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Customer repurchase intention

A general structural equation model

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Abstract

This paper develops a general service sector model of repurchase intention from the consumer theory literature. A key contribution of the structural equation model is the incorporation of customer perceptions of equity and value and customer brand preference into an integrated repurchase intention analysis. The model describes the extent to which customer repurchase intention is influenced by seven important factors – service quality, equity and value, customer satisfaction, past loyalty, expected switching cost and brand preference. The general model is applied to customers of comprehensive car insurance and personal superannuation services. The analysis finds that although perceived quality does not directly affect customer satisfaction, it does so indirectly via customer equity and value perceptions. The study also finds that past purchase loyalty is not directly related to customer satisfaction or current brand preference and that brand preference is an intervening factor between customer satisfaction and repurchase intention. The main factor influencing brand preference was perceived value with customer satisfaction and expected switching cost having less influence.

Introduction

The objective of this paper is to test a general model which aims to describe the extent to which customer intention to repurchase a service is influenced by customer perceptions of quality, equity and value, customer satisfaction, past loyalty, expected switching cost and brand preference. The objective is important because customer repurchase intention research is largely fragmented and is in need of an empirically verified general theory.

Some studies have concentrated on determining the basic antecedent variables to repurchase intention (Hocutt, 1998; Storbacka *et al.*, 1994; Zahorik and Rust, 1992). Other studies, such as Bitner *et al.* (1990), Bolton and Drew (1991a, b), Boulding *et al.* (1993), Grayson and Ambler (1999), Liljander and Strandvik (1995), and Price *et al.* (1995) have

considered the single incident, critical encounters and longitudinal interactions or relationships between these variables.

Still others have considered the predictive validity of repurchase intention for subsequent repurchase behaviour (Bemmaor, 1995; Mittal and Kamakura, 2001; Morwitz *et al.*, 1993). Despite the fact that research in this area largely relies on stochastic and deterministic approaches to customer retention analysis (Ehrenberg, 1988; Howard, 1977; Lilien *et al.*, 1992), few comprehensive, empirically tested, structural models of the customer retention process are evident in marketing literature. Even the understanding of the interrelationships between customer service perceptions *per se*, or how these relate to overall service satisfaction appears unclear (Bolton and Drew, 1994; Fornell *et al.*, 1996; Roest and Pieters, 1997; Taylor and Baker, 1994; Zahorik and Rust, 1992).

Furthermore, a customer behaviour model, which holistically defines the processes by which customers make a choice between several competing service brands or providers, is still to be developed. Some progress in this direction has been made by the evaluation of known alternatives being factored into customer assessments, via the disconfirmation of expectations (Bearden and Teel, 1983; Bolton and Drew, 1991b; Boulding *et al.*, 1993; Cadotte *et al.*, 1987; Oliver, 1980; Oliver and Bearden, 1985). While this approach measures the difference between pre and post consumption assessments, it provides only a partial explanation of how customer retention mechanisms might operate (Bagozzi *et al.*, 1999; Mano and Oliver, 1993; Oliver, 1993; Oliver and DeSarbo, 1988; Oliver and Swan, 1989; Price *et al.*, 1995; Westbrook, 1987).

This paper examines the following customer repurchase intention issues within the specific service environments of comprehensive car insurance and personal superannuation:

- What is the impact of customer satisfaction and brand preference on repurchase intention?
- What is the effect of customer loyalty and switching costs on brand preference?
- How important is the contribution of perceived value to customer satisfaction and brand preference?
- What is the impact of perceived equity on customer perceived value and satisfaction?
- How does perceived quality contribute to customer satisfaction?

"The research model" section of this paper outlines the theoretical foundation of the general model, and the propositions arising from the various relationships. The "survey method" section explains the research approach and sample design, establishes the measurement scales and provides confirmatory factor analysis and parameter estimates for the model. The "structural equation analysis" section tests the fit of the general model to the empirical data and a modified model is developed. The modified model is then tested against data from selected customer groups. This paper concludes with sections covering the study findings, the management implications of these findings and suggested avenues for future research.

