



# Service loyalty

## The effects of service quality and the mediating role of customer satisfaction

Service  
loyalty

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**Abstract** *Service loyalty, with its final effect on repurchasing by customers, appears to have received relatively little attention. This study starts by first delineating the concept of service loyalty and proceeds to distinguish between service quality and customer satisfaction. A mediational model that links service quality to service loyalty via customer satisfaction is proposed. Appropriate measures are identified and a postal survey is undertaken among 1,000 retail banking customers. A response rate of 20.5 per cent is obtained. Results indicate that customer satisfaction does play a mediating role in the effect of service quality on service loyalty. The effects of a number of demographic indicators on service loyalty are also reported. Implications are discussed, limitations of the study are noted and possible areas for further research are indicated.*

### Introduction

Service loyalty, with its final effect on repurchasing by customers, is perhaps one of the most important constructs in services marketing. Indeed, loyal customers that indulge in repeat purchases are the bedrock of any business. One of the more obvious questions relates to the demographic characteristics of loyal customers, whether any such variables are more salient than others and how these can be used for segmentation purposes (e.g. Frank, 1967). However, work that integrates the role of service loyalty within the context of other service marketing variables like service quality and customer satisfaction has received less attention.

Service quality has been the subject of considerable interest by both practitioners and researchers in recent years, spurred on by the original work by Parasuraman *et al.* (1985). An important reason for the interest in service quality by practitioners results from the belief that this has a beneficial effect on bottom-line performance for the firm. However, practitioners often tend to use the terms service quality and customer satisfaction interchangeably. Among academics the satisfaction construct is recognised as being distinct and has developed along fairly independent lines from service quality (e.g. Oliver, 1980). The concepts of service quality, customer satisfaction and service loyalty are related to each other. Theoretically, the expectancy/disconfirmation paradigm in process theory can provide the grounding for this study, with service quality as an antecedent construct and service loyalty as an outcome variable of customer satisfaction. A better understanding of the effects of service quality and customer satisfaction on service loyalty can help academics



in the development of a model of service marketing. It can also provide practitioners with indications as to where best to devote marketing attention and scarce corporate resources.

This study seeks to contribute to the development of a conceptual framework that integrates service loyalty, service quality and customer satisfaction. It reviews the literature on these three constructs and outlines the expected relationships in a research model. Appropriate measures are identified and research is carried out among retail banking customers to test the hypothesised relationships. The demographic characteristics of loyal customers are also investigated. Implications for theory development and management are discussed.

### **Service loyalty**

The conceptualisation of the loyalty construct has evolved over the years. In the early days the focus of loyalty was brand loyalty with respect to tangible goods (Cunningham, 1956; Day, 1969; Kostecki, 1994; Tucker, 1964). Cunningham (1956) defined brand loyalty simply as “the proportion of purchases of a household devoted to the brand it purchased most often”. Cunningham (1961) was to broaden the spectrum of analysis by focusing on store as opposed to brand loyalty using the same measures he had used earlier for brands. Over time the foci have continued to expand, reflecting the wider perspective of marketing to include other types of loyalty such as vendor loyalty. However, few studies have looked at customer loyalty of services (Oliver, 1997). The intention of this section is to show the evolution of the loyalty construct over time, mapping out the construct’s domain and its specific components to provide a clear definition of the service quality construct used in this study.

A review of the literature indicates that much of the initial research emphasised the behavioural dimension of loyalty. This is epitomised by Tucker (1964, p. 32) who holds that:

No consideration should be given to what the subject thinks nor what goes on in his central nervous system, his behaviour is the full statement of what brand loyalty is.

A review by Jacoby (1971) confirms that prior studies have focused entirely on behavioural outcomes and ignored consideration of what went on in customers’ minds. Brand loyalty was simply measured in terms of its outcome characteristics (Jacoby and Chestnut, 1978). This involved determining the sequence of purchase (Brown, 1952, 1953; Lawrence, 1969; McConnell, 1968; Tucker, 1964), proportion of purchase devoted to a given brand (Cunningham, 1956) and probability of purchase (Frank, 1962; Maffei, 1960).

