Original Article

The effect of retail service quality and product quality on customer loyalty

Received (in revised form): 21st June 2010

Euphemia F.T. Yuen

is an honorary industrial fellow of WMG, the University of Warwick. She is the Director of a consultancy firm providing a total solution on the administration, daily operation and marketing strategies to Hunter Douglas Gallery in Hong Kong. Hunter Douglas Gallery started in one retail shop and has now expanded to five chain retail outlets. Her research interest is in the areas of customer relationships management and business-to-customer marketing.

Sian S.L. Chan

is currently a PhD candidate in the Department of Industrial and Systems Engineering of the Hong Kong Polytechnic University. Her research interests include customer satisfaction, relationship marketing, product design and development and technology management.

ABSTRACT This study attempts to examine the impacts of the retail service quality dimension (that is, Personal Interaction, Policy, Physical Aspects, Reliability and Problem Solving) and the product quality dimension (including Features, Aesthetics and Customer-perceived Quality) on customer loyalty. It focuses on the store and staff levels of retail relationships, in particular on a specific sector of the retail industry, the curtain retail sector. Data were collected through a survey of existing customers of a window fashion gallery and further coded using the Statistical Package for the Social Sciences. The study shows that only three dimensions (Physical Aspects, Reliability and Problem Solving) are positively related to customer loyalty to store, and one dimension (Personal Interaction) of retail service quality is positively associated with customer loyalty to staff. By contributing to the body of knowledge in this area, this research adds significant and valuable information on the marketing behaviour of customers in the curtain industry, which will be novel to many readers.

Journal of Database Marketing & Customer Strategy Management (2010) 17, 222–240. doi:10.1057/dbm.2010.13; published online 4 October 2010

Keywords: retail service quality; product quality; customer loyalty

INTRODUCTION

Hong Kong is regarded as one of the world's 'shopping paradises', and the retail industry plays an important role in the district. A report from the Government's Census and Statistics Department¹ pointed out that 10.4 per cent of the labour force was engaged in the wholesale and retail industry in 2009, the third largest group among all industries. In addition, the

Monthly Survey of Retail Sales showed that the volume of total retail sales has increased steadily over recent years. In January 2010, after netting off the effect of price changes over the same period, the volume of total retail sales increased by 3.2 per cent as compared with a year earlier.¹

In today's competitive retail market, as the service quality improves, the customer's expectation and lateral demand on the

Correspondence:

Sian S.L. Chan
Department of Industrial
and Systems Engineering,
The Hong Kong Polytechnic
University, Hung Hom,
Kowloon, Hong Kong.

service level is increased from time to time.^{2,3} During the period of economic recession, remarkable success will depend on those retailers who are able to generate customer loyalty by responding to consumer demand.⁴ In addition, customer needs and purchase patterns have altered drastically. To meet various needs, companies tend to adopt differentiated and customer-oriented marketing strategies to gain a competitive edge in the market, which enables them to stand out in the competition.⁵ According to Ko et al,⁵ improved relationships with consumers can lead to greater customer loyalty, retention and profitability. Therefore, it is essential to build a long-term and stable relationship with customers in today's competitive society. As customers are currently more concerned with service quality received, it is of value to study the effect of service quality on customer loyalty.

In addition to improving service quality, improving product quality is also needed. As stated by Superville, a significant number of managers agree that success will depend on those companies that are willing to improve the quality and service in accordance with the demands of the customers. Quality has been typically regarded as a key strategic component of competitive advantage, and therefore improving product quality has been a matter of prime concern to firms.^{7–9} Product quality can also be a good place to start providing satisfaction and generating loyalty. 10 The pros include market pioneering, first-mover advantages, low-cost proactive innovation and industry redefinition. 10 The cons include loss of market opportunities, loss of market leadership, high cost-reactive innovation and high-cost brand development.¹⁰ Therefore, product quality is worth attention.

A previous study proposed that firms that can obtain privileged information about customer needs by making use of the

firm-customer relationship provide more satisfactory offerings than their competitors. 11 As the cost of serving one loyal customer is evidently less than that of attracting and serving a new customer, 11,12 finding out privileged information about customer needs should be of benefit to firms by creating customer loyalty. Firms that can generate customer loyalty will increase the probabilities of customers returning, making business referrals, providing positive word-of-mouth, and making references and publicity. 13,14 As a result, finding out the factors that affect customer loyalty is regarded as an important issue for firms.

This article is structured as follows:
Section 'Literature and hypotheses' discusses a literature review on retail service quality, product quality and customer loyalty, as well as the formation of hypotheses in this study. Data collection and survey design for testing the defined hypotheses are presented in Section 'Research methodology'. Section 'Analysis and findings' presents the results and findings of this study. Managerial implications can be found in Section 'Managerial implications'. Section 'Conclusions' concludes.

LITERATURE AND HYPOTHESES

The model proposed in this study consists of four major constructs: Retail Service Quality, Product Quality and the Two Levels of Customer Loyalty (Customer Loyalty to the Store and Customer Loyalty to the Staff), as illustrated in Figure 1.

Retail service quality

Parasuraman *et al*² defined service quality as 'the degree of discrepancy between customers' normative expectations for the service and their perceptions of the service performance'. In order to measure this discrepancy, they devised the SERVQUAL. This is regarded as the most comprehensive

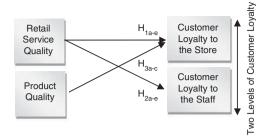


Figure 1: The proposed model.

and frequently used tool for measuring service quality. 15 The service items they proposed are divided into five dimensions: tangibles, reliability, responsiveness, empathy and assurance. The perception-only measure of service quality (SERVPERF), which consists solely of the performance (perceptions) items of SERVQUAL, was later introduced by Cronin and Taylor in 1992.¹⁶ SERVPERF is adopted in this study, as previous findings have indicated that it outperformed SERVQUAL and is more applicable for measuring service quality. When people are asked to indicate their 'desired level' (expectations) and 'existing level' (perceptions) of the service, there is a psychological constraint in that they tend to rate the former higher than the latter.¹⁷ In addition, it was found that service quality, as measured in SERVQUAL, significantly depends more on the perception score than on the expectation score.¹⁸ Respondents sometimes even appeared to be irked and mixed-up in distinguishing expectation and perception version of SERVQUAL, 19 which might have affected the quality of the data adversely.

The generalizability of SERVQUAL across various service settings is unclear³ and has not been empirically tested in the retail store environment.²⁰ Therefore, in order to capture dimensions that are important to retail customers, Dabholkar *et al.*²⁰ combined findings from three qualitative studies – retail and service quality literatures and SERVQUAL – and developed a scale

called the Retail Service Quality Scale. The Retail Service Quality Scale has been viewed as a generalized scale that is suitable for studying the retail business that offers a mix of services and goods. A previous study²¹ also used this scale to measure the service quality of a large chain retail store in Australia. Therefore, this scale is adopted in this study.

Dabholkar *et al*²⁰ argued that these items can be grouped into five dimensions, namely:

Personal Interaction: Associates are courteous, helpful, and inspire confidence and trust from the customer.

Policy: Operating hours, payment options, store charge cards, parking and so forth.

Physical Aspects: Store appearance and convenience of store layout.

Reliability: Retailer keeps its promises and 'does things right'.

Problem Solving: Associates are trained to handle potential problems, such as customer complaints, returns and exchanges.