The research model

Several researchers have found satisfaction and attitude to be major antecedents of customer repurchase intention (Bearden and Teel, 1983; Innis, 1991; Oliver, 1980, 1981; Roest and Pieters, 1997). When attitude is treated as a post-purchase construct, the general sequence is:Equation 1In this context, satisfaction is the overall level of customer pleasure and contentment resulting from experience with the service. Attitude is the customer's positive, neutral or negative learned disposition (often as a result of past evaluative experiences), with respect to the good service, company, or brand under consideration (Roest and Pieters, 1997). However, the precise relationship between customer learned disposition and customer preference for perceived alternatives remains unclear. In the literature, different terms have been used for similar or closely related preference constructs. Examples of terms used are, customer commitment (Storbacka *et al.*, 1994), brand choice (Manrai, 1995), product attitude (Roest and Pieters, 1997) and consumer preference (Mantel and Kardes, 1999).

In this paper, the approach taken is that a separate and distinct evaluation of alternatives (brand preference) precedes customer repurchase intention (Manrai, 1995; Storbacka *et al.*, 1994). In the conceptual model developed here the major antecedents to repurchase intention are thus:Equation 2The research model, shown in Figure 1, delineates the key factors preceding customer satisfaction and brand preference.

Each of the model components is defined as follows:

- Repurchase intention. The individual's judgement about buying again a designated service from the same company, taking into account his or her current situation and likely circumstances.
- Brand preference. The extent to which the customer favours the designated service provided by his or her present company, in comparison to the designated service provided by other companies in his or her consideration set.
- Expected switching cost. The customer's estimate of the personal loss or sacrifice in time, effort and money associated with the customer changing to another service provider.
- *Customer loyalty*. The degree to which the customer has exhibited, over recent years, repeat purchase behaviour of a particular company service; and the significance of that expenditure in terms of the customer's total outlay on that particular type of service.
- Customer satisfaction. The degree of overall pleasure or contentment felt by the customer, resulting from the ability of the service to fulfil the customer's desires, expectations and needs in relation to the service.
- Perceived value. The customer's overall appraisal of the net worth of the service, based on the customer's assessment of what is received (benefits provided by the service), and what is given (costs or sacrifice in acquiring and utilising the service).
- Perceived equity. The customer's overall assessment of the standard of fairness and
 justice of the company's service transaction and its customer problem and complaint
 handling process.
- *Perceived quality*. The customer's overall assessment of the standard of the service delivery process.

The theoretical basis of the research model is derived from several sources. The model is developed from the satisfaction, attitude and intention relationships examined by Oliver (1980, 1981) and from the analyses of customer perceptions of service performance by Cronin and Taylor (1992, 1994), Dodds *et al.* (1991), Oliver and Swan (1989) and Zeithaml (1988). The model also incorporates the defensive factors to switching identified by Fornell (1992).

Analysis of the inter-relationships between customer retention factors can be undertaken at the single transaction (micro) level or at a global (macro) level. The model adopts a macro framework. This is because the customer repurchase decision often depends on a general assessment of the service and supplier, based on multiple service transaction experiences with that supplier (Danaher and Mattsson, 1994; Liljander and Strandvik, 1995).

The service attribute of perceived quality is delineated as an important antecedent factor to customer satisfaction (Cronin and Taylor, 1992, 1994; Fornell *et al.*, 1996; Parasuraman *et al.*, 1994a). The other service attributes regarded as important determinants of satisfaction are perceived value (Crosby and Stephens, 1987; Fornell *et al.*, 1996) and perceived equity (Oliver, 1993; Oliver and DeSarbo, 1988; Oliver and Swan, 1989). The model also proposes perceived quality and perceived equity to be antecedents to perceived value (Chang and Wildt, 1994; Dodds *et al.*, 1991; Fornell *et al.*, 1996; Oliver and DeSarbo, 1988; Smith Gooding, 1995; Zeithaml, 1988).

There have been many approaches to the measurement of the factors influencing customer satisfaction (Erevelles and Leavitt, 1992). The performance compared to expectations approach (expectations disconfirmation) has often been used in the analysis and measurement of service quality and satisfaction (Oliver, 1980, 1981; Parasuraman *et al.*, 1988, 1991). However, Cronin and Taylor (1992, 1994) found that for cross-sectional studies, performance only based measures may better reflect customers' long-term service quality assessments. Zeithaml *et al.* (1996) maintain that the performance-expectations difference measure is appropriate if the primary purpose is to accurately diagnose service shortfalls. Whereas, the perceptions only approach is more appropriate when the primary purpose of measuring service quality is to explain the variance in some dependent construct. Accordingly, the perceived performance approach to modelling the antecedents to satisfaction is adopted in this paper.