Day (1969) argued that “there is more to brand loyalty than just consistent buying of the same brand. Attitudes for instance”. Building on this work, Jacoby (1969, 1971) provided a conceptualisation of brand loyalty that incorporated both a behavioural and an attitudinal component. The behavioural aspect of loyalty focuses on a measure of proportion of purchase of

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a specific brand, while attitude is measured by a single scale (Day, 1969) or multi-scale items (Selin *et al.*, 1988). Day obtained a value for loyalty by dividing the ratio of purchase of a brand by the mean scores obtained for attitude. The behavioural and attitudinal aspects of loyalty are reflected in the conceptual definition of brand loyalty offered by Jacoby and Chestnut (1978). These authors hold that:

Brand loyalty is (1) biased (i.e. non random), (2) behavioural response (i.e. purchase), (3) expressed over time, (4) by some decision making unit, (5) with respect to one or more brands out of a set of such brands, and is a function of psychological processes.

Much of the work on loyalty in the 1970s and early 1980s has used this conceptualisation (cf. Goldberg, 1981; Lutz and Winn, 1974; Snyder, 1986). More recently, Dick and Basu (1994) suggest an attitudinal theoretical framework that also envisages the loyalty construct as being composed of “relative attitude” and “patronage behavior”.

A further aspect of loyalty identified by other researchers in more recent years is cognitive loyalty. This is seen as a higher order dimension and involves the consumer’s conscious decision-making process in the evaluation of alternative brands before a purchase is effected. Gremler and Brown (1996) extend the concept of loyalty to intangible products, and their definition of service loyalty incorporates the three specific components of loyalty considered, namely: the purchase, attitude and cognition. Service loyalty is defined as:

The degree to which a customer exhibits repeat purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists (Gremler and Brown, 1996).

### **Service quality**

Definitions of service quality hold that this is the result of the comparison that customers make between their expectations about a service and their perception of the way the service has been performed (Lewis and Booms, 1983; Lehtinen and Lehtinen, 1982; Grönroos, 1984; Parasuraman *et al.*, 1985, 1988, 1994). Lehtinen and Lehtinen (1982) give a three-dimensional view of service quality. They see it as consisting of what they term “interaction”, “physical” and “corporate” quality. At a higher level, and essentially from a customer’s perspective, they see quality as being two-dimensional, consisting of “output” and “process” quality. The model proposed by Grönroos (1984, 1990) highlights the role of technical (or output) quality and functional (or process) quality as occurring prior to, and resulting in, outcome quality. In this model technical quality refers to what is delivered to the customer, be it the meal in a restaurant, the solution provided by a consultant, or the home identified by the estate agent. Functional quality is concerned with how the end result of the process was transferred to the customer. This concerns both psychological and behavioral aspects that include the accessibility to the provider, how service employees perform their task, what they say and how the service is done. Thus

while technical quality can often be quite readily evaluated objectively, this is more difficult to do with functional quality. The model also recognises that customers also have some type of image of the firm, which has a quality impact in itself and functions as a filter. The customers' perceived quality is the result of the evaluation they make of what was expected and what was experienced, taking into account the influence of the organisation's image.

In operationalising the service quality construct, Parasuraman *et al.* (1985, 1988, 1994) have made use of qualitative and quantitative research following generally accepted psychometric procedures. This resulted in the development of the original 22-item SERVQUAL instrument that represents one of the most widely used operationalisations of service quality. It has provided researchers with the possibility of measuring the performance-expectations gap (gap 5) ostensibly composed of five determinants. In further developing the expectations side of their gap model, Berry and Parasuraman (1991) and Zeithaml *et al.* (1993) argue that expectations can be conceptualised to exist at two levels: the desired; and the adequate. In between there exists a zone of tolerance reflecting the degrees of heterogeneity individual customers are willing to accept. Interestingly, the original service quality gap (gap 5) now splits into two (Zeithaml *et al.*, 1993). Gap 5A results from the contrast between perceived service and desired service and is termed the measure of service superiority (MSS). Gap 5B contrasts perceived service with adequate service and is termed the measure of service adequacy (MSA). The authors argue that companies providing a service above the adequate level have a competitive advantage. However, such companies need to strive so that perceived service exceeds the service level desired by customers. This will ensure "customer franchise" which results in unwavering customer loyalty.