According to Dabholkar et al,²⁰ the Physical Aspects dimension has a wider meaning than does the tangibles dimension of the SERVQUAL. This dimension includes not only the physical facilities appearance, but also the store layout and public areas (for example, fitting rooms) convenience. The Reliability dimension is similar to the SERVQUAL reliability dimension, and involves the store's ability to keep promises and do things right. The Personal Interaction dimension is a combination of the SERVQUAL dimensions of responsiveness, assurance and some items from empathy. It measures customer perceptions of whether or not the store has courteous and helpful employees who inspire confidence and trust. Problem Solving is a new dimension proposed by Dabholkar et al²⁰ that measures the store's ability to handle potential problems like returns, exchange and complaints. Although this dimension involved



interaction between customers and employees, it is viewed as separate from the Personal Interaction dimension because 'service recovery is being recognized as a critical part of good service'.²⁰ The last dimension, Policy, is also a new dimension introduced by the researchers, and represents 'aspects of service quality that are directly influenced by store policy'.²⁰

Product quality

Garvin²¹ proposed the most comprehensive definition of product quality, with the following eight attributes:

Performance: Product's primary operating characteristics.

Features: Additional features or the 'bells and whistles' of the product.

Conformance: The extent to which a product's design and operating characteristics meet established standards.

Reliability: The probability that a product will operate properly over a specified period of time under stated conditions of use.

Durability: The amount of use the customer gets from a product before it physically deteriorates or until replacement is preferable.

Serviceability: The speed, competence and courtesy of repair.

Aesthetics: How a product appeals to our five senses.

Customer-perceived Quality: Customer perception of a product's quality based on the reputation of the firm.

Although Garvin's eight-dimension framework first appeared in 1984,²⁴ its relevance enables it to be adopted continuously by many researchers for defining product quality.²² In 1995, Madu *et al*²³ used 'price', 'product features' and 'product reliability' as some of the key indicators operationalizing the 'customer satisfaction' construct.

Only three of the dimensions were used in this study, as some of the dimensions may be less measurable or relevant in some contexts than others. 10 For example, the dimensions of performance and features were combined as, in many cases, 'the line separating primary product characteristics (performance) from secondary characteristics (features) is difficult to draw'. 24 As conformance and reliability are less likely to reflect individual preferences, the data on conformance are often difficult to be obtained and proxies frequently used,²⁴ they are not used in this study. Durability is a measure of product life,²⁴ and requires measurable product attributes rather than reflecting individual preference, thus it is excluded in the research. Serviceability refers to the speed, competence and courtesy of repair, and related items have been in the problem solving of retail service quality, thus it is not measured under product quality. Hence, the following dimensions (such as Product Features, Aesthetics and Customer-perceived Quality) are used to define the product quality construct.

Customer loyalty

Past literature pointed out that there are several definitions of customer loyalty. Loyalty is an attitude; it refers to positive feelings towards a brand in addition to repurchasing time after time.²⁵ It includes both attitudinal and behavioural practices, such as repeat buying of a product and service, repurchasing a brand for a long period of time, non-sensitivity to price increases, ^{26,27} a relational construct where repeat behaviour and psychological bond are closely connected, ²⁸ a higher possibility of introducing or recommending companies to others and establishing positive public word-of-mouth.²⁹ With reference to the above definition, customer loyalty has been generally described as occurring when customers repeatedly purchase goods or services over time and hold favourable

attitudes towards, and support, the company supplying the goods or services.

Service providers are increasingly developing loyalty, as they find that it helps to increase income, and leads to greater market share and profitability. 30,31 Research has established the many benefits of customer loyalty, such as making it a trend for retailers to follow, as well as developing and maintaining a loyal customer base. Loyal customers are important assets to companies; they make proportionally more purchases at their 'first choice' store than customers who switch,³² and they are more willing to spend a larger amount compared to less loyal customers.³³ In addition, companies that adopt loyal customer base are able to reduce operational and marketing cost.³⁴ Therefore, to guarantee long-term survival or to stand out from the crowd, firms should pay more attention to customer loyalty, as the financial performance of the organization is normally argued to be driven by the increase of customer loyalty.³⁵

Two levels of customer loyalty

There are differences between personto-person loyalty (salesperson level) and person-to-firm loyalty (store level), and there are several arguments with regard to their relationship. According to Iacobucci and Ostrom,³⁶ firm relationships are relatively short-term and faint compared to person-to-person relationships. It is also argued that person-to-person loyalty is more important than other kinds of loyalty, like store or brand loyalty.³⁷ Even so, they are also interrelated. Beatty et al. 38 pointed out that customer loyalty starts with sales associate, and this relationship has positive impact on customer loyalty to the store. Macintosh and Lockshin³⁹ also confirmed that loyalty to the sales associate is an antecedent to the loyalty to the store. Therefore, a positive feeling towards the salesperson, such as giving personal advice, which helps to build up trust and

confidence will cast to the store as well.²¹ Since scholars consent to the relationship between salesperson loyalty and firm loyalty and it is believed that the former will carry the latter, building up salesperson loyalty is proposed as it posts a great impact on the firm loyalty, which firm's customers are prided on getting the products of it over other stores.

The link between retail service quality and customer loyalty

Generally, good service quality leads to customer loyalty, as it enhances customer trust towards and satisfaction with the firm. Customers may be more willing and intend to do something that is beneficial to the strategic health of the firm; as a result, customer loyalty will gradually form. It is believed that positive perceptions of service quality increase the chance of customers being involved in supporting the firm and developing loyalty behaviour. A study conducted in five different service industries found a positive relationship between perceived service quality and loyalty. 40 This view is further exemplified by a study conducted in the hospital industry, 41 where a positive relationship was found between the dimensions of service quality and customer loyalty. Although loyalty item is mostly included as an outcome in the construct of service quality, 16,42 the linkage between them remains relatively underdeveloped.⁴³ While a previous study in five different service industries has proven the positive relationship between perceived service quality and loyalty, 40 other studies failed to find the direct relationship. 16 We thus propose the following hypotheses:

Hypothesis 1a: Personal Interaction exerts a positive influence on customer loyalty to the store.

Hypothesis 1b: Policy exerts a positive influence on customer loyalty to the store.



- **Hypothesis 1c:** Physical Aspects exerts a positive influence on customer loyalty to the store.
- **Hypothesis 1d:** Reliability exerts a positive influence on customer loyalty to the store.
- **Hypothesis 1e:** Problem Solving exerts a positive influence on customer lovalty to the store.
- **Hypothesis 2a:** Personal Interaction exerts a positive influence on customer loyalty to the staff.
- **Hypothesis 2b:** Policy exerts a positive influence on customer loyalty to the staff.
- **Hypothesis 2c:** Physical Aspects exerts a positive influence on customer loyalty to the staff.
- **Hypothesis 2d:** Reliability exerts a positive influence on customer loyalty to the staff.
- Hypothesis 2e: Problem Solving exerts a positive influence on customer loyalty to the staff.

