increased understanding of the service quality constructs in general and the retail service quality construct specifically was lacking. The synthesis of the literature provided three underlined gaps in knowledge that required to be addressed in this study.

The first gap was about the operationalization of the retail service quality construct. There was a lack of unanimity in both service quality and
retail service quality literature as to how the construct should be conceptualized and measured.

The second gap involved the appropriateness in using the number of dimensions that should be included in a retail service quality model (Cronin and Taylor 1992; Gagliano and Hathcote 1994; Dabholkar et al 1996; Siu and Cheung 2001) and also on the scale items best represented the theorized dimensions.

As given in the literature, the testing of retail service quality models had poor success when empirically tested in other cultures (Kim and Jin 2002; Brent McKenzie 2005) and there were fewer studies in India testing the validity of RSQS in Indian retail setting. The third gap involved the poor literature support in testing the validity and scale modification in a country like India.

The growing number of studies based on the cited literature indicated that the retail service experience involved a number of different indicators of service quality that were not present in non-retail service experiences (Dabholkar et al 1996). The difference in various indicators of service quality helped to explain the limited success in applying generic service quality measurement instruments such as SERVQUAL to measure retail service quality (Carman, 1990; Finn and Lamb, 1991). Similarly, the universality of the five factor structure of retail service quality being Physical Aspects, Reliability, Personal Interaction, Problem Solving and Policy was not supported by many in the literature. As acknowledged by Dabholkar et al (1996), the change in retail practice will make the change in relevant scale items.

The lack of consensus for a five factor structure of retail service quality was suggested to be a result of the lack of external validity of the scale
rather than the theoretical support of retail service quality being best modeled using a multi-factor structure.

The constructs of service quality, and by extension research retail service quality, were the mainstays in the marketing literature and the outcome of this chapter had been an extensive, sufficient, body of published research literature over the past two decades. The focus of this research study was to address the identified literature gap as to the validity and reliability of the retail service quality scale and the theoretical models beyond the retail settings and cultures in which they were developed and tested.