The contention by the developers of SERVQUAL that the instrument can be applied to determine the service quality offering of any service firm has led to its extensive adoption (cf. Dabholkar *et al.*, 1996). The various replications undertaken have highlighted a number of areas of both theoretical and psychometric concern. First, the conceptualisation and usefulness of the expectations side of the instrument has been questioned (cf. Boulding *et al.*, 1993; Cronin and Taylor, 1992, 1994; Forbes *et al.*, 1986; Tse and Wilton, 1988). Second, the problems expectation scores pose in terms of variance restriction have been highlighted (cf. Babakus and Boller, 1992; Brown *et al.*, 1993). Third, there are problems associated with difference scores including findings showing that the performance items on their own explain more variance in service quality than difference scores (Babakus and Boller, 1992; Cronin and Taylor, 1992, 1994). Cronin and Taylor (1992, 1994) show empirically that the perception items in SERVQUAL exhibit a stronger correlation with service quality than the difference score computations suggested by SERVQUAL. They therefore suggest the use of SERVPERF that consists solely of the 22 performance items of SERVQUAL. Finally, the number of factors extracted is not stable (cf. Bouman and van der Wiele, 1992; Carman, 1990; Cronin and Taylor, 1992, 1994; Gagliano and Hathcote, 1994).

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In response to the empirical findings that have emerged, Parasuraman *et al.* (1994) have undertaken significant changes. First, there has been a reconceptualisation and extension of the expectations side distinguishing between desired and minimum expectations. Second, they have suggested the use of a three-column format SERVQUAL that eliminates the need to re-administer items. The authors have also suggested a reduction in the number of items to 21, the use of nine-point instead of seven-point scales, and recognise the possibility of the existence of three rather than five dimensions, where “responsiveness, assurance and empathy meld into a single factor”.

The Grönroos and the gap model of service quality provide parallel conceptualisation of the construct. The contribution made by Parasuraman *et al.* has been in developing the widely used SERVQUAL. Cronin and Taylor (1992, 1994) have shown that SERVPERF does a better job in measuring service quality. This paper takes the view that the conceptualisation of service quality as a gap is correct, but adopts the position by Rust *et al.* (1996, p. 249) who hold that service quality is simply confirmation/disconfirmation in satisfaction theory. Operationally this means that the gap is measured directly by asking respondents to provide a score for each of the performance items in SERVQUAL in relation to their expectations rather than ask these separately and then calculating the gap. This preserves the conceptualisation of service quality but has the advantage of being more statistically reliable and cutting the length of the questionnaire.

### **Customer satisfaction**

The expectancy/disconfirmation paradigm in process theory (Mohr, 1982) provides the grounding for the vast majority of satisfaction studies and encompasses four constructs:

- (1) expectations;
- (2) performance;
- (3) disconfirmation; and
- (4) satisfaction.

Dis/confirmation arises from discrepancies between prior expectations and actual performance. This conceptualisation is reflected in the definition of satisfaction by Tse and Wilton (1988, p. 204) as:

The consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption.

At face value this definition is very similar to that put forward for service quality. However, a number of distinctions are often made between customer satisfaction and service quality. These include that satisfaction is a post-decision customer experience while quality is not (Bolton and Drew, 1991; Boulding *et al.*, 1993; Cronin and Taylor, 1994; Oliver, 1980, 1993; Parasuraman *et al.*, 1988). A further point concerns expectations that are defined differently

in the satisfaction and quality literature. In the satisfaction literature “expectations reflect anticipated performance” (Churchill and Suprenant, 1982, p. 492) made by the customer about the levels of performance during a transaction. On the other hand, in the service quality literature, expectations are conceptualised as a normative standard of future wants (Boulding *et al.*, 1993, p. 8). These normative or ideal standards represent enduring wants and needs that remain unaffected by the full range of marketing and competitive factors. Normative expectations are therefore more stable and can be thought of as representing the service the market oriented provider must constantly strive to offer (Zeithaml *et al.*, 1993).