The link between product quality and customer loyalty

The product can be a good starting point to satisfy customers and create customer loyalty. 10 Customer loyalty expresses an intended behaviour to support a product, which is by communicating their experience to others through saying positive things. 44,45 When the company's customers recommend someone to buy the product, a high degree of loyalty is reflected.⁴⁴ Kotler and Keller⁴⁶ believed that better product quality will maintain a high level of customer satisfaction, which encourages customers to make their next purchases. Thus, customer loyalty is gradually formed. Numerous studies showed that improved

product quality benefits companies by building a long-term customer base, and creating a valuable asset for companycustomer loyalty. 47-50 In order to stand out in today's competitive market, firms should pay much attention to product quality, as it is believed to be the starting point for generating customer loyalty.

Most research on customer satisfaction and/or loyalty focuses on the brand rather than the product. The product has been merged into an brand and its separate existence is neglected. Such an approach resulted from the fact that marketers did not use product as an initial item to generate either customer satisfaction or customer loyalty. 10 As few attempts have been made to examine the links between product quality and the customer loyalty, we set the following hypotheses to test whether product quality has a positive impact on customer loyalty.

- **Hypothesis 3a:** Feature exerts a positive influence on customer loyalty to the store.
- **Hypothesis 3b:** Aesthetics exerts a positive influence on customer loyalty to the store.
- **Hypothesis 3c:** Customer-perceived quality exerts a positive influence on customer loyalty to the store.

The dimensions of product quality do not include interactive process with employees, and are assumed not to exert impact on customer loyalty to staff. Therefore, a hypothesis regarding the dimensions of product quality to customer loyalty to staff is not proposed.

RESEARCH METHODOLOGY

Data collection

A well-known window fashion gallery, Hunter Douglas, was adopted for research

Table 1: Demographics of the respondents

Gender	Male (50%), Female (50%)
Age (All)	Below 20 (0%), 21–30 (12%), 31–40 (31.5%), 41–50 (41.5%), 51–60 (15%), Above 60 (0%)
Age (Male)	Below 20 (0%), 21–30 (13%), 31–40 (31%), 41–50 (42%), 51–60 (14%), Above 60 (0%)
Age (Female)	Below 20 (0%), 21–30 (11%), 31–40 (32%), 41–50 (41%), 51–60 (16%), Above 60 (0%)
Occupation (All)	Student (0%), Clerk (6.5%), Service worker (5.5%), Executive/Manager (19%), Housewife (20%), Unemployed (2%), Self-employed (0%), Salesperson (0%), Retired (1%), Professionals (34.5%), Technicians (5.5%), Others (8%)
Occupation (Male)	Student (0%), Clerk (2%), Service worker (11%), Executive/Manager (19%), Housewife (0%), Unemployed (0%), Self-employed (0%), Salesperson (0%), Retired (0%), Professionals (53%), Technicians (11%), Others (6%)
Occupation (Female)	Student (0%), Clerk (11%), Service worker (0%), Executive/Manager (19%), Housewife (40%), Unemployed (4%), Self-employed (0%), Salesperson (0%), Retired (2%), Professionals (16%), Technicians (0%), Others (10%)
Monthly Salary (All)	Below \$20 000 (32%), \$20 001-\$40 000 (40%), \$40 001-\$60 000 (19.5%), \$60 001- \$80 000 (3.5%), \$80 001-\$100 000 (1%), Above \$100 000 (4%)
Monthly Salary (Male)	Below \$20 000 (47%), \$20 001-\$40 000 (35%), \$40 001-\$60 000 (14%), \$60 001- \$80 000 (0%), \$80 001-\$100 000 (0%), Above \$100 000 (4%)
Monthly Salary (Female)	Below \$20 000 (17%), \$20 001-\$40 000 (45%), \$40 001-\$60 000 (25%), \$60 001- \$80 000 (7%), \$80 001-\$100 000 (2%), Above \$100 000 (4%)

due to its success and substantial influences in the curtain industry. Since developing the first lightweight aluminium blind in 1946 in United States, Hunter Douglas has led the industry in creating the highest quality window coverings. As this study focuses on the factors that affect customer loyalty towards Hunter Douglas, we targeted current customers of Hunter Douglas in the survey. Of the 447 surveys distributed to the existing customers through direct callings and sending e-mails, 200 surveys contributed to the final sample of data for a response rate of 44.7 per cent. Table 1 shows the demographics of the respondents categorized by gender, age, occupation and monthly salary.

Survey design

To measure the retail service quality of Hunter Douglas, 17 variables combined from the SERVQUAL scale and the Retail Service Quality Scale and four customized variables related to the retail service quality of Hunter Douglas were used. The SERVQUAL scale was still adopted in this study because of its popularity in measuring the service quality and high reliability in terms of coefficient alphas (exceeded 0.8), which implied high internal consistency.²¹ When there is the case that generic SERVQUAL scale excluded some relevant variables from the retail service quality scale, those variables were selected in the study.²¹ Some variables in the SERVQUAL scale and the Retail Service Quality Scale were not used in this study because of the comparatively minor features or because they were inappropriate in terms of meaning in this study.

To measure the product quality of Hunter Douglas, nine variables were set under the definition of corresponding dimension of product quality, which were relevant to the product quality of the blinds of Hunter Douglas.

In this study, customer loyalty to the store was measured using six variables from the reconfigured behavioural intentions



battery developed by Parasuraman *et al*,⁵¹ one variable in the relationship dimensions scale developed by Barnes⁵² and one customized variable. Customer loyalty to the employee was evaluated by the loyalty to sales associate scale developed by Reynolds and Beatty.⁵³

It originally contained four items: loyalty to sales associate, intention to shop with sales associate, commitment to sales associate and a reverse score of loyalty to sales associate. Yet, the last two items were deleted in this study. Those two items were deleted because they are regarded as antecedents to loyalty attitude, 'including but not limited to loyalty' and similar to the first question, respectively.²¹

To increase data accuracy, two reversescored items were asked in order to test whether the respondents were reading the questions carefully. All reverse-scored items were re-coded before further analysis. The survey questions are shown in Table 2.

ANALYSIS AND FINDINGS

Scale and assessments of reliability and validity

The three major constructs included in this study were retail service quality, product quality and the two levels of customer loyalty. To assess the understandability and avoid inapplicability of the questionnaire, pilot tests were conducted with three members of professional staff at Hunter Douglas, three university students and three persons aged between 35 and 55. It was refined according to their feedback and suggestions. With reference to the pilot test, some items were deleted because they were deemed inappropriate in terms of meaning in this study.

Factor analysis was applied to evaluate all constructs on a preliminary basis, leading to the exclusion of five items, 'Staff handle complaints immediately', 'Staff handle complaints directly', 'Staff show sincere interest in solving problems', 'You will not

patronize other department stores that offer more attractive prices' and 'You will switch to other department stores when there are problems with Hunter Douglas' service', owing to cross-loading. The values of Bartlett's Test of Sphericity of the three constructs were significant (P-value = 0.000), thereby making the factor analysis meaningful. In addition, the Kaiser-Meyer-Olkin measure of sampling adequacy test of retail service quality, product quality and customer loyalty had values of 0.858, 0.819 and 0.878, respectively, which were greater than the recommended value of 0.7.54,55 and indicated a meritorious degree of common variance. These results jointly indicated that the latent structural model has satisfactory fit and is meaningful. In addition, the eigenvalues for the three factors were in excess of 1.0 (as suggested by Kaiser⁵⁶), and explained 73.558 per cent, 82.076 per cent and 67.171 per cent of the total variance, respectively, indicating that the latent structural model is meaningful and incorporates as many reliable factors as possible.

Reliability refers to the extent to which a construct is free from errors and yields consistent results. Cronbach's \alpha was used to measure the internal consistency of the multi-items used in this study. By reviewing the reliability tests for various dimensions of service quality, product quality and customer loyalty (Table 6), as the Cronbach's α values of all of the dimensions were over 0.7, it can be claimed that they were all reliable. Moreover, as most of the variables have been used in past studies, and the questionnaire was validated by the professional staff of Hunter Douglas before being administered, the content validity of the variables can be deemed to be acceptable.

The correlation matrices of the data set are shown in Tables 3–5. They were used to examine all potentially overlapping constructs. According to Fornell and Larcker,⁵⁷ the construct is confirmed valid (there is just a small overlap between the



Table 2: Survey questions

Retail Service Quality

Personal Interaction

Staff are courteous with customers

Staff are able to provide prompt quotations

Staff provide accurate quotations

Staff are never too busy to respond your requests

Staff provide accurate information about Hunter Douglas

Staff give personal attention

Policy

You feel safe during the transaction

Hunter Douglas accepts most major payment methods

The operating hours of Hunter Douglas are convenient

Physical Aspects

Hunter Douglas has visually appealing physical facilities

Hunter Douglas has visually appealing service materials

Staff of Hunter Douglas are neat in their appearance

Store layout makes it easy to find what you need

Reliability

When Hunter Douglas promises to do something, it will do so

When Hunter Douglas promises to do something by a certain time, it will do so

Problem Solvina

Hunter Douglas handles your complaint immediately

Hunter Douglas handles your complaint directly

Hunter Douglas shows sincere interest in solving your problems

The hotlines of Hunter Douglas are seldom busy

You are satisfied with the message leaving policy of the maintenance hotline

The maintenance hotline always responds fast after your voice messages are left

Product Quality

Product Features

Hunter Douglas provides you with a wide selection of blind types

Hunter Douglas provides you with a wide selection of colors

Hunter Douglas provides you with a wide selection of materials

The blinds of Hunter Douglas are functional

Aesthetics

The blinds of Hunter Douglas are stylish

The blinds of Hunter Douglas are innovative

The blinds of Hunter Douglas have an appealing appearance

Customer-perceived Quality

Hunter Douglas provides a high quality of product

The blinds of Hunter Douglas have high durability

Customer Loyalty

Customer Loyalty to Store

You say positive things about Hunter Douglas to others

You would recommend Hunter Douglas to someone seeking advice on curtains

You encourage relatives and friends to shop at Hunter Douglas

You would consider Hunter Douglas as your first choice in buying curtains during the next few years

You will not patronize other department stores that offer more attractive prices

Moving current business to another retail store is just not worth the effort

You will switch to other department stores when there are problems with Hunter Douglas' service^a

You want to build a good relationship with Hunter Douglas

Customer Loyalty to Staff

You are loyal to a particular employee

You have no intention to shop in the future because of a particular employee^a

^aReverse-scored questions.



Table 3: Correlation matrix for retail service quality

	AVE	1	2	3	4	5
Personal Interaction	0.535	0.731	_	_	_	_
Policy	0.600	0.510**	0.775	_	_	_
Physical Aspects	0.619	0.471**	0.484**	0.787	_	_
Reliability	0.732	0.549**	0.430**	0.425**	0.856	_
Problem Solving	0.820	0.379**	0.310**	0.329**	0.406**	0.906

^{**}Correlation is significant at the 0.01 level (two-tailed).

Table 4: Correlation matrix for product quality

	AVE	1	2	3
Features	0.681	0.825	_	_
Aesthetics	0.820	0.442**	0.672	_
Customer-perceived Quality	0.690	0.451**	0.483**	0.831

^{**}Correlation is significant at the 0.01 level (two-tailed).

Table 5: Correlation matrix for customer loyalty

	AVE	1	2
Loyalty to Store	0.580	0.762	_
Loyalty to Staff	0.707	0.376**	0.841

^{**}Correlation is significant at the 0.01 level (two-tailed).

two dimensions) if its average variance extracted (AVE) is greater than the squared intercorrelation result of the particular construct and other dimensions. As all of the diagonal elements, which are the square root of the AVEs of the corresponding dimensions, were higher than the correlations between the target dimensions, the discriminant validity of all the dimensions in this study was assured.

Rank order of retail service quality, product quality and customer loyalty

Table 6 shows that the mean scores of the dimensions of Retail Service Quality suggested that the respondents had a positive attitude towards the retail service quality of the store. Comparing the five dimensions of retail service quality, Personal Interaction acquired the highest mean score, reflecting that the respondents were generally satisfied with the service provided by the sales associates of Hunter Douglas.

Among the dimensions, respondents were most satisfied with the variable 'Staff are courteous with customers' (mean = 5.36). On the other hand, Problem Solving received the lowest mean score among the five dimensions. Within the dimension, the variable 'You are satisfied with the message leaving policy of the maintenance hotline' scored the lowest. Meanwhile, this variable was also by far the least satisfactory one among all the individual variables in retail service quality. The results suggested that the company would perform better if it focused more on the hotline policy issue.

Comparing the three dimensions of product quality, Aesthetics scored the highest, reflecting that the respondents were generally satisfied with the blinds of Hunter Douglas. Among the dimensions, respondents were most satisfied with the variable 'The blinds of Hunter Douglas are innovative' (mean = 5.59).

Customer loyalty to the company had a mean score of 4.07, slightly above the midpoint of 4. Customer loyalty to employees was higher, at 4.88. This showed that the shoppers had a higher loyalty level to the employees than to the store. The results reinforced the importance of the concept of relationships between service and product providers and their customers.⁵²

Table 6: Descriptive statistics and reliability

	Factor loading	<i>Mean</i> ^a
Personal Interaction (Cronbach's α=0.826, Eigenvalue=7.320, % of Variance=40.668)	-	5.17
PersonalInteraction 1	0.688	5.36
PersonalInteraction 2	0.713	5.06
PersonalInteraction 3	0.782	5.15
PersonalInteraction 4	0.829	5.21
PersonalInteraction 5	0.700	5.18
PersonalInteraction_6	0.662	5.07
Policy (Cronbach's α=0.804, Eigenvalue=1.959, % of Variance=10.884)	_	4.94
Policy_1	0.834	4.88
Policy_2	0.747	5.01
Policy_3	0.740	4.92
Physical Aspects (Cronbach's α=0.824,	_	4.92
Eigenvalue=1.674, % of Variance=9.301)	0.757	4.00
PhysicalAspects_1	0.757	4.69
PhysicalAspects_2	0.746	4.68
PhysicalAspects_3	0.766	5.08
PhysicalAspects_4	0.761	5.21
Reliability (Cronbach's α=0.936, Eigenvalue=1.213, % of Variance=6.741)	_	4.72
Reliability_1	0.863	4.73
Reliability_2	0.848	4.7
Problem Solving (Cronbach's α=0.939, Eigenvalue=1.073, % of Variance=5.964)	_	4.33
ProblemSolving_1	0.887	4.4
ProblemSolving_2	0.893	4.28
ProblemSolving_3	0.930	4.32
Product Features (Cronbach's α=0.883, Eigenvalue=4.781, % of Variance=52.423)	_	5.30
ProductFeatures 1	0.795	5.31
ProductFeatures 2	0.858	5.31
ProductFeatures 3	0.888	5.16
ProductFeatures 4	0.754	5.40
Froductreatures_4	0.754	5.40
Aesthetics (Cronbach's α=0.938, Eigenvalue=1.651, % of Variance=18.347)	_	5.52
Aesthetics_1	0.917	5.43
Aesthetics_2	0.874	5.53
Aesthetics_3	0.924	5.59
Customer-perceived Quality (Cronbach's α=0.760, Eigenvalue=1.018, %of Variance=11.306)	-	5.40
Customer-perceivedQuality_1	0.752	5.30
Customer-perceivedQuality_1 Customer-perceivedQuality_2	0.903	5.49
Loyalty to Store (Cronbach's α=0.871, Eigenvalues=4.105, % of Variance=51.317)	_	4.07
CustomerLoyaltytoStore_1	0.715	4.57
CustomerLoyaltytoStore_2	0.750	4.50
CustomerLoyaltytoStore_3	0.806	4.27
CustomerLoyaltytoStore_4	0.809	4.03
CustomerLoyaltytoStore_5	0.791	3.52
CustomerLoyaltytoStore_6	0.689	3.55
Loyalty to Staff (Cronbach's α=0.704, Eigenvalues=1.268,	_	4.88
% of Variance=15 854)		
% of Variance=15.854) CustomerLoyaltytoStaff_1	0.788	5.08