One of the hurdles in looking at antecedents and consequences of customer satisfaction is the absence of a consensus as to what constitutes satisfaction. Without a clear and broadly accepted conceptual and operational definition the development of satisfaction measurement instruments is somewhat arbitrary, and any conclusions about interactions with other constructs are problematic. To identify the conceptual domain of the customer satisfaction construct, Giese and Cote (2000) conduct research that involves a review of the satisfaction literature together with group and personal interviews. They define the customer as the ultimate user of a product. Their research suggests three general components that constitute the customer satisfaction construct. First, customer satisfaction is a summary affective response that varies in intensity. Second, the response pertains to a particular focus, be it a product choice, purchase or consumption. Finally, the response occurs at a particular time that varies by situation, but is generally limited in duration. The authors hold that these three aspects provide a framework for a context specific operational definition. They describe customer satisfaction as:

A summary affective response of varying intensity, with a time-specific point of determination and limited duration, directed toward focal aspects of product acquisition and/or consumption.

This definition can be used to develop context relevant definitions. For the purpose of this study the definition of customer satisfaction with retail banking services:

Involves a post purchase, global affective summary response, that may be of different intensities, occurring when customers are questioned and undertaken relative to the retail banking services offered by competitors.

### **Research model**

There has been significant effort in the past to look at the area of service quality, customer satisfaction and, to a lesser extent, service loyalty. However, there is considerable confusion in the demarcation between service quality and customer satisfaction. Grönroos (1984, 1990) and Parasuraman *et al.* (1985, 1988, 1994), both argue that perceived service quality results from the comparison that customers make between expected quality and experienced or outcome quality. The expectancy/disconfirmation paradigm that ultimately

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results in satisfaction or dissatisfaction makes a similar point. Use is made of this paradigm in process theory to accommodate both the Grönroos and the gap model.

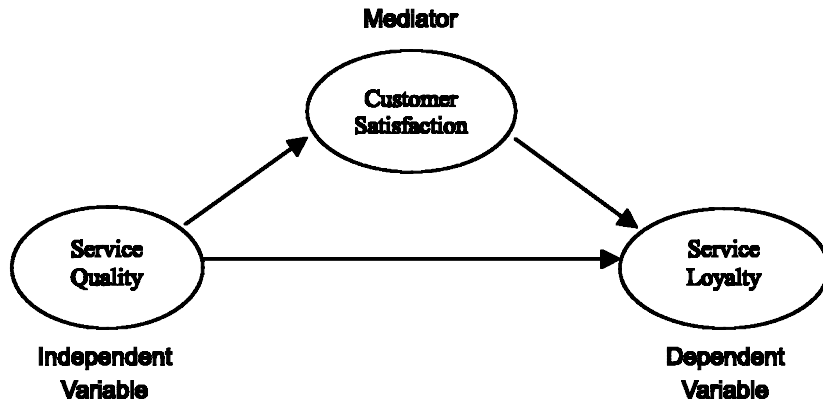
It is clear from Grönroos (1984) that the most important aspect to perceived service quality is the functional rather than the technical side of quality. The gap model and its resultant SERVQUAL measure primarily focus on what Grönroos (1984, 1990) terms the functional aspect of quality. It is suggested that these two models represent parallel concepts that can both be viewed as one type of confirmation/disconfirmation in satisfaction theory. It is for this reason that we adopt the suggestion by Rust *et al.* (1996, p. 249) who argue that service quality is simply confirmation/disconfirmation and who advocate the direct measurement of the perception items in SERVQUAL in relation to respondents' expectations. On its own the gap model has no theoretical grounding and the use of difference score measures relative to ideal expectations is questionable. The approach being suggested has the advantage of providing a clearer theoretical underpinning to the constructs, data that are more statistically reliable while cutting the length of the questionnaire.

As a process in time, service quality takes place before, and leads to, overall customer satisfaction. Although Cronin and Taylor originally hypothesised that satisfaction is an antecedent of service quality, their research with a multi-industry sample showed, in a LISREL analysis, an opposite relationship. Service quality appears to be only one of the service factors contributing to customers' satisfaction judgements (Cronin and Taylor, 1992; Ruyter *et al.*, 1997; Spreng and Mackoy, 1996). There are clearly other antecedents.

Overall satisfaction with an experience does lead to customer loyalty. Bearden and Teel (1983) argue that customer satisfaction is important to the marketer because "it is generally assumed to be a significant determinant of repeat sales, positive word of mouth and consumer loyalty". Similarly, Bloemer and Poiesz (1989) have also argued that "satisfaction can be thought of as an important determinant of brand loyalty", while Selnes (1993) argues that it is satisfaction with a brand that leads to customer loyalty. This view is also supported by Dick and Basu (1994). LaBarbera and Mazursky (1983) show empirically that brand loyal customers had a lower probability to switch brands due to higher levels of satisfaction. On the basis of the above, customer satisfaction is indicated as acting as a mediator in the link between service quality and service loyalty as per Figure 1.