^a1 - Strongly disagree and 7 - Strongly agree.



Test of hypothesis

The multiple regression was employed with five retail service quality dimensions and three product quality dimensions used as independent variables, with customer loyalty to store and to staff as dependent variables. We set the confidence level for this empirical study at 95 per cent.

Previous studies reported that individual perceptions and behaviours may differ across personal factors such as gender, education and age. 58-61 These factors were then included as the control variables in the study. Gender was coded with 0 for 'male' and 1 for 'female'. Age was coded with 1 for 'below 20', 2 for '21-30', 3 for '31-40', 4 for '41-50', 5 for '51-60' and 6 for '61 or above'. In the same way, income was coded with 1 for 'below US\$20000', 2 for '\$20001-\$40000', 3 for '\$40001-\$60000', 4 for '\$60001-\$80000', 5 for '\$80001-\$100000' and 6 for '\$100001 or above'.

The relationships between Retail Service Quality and Product Quality with Customer Loyalty to Store are shown in Table 7. The R^2 of attitude towards customer loyalty for step one and step two (including the main effect) were 0.04 and

0.436, respectively. The R^2 (being 0.436) was increased by 0.396, which was a big jump from the explained variance purely from the control variables, and implied that the five dimensions of retail service quality and three dimensions of product quality were dominant factors explaining customer loyalty to the store. The three dimensions of retail service quality, namely Physical Aspects (P=0.003), Reliability (P=0.000)and Problem Solving (P=0.031), were found to have a significant impact on customer loyalty at the store level, as its regression model is significant at P < 0.01. For the value of β , the higher the value of the β is, the more influential the variable is. Among the significant dimensions, the β values of Physical Aspects, Reliability and Problem Solving were 0.206, 0.369 and 0.138, respectively, indicating that their associations were moderate. As Personal Interaction, Policy, Product Feature, Aesthetics and Customer-perceived Quality did not have a significant impact on customer loyalty to the store, hypotheses 1a, 1b, 3a, 3b and 3c were rejected. The summarized relationship is shown in Table 9.

Table 7: Regression analysis on customer loyalty to store

	Step 1		Sto	ep 2
_	β	Sig.	β	Sig.
Control Variables				
Age	-1.24	0.086	-0.013	0.821
Income	0.006	0.939	0.030	0.617
Gender	-1.52	0.038*	-0.175	0.005*
Dimensions				
Personal Interaction	_	_	-0.023	0.753
Policy	_	_	0.113	0.110
Physical Aspects	_	_	0.206	0.003**
Reliability	_	_	0.369	0.000***
Problem Solving	_	_	0.138	0.031*
Features	_	_	-0.041	0.528
Aesthetics	_	_	-0.110	0.101
Customer-perceived Quality	_	_	0.100	0.147
Model information				
R^2	_	0.04	_	0.436
R ² change from previous step	_	_	_	0.396

^{*=}P<0.05; **=P<0.01; ***=P<0.001.

Table 8: Regression analysis on customer loyalty to staff

	Step 1		Ste	ep 2
_	β	Sig.	β	Sig.
Control variables				
Age	0.003	0.966	0.083	0.220
Income	-0.011	0.889	0.011	0.878
Gender	0.113	0.128	0.065	0.356
Dimensions				
Personal Interaction	_	_	0.310	0.000***
Policy	_	_	0.014	0.863
Physical Aspects	_	_	0.075	0.351
Reliability	_	_	0.151	0.069
Problem Solving	_	_	-0.002	0.980
Model information				
R^2	0.	103	0.2	217
R ² change from previous step	_		0.2	204

^{*}P<0.05; **P<0.01; ***P<0.001.

Table 9: Detailed hypothesis results

Parameter	Description	β	Hypothesis supported?
Hypothesis 1a	Personal interaction→Loyalty (store)	-0.023	No
Hypothesis 1b	Policy→Loyalty (store)	0.113	No
Hypothesis 1c	Physical aspects → Loyalty (store)	0.206**(2nd)	Yes
Hypothesis 1d	Reliability→Loyalty (store)	0.369***(1st)	Yes
Hypothesis 1e	Problem Solving→Loyalty (store)	0.138*(3rd)	Yes
Hypothesis 2a	Personal interaction → Loyalty (staff)	0.310***(1st)	Yes
Hypothesis 2b	Policy→Loyalty (staff)	0.014	No
Hypothesis 2c	Physical aspects → Loyalty (staff)	0.075	No
Hypothesis 2d	Reliability→Loyalty (staff)	0.151	No
Hypothesis 2e	Problem solving→Loyalty (staff)	-0.002	No
Hypothesis 3a	Product features → Loyalty (store)	-0.041	No
Hypothesis 3b	Aesthetics → Loyalty (store)	-0.110	No
Hypothesis 3c	Customer-perceived quality → Loyalty (store)	0.100	No

^{*}P<0.05; **P<0.01; ***P<0.001.

The relationship between service quality and customer loyalty to staff, excluding the product quality, is presented in Table 8. The R^2 of attitude towards customer loyalty for steps one and two (including the main effect) were 0.013 and 0.217, respectively. The R^2 (being 0.217) was increased by 0.204, meaning that the five dimensions of retail service quality were the principal factors explaining customer loyalty to staff. Referring to the result, only the Personal Interaction dimension of retail service quality (P-value = 0.000) was positively related to customer loyalty to staff. The corresponding

 β value was 0.310, implying that the variable had a moderate relationship to customer loyalty to staff. Overall, only Hypothesis 2a was supported, while Hypotheses 2b–2e were rejected. The summarized relationship is shown in Table 9.