Baron and Kenny (1986, p. 1177) provide the procedure that can be used to investigate the mediating effect depicted in Figure 1. This involves the computation of three regression equations: first, the regression of the mediator (customer satisfaction) on the independent variable (service quality), second, the regression of the dependent variable (service loyalty) on the independent variable (service quality); and third, the regression of the dependant variable (service loyalty) on both the independent variable (service quality) and on the mediator (customer satisfaction). For mediation to hold: in the first regression equation the independent variable must affect the mediator; in the second

Figure 1.  
Research model



equation the independent variable must be shown to affect the dependent variable; and in the final equation the mediator must affect the dependent variable to the exclusion of the independent variable.

### The research

The questionnaire used consisted of 37 items split between three instruments that each measured service loyalty, service quality and customer satisfaction respectively. Demographic variables were also collected. To measure service loyalty the 12-item measure suggested by Gremler and Brown (1996) that captures their conceptualisation of service loyalty has been used. Seven-point scales described at either end by “strongly agree” and “strongly disagree” were used. To measure service quality the 21-item SERVQUAL instrument was used. However, in line with the conceptualisation envisaged, rather than collect expectation and perception items separately, service quality is treated as disconfirmation in satisfaction theory, and perceptions data relative to respondent expectations are collected directly. Therefore, for each perception item respondents were asked to consider their views in terms of their expectations on a three-point scale. Was the perception on the particular item worse than expected, about as expected or better than expected? To measure customer satisfaction the instrument provided by Bitner and Hubbert (1994) was used. This is in line with the conceptualisation of customer satisfaction adopted. The instrument consists of a four-item scale that looks at post-purchase, global affective summary responses measured using a five-point Likert-type scale appropriately described at either end. The wordings of the items, together with descriptive statistics, appear in the Appendix.

Postal questionnaires were undertaken because of consideration of costs. It is known that almost all households in Malta have a bank account and use was therefore made of the telephone directory as a convenient sampling frame. The “critical sample size” for the intended subsequent LISREL analysis is considered to be 200 replies (Hair, 1998, p. 605). Since the reply rate for anonymous postal surveys in Malta is in the region of 23 per cent, mailings



were sent to 1,000 households generated at random from an electronic version of the telephone directory that excluded commercial subscribers. The covering letter sought to generate interest, reassure potential respondents of the minimum effort required in replying, and provided an undertaking of anonymity. By the closing date, three weeks later, 194 replies were received. Given that 52 of the original questionnaires were returned for various reasons, an acceptable response rate of 20.5 per cent was achieved. To test for non-response bias use was made of the technique suggested by Armstrong and Overton (1977). This assumes that late respondents are similar to non-respondents. *t*-tests were used to compare the means for each of the items of the last 30 replies received to the mean for the same items from the rest of the respondents. Differences were not statistically significant and this was treated as sufficient assurance that the data obtained were likely to be a fair representation of the population of interest.

## Results

Respondents were almost equally split between males (43.8 per cent) and females, 73.2 per cent were married and 12.4 per cent were single. The mean age was 43 (SD = 15.6) and 73.2 per cent of respondents had completed up to secondary level of education. The check for reliability provided (Cronbach, 1951) alphas that ranged from 0.79 to 0.95, which exceeded the acceptable cut-off point of 0.70 (Nunnally, 1978). The third customer satisfaction item (item 24 in the Appendix) was deleted as this has an item-to-total correlation of less than 0.5. The Appendix provides loadings resulting from a simultaneous factor analysis followed by a varimax rotation of all the items of the three constructs that make up the questionnaire. Results show a clear factor structure. The service loyalty and customer satisfaction items load on two separate factors, while the service quality items load on three factors. The loading of the service quality items is in line with the latest findings by Parasuraman *et al.* (1994). The responsiveness, assurance and empathy items melding into one factor and distinct factors for tangibles and reliability arise. Also in line with recent findings, SERVQUAL item 6 (item 22 in the Appendix) that had previously been treated as a responsiveness item tends to load with the reliability items. The loading results in the Appendix provide support for both convergent and discriminant validity, with items expected to load together actually doing so.

The results of the regression equations required to test the mediation model are shown in Table I. The conditions required for mediation to hold are present. The effect of service quality on the service loyalty is much less in the third equation than in the second and the *R* has improved. Although perfect mediation cannot be claimed as the beta for service quality in the third equation is still significant (at  $p < 0.05$ ), a mediation effect can be confirmed as the beta value has declined very considerably. Service quality acts on service loyalty via customer satisfaction. As can be expected, service quality and customer satisfaction are correlated ( $r = 0.45$ ;  $p < 0.00$ ), resulting in multicollinearity, and this is compounded by the possible presence of measurement error in the

results. To overcome these concerns structural equation modelling can be used. This has the advantage of taking all the relevant paths being tested directly and dealing with complications of measurement error, correlated measurement error and even feedback that are incorporated directly into the model (Baron and Kenny, 1986). To do this the model in Figure 1 was used as the basis of a LISREL 8.3 (Jöreskog *et al.*, 1999) analysis. The results provided a very good fit ( $\chi^2(3) = 2.24$ ;  $p = 0.52$ ; GFI 0.98) and standardised beta values that are very close to those obtained from the multiple regression (Table II). The major difference is that the marginal decline in the value of the beta for the link between service quality and service loyalty is enough to render this link non-significant. The LISREL analysis can be considered to be a more robust test of the interrelationship among constructs, and the results obtained provide support for a completely mediated effect of service quality on service loyalty via customer satisfaction.

Means for each of the constructs were tested against classificatory variables. Statistically significant lower mean scores were obtained for the three constructs as the education level of respondents increases (Table III). Results of a further ANOVA also shows statistically significant differences between age groups for all constructs, with younger respondents tending to give lower scores (Table IV). Results of *t*-tests and an ANOVA for gender and marital status, respectively, indicated no statistically significant differences.

To investigate which elements of age or education play the most salient effect, the service loyalty construct was investigated further as this is ultimately what determines defection or repurchases. To do this analysis

<i>y</i>	Customer satisfaction	Service loyalty	Service loyalty
$R^2$	0.20	0.16	0.421
$F$	47.91***	37.66***	69.30***
Beta – service quality	0.45***	0.41***	0.15*
Beta – customer satisfaction			0.57***

**Table I.**  
Results of regression  
equations testing  
mediation

**Note:** Betas reported are standardised values  
\*\*\*  $p < 0.000$ ; \* =  $p < 0.05$

Parameter	Unstandardised value	Standardised value	<i>t</i> -values
<i>Gamma</i>			
Service quality → customer satisfaction	0.67	0.53	7.04***
<i>Beta</i>			
Customer satisfaction → service loyalty	0.59	0.59	8.44***
Service quality → service loyalty	0.17	0.14	1.91

**Table II.**  
ML estimates for  
structural model  
parameters

**Note:** \*\*\*  $p < 0.000$

CHAID (chi-squared automated interaction detector) was applied to the data. The results in tree diagram form are depicted in Figure 2. These show that 62.5 per cent of respondents are less loyal. Education is the primary variable that explains the presence of service loyalty, with those that have completed education at post-secondary level (codes 3-5) and above being proportionally (72.8 per cent) the least loyal. Moreover, the analysis indicates that within the category of those that have completed education at post-secondary level and above, 90 per cent of those in the 15-39 years age bracket (code 1-5) are even less loyal.

### Discussion

The findings indicate that the questionnaires identified to measure service loyalty, customer satisfaction and service quality exhibit acceptable psychometric properties in terms of both reliability and validity. The results confirm the hypothesised relationships in the research model. Service quality is found to act on service loyalty via customer satisfaction. The results also show that while gender and marital status provided no basis for differentiation among constructs, education and age play a major role in determining the different perceptions of customers about the constructs investigated. Analysis using CHAID for the service loyalty construct shows that it is education followed by age that is the salient segmentation variable.