Post hoc analysis

Looking back on the regression analysis on the customer loyalty to store (Table 7), one of the control variables, gender, had significant impacts on customer loyalty to store. Therefore, a follow-up in the form



Table 10: Regression analysis of retail service quality and product quality on customer loyalty to store: On the effect of gender

	Group 1 (Male)		Group 2 (Female)		Differences	
	β	Sig.	β	Sig.	β	Sig.
Control variables						
Age	0.067	0.486	-0.061	0.437	-0.128	-0.049
Income	-0.091	0.322	0.119	0.157	0.210	-0.165
Dimensions						
Personal Interaction	-0.094	0.398	0.050	0.643	0.000	0.000
Policy	0.078	0.451	0.160	0.143	0.144	0.245
Physical Aspects	0.175	0.167	0.271	0.004**	0.082	-0.308
Reliability	0.426	0.000***	0.313	0.006**	0.096	-0.163
Problem Solving	0.223	0.028*	0.022	0.811	-0.113	0.006
Features	-0.056	0.581	0.020	0.831	-0.201	0.783 ^a
Aesthetics	-0.044	0.684	-0.199	0.042*	0.076	0.250
Customer-perceived quality	0.028	0.779	0.120	0.287	-0.155	-0.642
Model information						
R^2	0.4	105	0.4	179		_

^aBiggest differences.

of *post hoc* tests was conducted to isolate exactly where the significant differences lay.

From the regression results in Table 10, the Reliability dimension had a significant impact on customer loyalty to store for both genders, and our test showed that the association between Reliability and customer loyalty to store was stronger for men than for women. On the other hand, gender differences were found on the significant dimensions of customer loyalty. For men, Problem Solving had a significant impact on Customer Loyalty to Store, whereas for women, Physical Aspects and Aesthetics had significant impacts on customer loyalty to store. For the Problem Solving dimension, the standardized coefficients for men and women were 0.223 and 0.022, respectively. This implies that the men were far more sensitive to Problem Solving issues than the women. For the Physical Aspects dimension, the standardized coefficients for men and women were 0.175 and 0.271, respectively. This indicates that the women were relatively more concerned about the physical outlook of the store. Surprisingly, although Aesthetics had a significant impact on customer loyalty to store for the female

group, their relationship was reversed. This means that when the respondents were more satisfied with the dimension of Aesthetics, they were probably less loyal to the store. For the men, the standardized coefficient of Aesthetics was also negative, but the relationship between Aesthetics and customer loyalty was weaker compared to women.

As can be seen from Table 8, none of the control variables had significant impacts on customer loyalty to store. Therefore, *post hoc* analyses were not conducted on either one of the control variables.

Discussion

The findings suggest that retail service quality is positively associated with customer loyalty, whereas product quality surprisingly does not exert a positive influence on customer loyalty. Three dimensions (Physical Aspect, Reliability and Problem Solving) were found to have a positive impact on customer loyalty to store, whereas only one dimension (Personal Interaction) was found to have a positive impact on customer loyalty to staff. There are several reasons explaining the apparent positive effect. For Physical

^{*}P<0.05; **P<0.01; ***P<0.001.

Aspects, a good store layout and attractive service materials give customers a good impression and attitude towards the store. Once a good store image is built, the chance of consumers priding themselves on getting the blinds of Hunter Douglas over other brands increases. Reliability refers to the promises given by the store. If the store cannot keep or breaks the promises, it dissatisfies customers and results in negative word-of-mouth. In contrast, when the company is able to keep its promises, it increases customer confidence in the store and creates customer loyalty. For the Problem Solving, once customers seek help, it means that they cannot solve the problems themselves and need professional staff to tackle the problem. When professional staff can help them to solve a problem, they are satisfied and are more likely to spread positive word-of-mouth to others seeking advice on curtains in the future. For Personal Interaction, when staff perform better or give more personal attention to customers, the chance of repurchasing, introducing or recommending companies to others and establishing public praise will increase.²⁹ In addition, it also benefits a firm in developing and retaining customers.⁶² Generally, the positive relationship is stronger at the store level than at the staff level. In the customer's eves, staff are included in the store, and thus their impressions towards the staff will affect their comments on the store.⁶³

Results of the *post hoc* analysis showed that the Physical Aspects, Reliability, Problem Solving and Aesthetics dimensions had significant impacts on customer loyalty to the store under the gender effect. For Physical Aspects, the standardized coefficient for female customers was higher. This means the impact of Physical Aspects on customer loyalty to store is stronger for women, possibly because they are more concerned with the sense of beauty than men. When female customers are satisfied with the store layout or staff neatness, they

are more loyal than their male counterparts. For Reliability, the standardized coefficient was higher for men, showing that the impact of Reliability on customer loyalty to store is higher for men. As most of the respondents were professionals (35 per cent), owing to their job nature, professionals regarded promises as an important issue, and thus this group of respondents was used to focus on this point. As most of the respondents from the professional group were men, the phenomenon of more men than women emphasizing this point occurred. As Reliability is far more important in the eyes of men than women, if the company can keep its promises, male customers are more loyal in comparison to women. For Problem Solving, again, the standardized coefficient was higher for men. This implies that the impact of Problem Solving on customer loyalty to store is higher for men. The differences between the way women and men evaluate problems are significant. When men look at problems, a particular item is seen, and they are keen to resolve and correct them.⁶⁴ and thus men are more motivated to solve and the problem immediately compared with women. Once male customers are satisfied with the company's problem-solving skill, they are more loyal than female customers. Surprisingly, although Aesthetics had a significant impact on customer loyalty to store for the female group, their relationship was reversed. This is because most of the respondents were aged between 41 and 50 (41 per cent of the women), and thus they are less willing to deal with changes. As a result, they like the blinds with traditional designs or operations, so that they can handle them more easily. For the men, the standardized coefficient of the Aesthetics dimension was also negative, but the relationship between Aesthetics and customer loyalty was weaker compared to women. Again, the major age group was 41–50 (42 per cent of men) and the reasons would be the same as for women.



MANAGERIAL IMPLICATIONS

Personal Interaction, Physical Aspects, Reliability and Problem Solving of retail service quality were relatively influential factors that affected customer loyalty to store and staff. To improve the Personal Interaction dimension, comprehensive personal empowerment programmes and continuous training programmes on product knowledge and selling techniques are suggested. To improve the Physical Aspects, renovation of the store (for example, to make it more modern and fashionable) is useful to change the perception of customers and give them a brand new image. Staff uniforms and service materials like catalogues should also be improved so that a better impression can be provided to customers. To improve the Reliability dimension, comprehensive company policies should be established and the staff should follow them to fulfil the promises. Many respondents complained about the arrival time of the installation staff, and thus the store should monitor the installation staff frequently. Lastly, for Problem Solving, most of the respondents complained about the message-leaving policy and the delay in replying after their voice messages were left. Therefore, it is suggested that the store should change its message-leaving policy to a direct contact hotline, as this would help customers to solve their problems more directly and immediately. Results showed that the Reliability dimension has the strongest power to predict customer loyalty. Practitioners in the retail business therefore need to continually track their customers' perceptions on this dimension when formulating their service strategies.

Even though some retail service quality dimensions (Personal Interaction, Physical Aspects, Reliability and Problem Solving) were found to be positively related to customer loyalty, their associations were only moderate. This is because there were still some factors such as store location, prices, promotion activities, after-sales

service and economic environment that affect customer lovalty. All these variables are believed to be additional important elements for customers in choosing Hunter Douglas.

As Aesthetics had a negative impact on customer loyalty to store under the gender effect, it is recommended to design blinds with traditional design and operations so that users can handle them more easily.