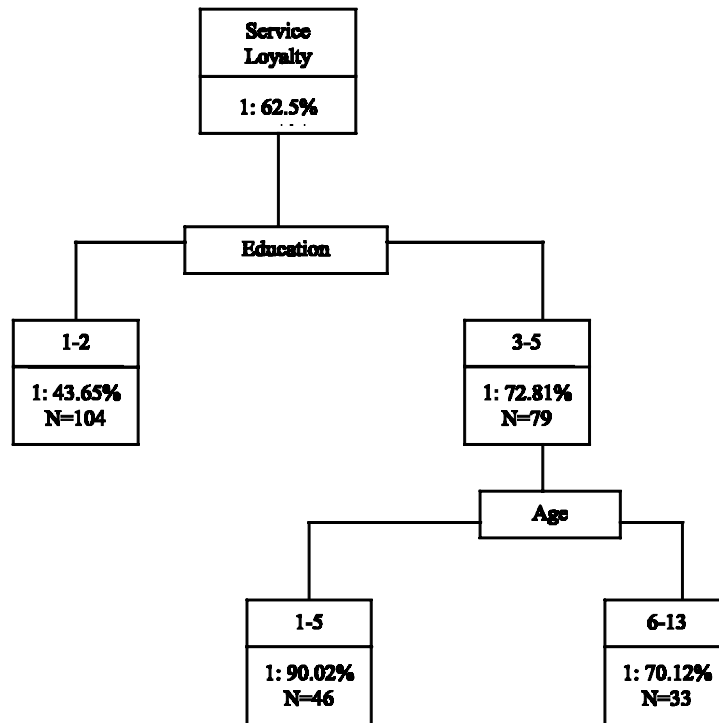
The research contributes to our knowledge by providing support for the contention that customer satisfaction performs a mediating role in the link between service quality and service loyalty. Service quality has been found to be an important input to customer satisfaction and explains 53 per cent of its variance. However, the main focus of management attention should be on customer satisfaction, of which service quality is an important antecedent. Identification of the various elements, besides service quality, that contribute to overall customer satisfaction becomes critical. Other elements that could be contributing to customer satisfaction could include other constructs such as transaction satisfaction, value and corporate reputation or image. Similarly, it is just as critical to identify other elements, in addition to customer satisfaction, that have a direct impact on service loyalty. A clearer understanding as to the sequence of relationship between service quality, customer satisfaction, service loyalty and ultimately the performance of the firm can help ensure better targeting of limited marketing resources. It is interesting that service loyalty is primarily affected by education and only to a secondary extent by age.

	Primary	Secondary	Post- secondary	Graduate	Post- graduate	<i>F</i>	Sig
Service quality	53.91	54.61	52.44	45.61	45.06	6.42	0.000
Customer satisfaction	12.81	13.14	11.95	10.94	10.43	4.01	0.004
Service loyalty	73.08	73.84	67.16	64.83	59.21	3.72	0.006

**Table III.**  
ANOVA for means of  
constructs on the basis  
of education

**Table IV.**  
ANOVA for means of  
constructs on the basis  
of age bracket

	Service quality	Customer satisfaction	Service loyalty
<i>Age group</i>			
15-19	48.30	12.33	68.86
20-24	51.01	11.50	60.61
25-29	48.80	10.07	57.78
35-34	49.82	12.91	73.90
40-44	56.00	12.90	72.22
45-49	54.27	12.82	70.00
50-54	51.82	11.68	69.45
55-59	58.61	15.00	80.20
60-64	55.43	12.94	74.14
65-69	54.28	14.08	74.74
70-74	56.02	14.17	81.13
75-80	55.00	14.00	84.00
<i>F</i>	1.882	2.407	2.504
<i>Sig.</i>	0.039	0.007	0.005



**Figure 2.**  
Tree diagram of results  
from CHAID analysis of  
service loyalty

Education, occupation and income are considered to be critical elements in social class. It is likely that the variable of influence on service loyalty could quite well be social class. Knowing whether the different social class groupings exhibit different levels of service loyalty could have considerable marketing

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implications. This type of analysis can help identify segments that have the highest potential of defection and where best to target limited marketing resources. It is crucial for service firms to establish benchmarks for the constructs under consideration and to regularly and systematically monitor its performance among its customers in the same manner that the firm monitors its management accounts. Different benchmarks may be required for the different segments that the firm targets. Moreover, such monitoring can be extended to include a comparison of the firm's performance on the three constructs to those of its competitors.

All research has its limitations and this study is no exception. In a strict sense the results pertain only to the respondents and generalisations to a wider population or industry should be done with caution. The sample size is not large but adequate for the type of analysis undertaken. While there is an argument for the relationship investigated to be undertaken with more than one sector to support the findings' generalisability, this needs to be balanced with "chameleon effects" that are likely to creep in and cause the meaning of customer satisfaction to vary as a result of the different research contexts (Giese and Cote, 2000).

This study provides a number of directions for future research. Work can focus on identifying and possibly developing a unique measure of customer satisfaction for a banking context. It is also possible to look at developing a richer model that incorporates other constructs beyond the three used in this study and to consider their interactive effects. The role of value and its exact relationship to customer satisfaction and service loyalty could prove to be an interesting area of study. Similarly, the role of corporate reputation or image is worthy of further elaboration. Does corporate reputation have an effect on service quality, on customer satisfaction or on both? Is there a reverse relationship from these two constructs to corporate reputation? How important is the role of customer involvement? What is the effect of switching cost? How important are emotions in service loyalty?

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Descriptor	Mean	Std Dev	LOY*	SAT*	SQ1*	SQ2*	SQ3*
<i>Service loyalty</i>							
1. Say positive things about XYZ to other people	5.71	1.57	0.69				
2. Intend to continue doing business with XYZ	6.10	1.32	0.78				
3. Encourage friends and relatives to do business with XYZ	5.69	1.57	0.70				
4. Seldom consider switching away from XYZ	5.43	1.84	0.60				
5. Doubt that I would switch	5.87	1.61	0.72				
6. Really like doing business with XYZ	5.90	1.43	0.83				
7. To me, XYZ is clearly the best to do business with	5.88	1.47	0.87				
8. Believe XYZ is a good bank	6.22	1.24	0.83				
9. Try to use XYZ every time I need services	5.99	1.42	0.89				
10. Consider XYZ my primary bank	5.89	1.53	0.88				
11. First choice when I need XYZ services	5.92	1.43	0.90				
12. Primary place where I consider when I want to use XYZ services	5.88	1.51	0.86				
Service loyalty scale	70.49	14.54					
<i>Customer satisfaction</i>							
13. Based on all of your experience, how satisfied overall are you	4.21	1.01		0.61			
14. Based on all my experience, I am (reversed)	Deleted						
15. Compared to other banks you have done business with,	4.04	1.14		0.72			
16. In general I am satisfied	4.22	1.05		0.68			
Customer satisfaction scale	12.48	2.81					
<i>Service quality</i>							
17. Providing services as promised	2.40	0.57				0.52	
18. Dependability in handling customer service problems	2.45	0.57				0.54	
19. Performing services right first time	2.53	0.58				0.64	
20. Providing services at the promised time	2.42	0.59				0.74	
21. Keeping customers informed when service will be provided	2.52	0.58				0.56	
22. Prompt service to the customer	2.37	0.67			0.42		
23. Willingness to help customers	2.66	0.55			0.63		

(continued)

**Table AI.**  
Items with descriptive  
statistics and factor  
loadings

Table AI.

Descriptor	Mean	Std Dev	LOY*	SAT*	SQ1*	SQ2*	SQ3*
24. Readiness to respond to customers' requests	2.60	0.56			0.65		
25. Employees that instil confidence in customers	2.62	0.54			0.64		
26. Making customers feel safe in their transactions	2.58	0.58			0.55		
27. Employees who are consistently courteous	2.61	0.58			0.71		
28. Employees who have the knowledge to answer customer questions	2.62	0.55			0.71		
29. Giving customers individual attention	2.59	0.56			0.65		
30. Employees who deal with customers in a caring fashion	2.55	0.57			0.78		
31. Having the customers' best interests at heart	2.58	0.57			0.69		
32. Employees who understand the needs of their customers	2.53	0.57			0.79		
33. Convenient business hours	2.34	0.70			0.49		
34. Modern equipment	2.45	0.68					0.81
35. Visually appealing facilities	2.39	0.63					0.80
36. Employees who have a neat, professional appearance	2.57	0.59					0.64
37. Visually appealing materials associated with the service	2.40	0.60					0.62
Service quality scale	52.78	8.13					

**Note:** \* Loadings less than 0.35 are not shown