CONCLUSIONS

This study investigated the impact of retail service quality dimensions on customer loyalty on two levels (store and staff) of retail relationships. In addition to studying the retail service quality, product quality on customer loyalty to store levels was studied. The major findings of this study are summarized as follows:

Of the dimensions, three dimensions, namely Physical Aspects, Reliability and Problem Solving, were significant to customer loyalty to store, while only the Personal Interaction dimension was significant to customer loyalty to staff. Consistent with other research, the Personal Interaction and Physical Aspects dimensions were found to be significant success factors for a retail store in a previous study conducted in Japan. 65 Again, this is consistent with previous studies such as that of Bloemer et al, 43 who showed that retail store purchase intentions are strongly determined by reliability. However, this result contradicts a study of a multinational department store chain conducted by Siu and Cheung⁶⁶ in the United Kingdom, where Problem Solving was found not to have a significant impact on future consumption behaviour. As the items used in Problem Solving were customized in this study, the result may vary as measurement variables are different in each case.

As reliability has the strongest power to predict customer loyalty, practitioners in the retail business therefore need to continually track their customers' perceptions of this

dimension when formulating their service strategies. Appropriate investments and strategies (such as monitoring the installation staff frequently and changing the message leaving policy to a direct hotline) should be placed on those positive significant dimensions so as to increase customer loyalty. Regarding the insignificant dimensions (such as Policy, Features, Aesthetics and Customerperceived Quality), fewer resources and effort could be made as they may not have a real influence on customer loyalty. Although not all the hypotheses are fulfilled, these findings are useful in enabling the operators of Hunter Douglas to make appropriate investment decisions and strategies, and for attracting and growing loyal customers in the Hong Kong curtain industry.

As gender was found to have a confounding effect on customer loyalty to a store, *post hoc* analysis was conducted to this area. However, as other demographic factors did not have a significant effect on customer loyalty at either store or staff level, they were not studied in this research. Further research could also consider the moderation effects of other demographic factors such as age, occupation and income to gain a comprehensive understanding of their influences on customer loyalty.

There is a limitation to this study that is inherent to other telephone-type interviews, which is the inability to ring those customers without a telephone connection. ⁶⁷ Yet the field research was designed in a way that minimized this inherent difficulty. In this study, the respondents were only reached by direct calling or by email. This is because our target respondents were existing customers, and thus a street survey was not used. Although street interview is a way to maintain a higher response rate, the response rate was still high in this study because most of the people were willing to answer the survey once they had listened to

the phone. In addition, as the statistics of this study were collected from customers of a specific sector of the retail industry, the curtain retail sector, this limited the generalizability of the findings to other parts of the retail industry. More than that, this research was conducted only in Hong Kong and may not be applicable to other countries with different cultures. As foreign curtain retail stores may have different policies, such as giving refunds when there is a problem, unlike the curtain retail stores in Hong Kong, the findings may not be applicable to them.

ACKNOWLEDGEMENTS

The authors express their sincere gratitude to the Hong Kong Polytechnic University and Hunter Douglas window fashion gallery for their support of this research work.

REFERENCES

- Census and Statistics Department. (2010)
 Employment distribution by industry sector, http:// www.censtatd.gov.hk, accessed 27 April 2010.
- 2 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.
- 3 Rao, C.P. and Kelkar, M.M. (1997) Relative impact of performance and importance ratings on measurement of service quality. *Journal of Professional Services Marketing* 15(2): 69–86.
- 4 Ghosh, P., Tripathi, V. and Kumar, A. (2010) Customer expectations of store attributes: A study of organized retail outlets in India. *Journal of Retail* and Leisure Property 9(1): 75–87.
- 5 Ko, E., Kim, S.H., Kim, M. and Woo, J.Y. (2007) Organizational characteristics and the CRM adoption process. *Journal of Business Research* 61(1): 65–74.
- 6 Superville, C.R. and Gupta, S. (2001) Issues in modelling, monitoring and managing quality costs. The TQM magazine 13(6): 419–423.
- 7 Daniel, S.J., Reitsperger, W.D. and Gregson, T. (1995) Quality consciousness in Japanese and US electronics manufacturers: An examination of the impact of quality strategy and management control systems on perceptions of the importance of quality to expected management rewards. *Management Accounting Research* 6(4): 367–382.
- 8 Flynn, B.B., Schroeder, R.G. and Sakakibara, S. (1995) The impact of quality management practices on performance and competitive advantage. *Decision Sciences* 26(5): 659–692.

米

- 9 Foster, G. and Sjoblom, L. (1996) Quality improvement drivers in the electronic industry. *Journal of Management Accounting Research* 8: 55–86.
- 10 Eduardo, T.M., Arturo, Z.V.P. and Forge, Z.G. (2008) Customer satisfaction and loyalty: Start with the product, culminate with the brand. *Journal of Consumer Marketing* 25(5): 302–313.
- 11 Ndubisi, N.O. (2004) Understanding the salience of cultural dimensions on relationship marketing, its underpinnings and aftermaths. Cross Cultural Management 11(3): 70–89.
- 12 Forbes, T. (2007) Valuing customers. *Journal of Database Marketing and Customer Strategy Management* 15(1): 4–10.
- 13 Keaveney, S.M. (1995) Customer switching behaviour in service industries: An exploratory study. *Journal of Marketing* 59(2): 71–82.
- 14 O'Brien, L. and Jones, C. (1995) Do rewards really create loyalty? *Harvard Business Review* 73(3): 75–82.
- 15 Khatibi, A.A., Ismail, H. and Thyagarajan, V. (2002) What drives customer loyalty: An analysis from the telecommunications industry. *Journal of Targeting, Measurement and Analysis for Marketing* 11(1): 34–44.
- 16 Cronin, J.J. and Taylor, S.A. (1992) Measuring service quality: A reexamination and extension. *Journal of Marketing* 56(3): 55–68.
- 17 Wall, T.D. and Payne, R. (1973) Are deficiency scores deficient? *Journal of Applied Psychology* 58: 322–326.
- 18 Babakus, E. and Boller, G.W. (1992) An empirical assessment of the SERVQUAL scale. *Journal of Business Research* 24(3): 253–268.
- 19 Bouman, M. and Van Der Wiele, T. (1992) Measuring service quality in the car service industry: Building and testing an instrument. *International Journal of Service Industry Management* 3(4): 4–16.
- 20 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.
- 21 Garvin, D.A. (1987) Competing on the eight dimensions of quality. *Harvard Business Review*, November–December: 101–109.
- 22 Rose, S. and Nabil, T. (2002) How product quality dimensions relate to defining quality. *International Journal of Quality and Reliability Management* 19(4): 442–453.
- 23 Madu, C., Kuei, C. and Lin, C. (1995) A comparative analysis of quality practice in manufacturing firms in the US and Taiwan. *Decision Science*: 26(5): 621–635.
- 24 Garvin, D.A. (1984) What does 'product quality' really mean? MIT Sloan Management Review 26(1): 25–43.
- 25 Day, G.S. (1969) A two dimension concept of brand loyalty. *Journal of Advertising Research* 9(3): 29–36.
- 26 Wangenheim, F. and Bayon, T. (2004) Satisfaction, loyalty and word of mouth within the customer base of a utility provider: Differences between stayers, switchers and referral switchers. *Journal of Consumer Behaviour* 3(3): 211–220.

- 27 Lewis, B.R. and Soureli, M. (2006) The antecedents of consumer loyalty in retail banking. *Journal of Consumer Behaviour* 5(1): 15–31.
- 28 Jarvis, L.P. and Wilcox, J.B. (1977) True vendor loyalty or simply repeat purchase behaviour? *Industrial Marketing Management* 6(1): 9–14.
- 29 Bowen, J.T. and Shoemaker, S. (1998) Loyalty: A strategic commitment. Cornell and Hotel Restaurant Administration Quarterly 39(1): 12–25.
- 30 Meidan, A. (1996) Marketing Financial Services. Basingstoke, UK: Macmillan.
- 31 Al-Wugayan, A., Pleshko, L.P. and Baqer, S.M. (2008) An investigation of the relationships among consumer satisfaction, loyalty, and market share in Kuwaiti loan services. *Journal of Financial Services Marketing* 13(2): 95–106.
- 32 Knox, S.D. and Denison, T.J. (2000) Store loyalty: Its impact on retail revenue. An empirical study of purchasing behaviour in the UK. *Journal of Retailing* and Consumer Services 7(1): 33–45.
- 33 Baldinger, A.L. and Rubinson, J. (1996) Brand loyalty: The link between attitude and behavior. *Journal of Advertising Research* 36(6): 22–34.
- 34 Griffin, J. (1995) Customer Loyalty: How to Earn It, How to Keep It. San Francisco, CA: Jossey-Bass Publishers.
- 35 Reichheld, F.F. (2003) The one number you need to grow. *Harvard Business Review* 81(12): 46–54.
- 36 Iacobucci, D. and Ostrom, A. (1993) Gender differences in the impact of core and relational aspects of services on the evaluation of service encounters. *Journal of Consumer Psychology* 2(3): 257–286.
- 37 Oliver, T.A. (1997) Satisfaction: A Behavioral Perceptive on the Consumer. Boston, MA: Irwin; McGraw Hill.
- 38 Beatty, S.E., Mayer, M., Coleman, J.E., Reynolds, K.E. and Lee, J. (1996) Customer-sales associate retail relationships. *Journal of Retailing* 72(3): 223–247.
- 39 Macintosh, G. and Lockshin, L.S. (1997) Retail relationships and store loyalty: A multi-level perspective. *International Journal of Research in Marketing* 14(5): 487–497.
- 40 De Ruyter, M. and Van Birgelen, M.W. (1998) Consumer ethnocentrism in international services marketing. *International Business Review* 7(2): 185–202.
- 41 Wong, A., Dean, A. and White, C. (1999) The impact of service quality on customer loyalty in the hospitality industry. *International Journal of Customer Relationship Management* 2(1): 81–89.
- 42 Boulding, W., Kalra, A., Staelin, R. and Zeithaml, V.A. (1993) A dynamic process model of service quality: From expectations to behavioural intentions. *Journal of Marketing Research* 30(1): 7–27.
- 43 Bloemer, J., De Ruyter, K. and Wetzels, M. (1999) Linking perceived service quality and service loyalty: A multi-dimensional perspective. *Journal of Marketing* 33(11–12): 1082–1106.
- 44 Selnes, F. (1993) An examination of the effect of product performance on brand reputation, satisfaction and loyalty. *European Journal of Marketing* 27(9): 19–35.

- 45 Arndt, J. (1967) Role of product-related conversations in the diffusion of a new product. *Journal of Marketing Research* 4(3): 292–294.
- 46 Kotler, P. and Keller, K.L. (2006) Marketing Management, 12th edn. New Jersey: Prentice Hall.
- 47 Bruhn, M. and Grund, M.A. (2000) Theory, development and implementation of national customer satisfaction indices: The Swiss index of customer satisfaction (SWICS). *Total Quality Management* 11(7): 1017–1028.
- 48 Gerpott, T.J., Rams, W. and Schindler, A. (2001) Customer retention, loyalty and satisfaction in the German mobile cellular telecommunications market. *Telecommunications Policy* 25(4): 249–269.
- 49 Gronholdt, L., Martensen, A. and Kristensen, K. (2000) The relationship between customer satisfaction and loyalty: Cross-industry differences. *Total Quality Management* 11(4/5 and 6): 509–514.
- 50 Kristensen, K., Martensen, A. and Gronholdt, L. (2000) Customer satisfaction measurement at Post Denmark: results of application of the European customer satisfaction index methodology. *Total Quality Management* 11(7): 1007–1015.
- 51 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.
- 52 Barnes, J.G. (1997) Closeness, strength, and satisfaction: Examining the nature of relationships between providers of financial services and their retail customers. *Psychology and Marketing* 14(8): 765–790.
- 53 Reynolds, K.E. and Beatty, S.E. (1999) Customer benefits and company consequences of customer-salesperson relationships in retailing. *Journal of Retailing* 75(1): 11–32.
- 54 Kaiser, H.F. (1970) A second generation little jiffy. *Psychometrika* 35(4): 401–415.
- 55 Kaiser, H.F. (1974) An index of factorial simplicity. *Psychometrika* 39(1): 31–36.
- 56 Kaiser, H.F. (1960) The application of electronic computers to factor analysis. *Educational and Psychological Measurement* 20(1): 141–151.
- 57 Fornell, C. and Larcker, D.F. (1981) Evaluating structural equation models with unobservable

- variables and measurement error. *Journal of Marketing Research* 18(1): 39–50.
- 58 Agarwal, R. and Prasad, J. (1999) Are individual differences germane to the acceptance of new information technologies? *Journal of Decision Sciences* 30(2): 361–391.
- 59 Frankel, K.A. (1990) Women and computing. *Communications of the ACM* 33(11): 34–45.
- 60 Gefen, D. and Straub, D.W. (1997) Gender differences in the perception and use of e-mail: An extension to the technology acceptance model. MIS Quarterly 21(4): 389–400.
- 61 Venkatesh, V. and Morris, M.G. (2000) Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly* 24(1): 115–139.
- 62 Tyrone, J.W. (2007) Personalisation and CRM. Journal of Database Marketing & Customer Strategy Management 15(1): 24–36.
- 63 Goff, B.G., Boles, J.S., Bellenger, D.N. and Stojack, C. (1997) The influence of salesperson selling behaviours on customer satisfaction with products. *Journal of Retailing* 73(2): 171–184.
- 64 Melanie, A.P. (2009) Male vs. female problem solving, http://storymind.com/content/62.htm, accessed 25 March 2009.
- 65 Mehta, S.C., Lalwani, K.A and Soon, L.H. (2000) Service quality in retailing: Relative efficiency of alternative measurement scales for different productservice environments. *International Journal of Retail* and Distribution Management 28(2): 62–72.
- 66 Siu, N.Y.M. and Cheung, J.T.H. (2001) A measure of retail service quality. *Marketing Intelligence and Planning* 19(2): 88–96.
- 67 Rigopoulou, I.D., Chaniotakis, L.E., Lymperopoulos, C. and Siomkos, G.I. (2008) After-sales service quality as an antecedent of customer satisfaction: The case of electronic appliances. *Managing Service Quality* 18(5): 512–527.
- 68 Wong, A. and Sohal, A. (2003) Service quality and customer loyalty perspectives on two levels of retail relationships. *Journal of Services Marketing* 17(4/5): 495–513.