There are also many approaches to the definition and measurement of the factors influencing brand preference, for example, Bettman *et al.* (1998), Manrai (1995), Oliva *et al.* (1992), Singh (1991) and Storbacka *et al.* (1994). Based on a literature survey and an exploratory analysis prior to the primary study, several factors were identified as important antecedent variables to brand preference. These factors are:

- customer perceived value;
- customer satisfaction (Oliva et al., 1992; Oliver, 1980, 1981); and
- the defensive factors, customer past loyalty and expected switching cost (Fornell, 1992; Perry and Hamm, 1969; Roselius, 1971).

The research model is used to test the following hypotheses: H1.=The strength of brand preference has a direct positive effect on repurchase intention. H2.=Expected switching cost has a direct positive effect on brand preference. H3.=Customer loyalty has a direct positive effect on brand preference.H4(a).=Customer satisfaction has a direct positive effect on brand preference. H4(b). = Customer satisfaction has a direct positive effect on customer loyalty to the company. H4(c). = Customer satisfaction has a direct positive effect on customer expected switching cost.H4(d).=Customer satisfaction has a direct positive effect on repurchase intention. H5(a). = Perceived value of service has a direct positive effect on customer satisfaction. H5(b).=Perceived value of service has a direct positive effect on brand preference. H6(a). = Perceived equity of service has a direct positive effect on customer satisfaction. H6(b).=Perceived equity of service has a direct positive effect on the perceived value of the service.H7(a).=Perceived quality of service has a direct positive effect on customer satisfaction. H7(b).=Perceived quality of service has a direct positive effect on the perceived equity of the service.H7(c).=Perceived quality of service has a direct positive effect on the perceived value of the service. From a search of the literature, it was found that H4(d), H6(a), H7(b) and H7(c) are supported by considerable empirical evidence. H1-H4(a), H5(a) and H5(b) appear intuitively obvious, but have been subjected to limited empirical analysis. H4(b) and H7(a) are subject to conflicting empirical evidence. H4(c) and H6(b) are not intuitively obvious and have been subjected to limited empirical analysis. A summary of the empirical evidence is shown in Table I. The remainder of this section contains a more detailed justification of each hypothesis.

Brand preference upon repurchase intention

The effect of brand preference on willingness to buy has rarely been examined (Dodds *et al.*, 1991). Encouraging approaches to the more precise specification of customer choice behaviour are provided by developments in consideration set theory by Kardes *et al.* (1993), Roberts and Lattin (1991, 1997) and Shocker *et al.* (1991). Constructive advances also appear in the structural models of customer preference and repurchase by Andreassen and Lindestad (1998), Erdem and Swait (1998), Pritchard *et al.* (1999) and Roest and Pieters (1997). This paper contends that there is a causal link between the disposition of the customer to favour the service of a specific supplier (brand preference) and the customer's willingness to buy that service again from the same supplier:*H1.*=The strength of brand preference has a positive direct effect on repurchase intention.

Expected switching cost upon brand preference

Switching cost makes changing service providers more expensive (Grønhaug and Gilly, 1991; Peter and Tarpey, 1975). As this cost increases, customers are less likely to change suppliers (de Ruyter *et al.*, 1998; Jones *et al.*, 2000; Sharma and Patterson, 2000). This is why some service suppliers expend considerable effort in building switching costs into their marketing strategies (Fornell, 1992; Heskett *et al.*, 1990). The larger the switching cost, *ceteris paribus*, the stronger will be the customer's preference for the same service supplier or service brand:*H2.*=Expected switching cost has a direct positive effect on brand preference.

Customer loyalty upon brand preference

Customers attempt to reduce the perceived risk of service purchase (Murray, 1991) by buying a well known brand, seeking additional information and repeating the purchase of the brand that has provided satisfaction (Perry and Hamm, 1969; Roselius, 1971). The use of customer loyalty segmentation in a firm's marketing strategy also increases the likelihood of a positive relationship between past patronage and present brand preference (Pritchard, 1991). The causal link between past repeat purchase and current brand preference may also be the result of customer inertia (Roy *et al.*, 1996). For example, the desire by the customer to avoid learning new service routines and practises or to avoid making price comparisons between brands (Heskett *et al.*, 1990; Krishnamurthi *et al.*, 1992):*H3.*=Customer loyalty has a direct positive effect on brand preference.

Customer satisfaction upon brand preference

Customer satisfaction can influence attitudinal change (e.g. service and supplier preference) which in turn affects repurchase intention (Innis, 1991; Oliver, 1980; Oliver and Bearden, 1985; Stauss and Neuhaus, 1997). A high level of satisfaction is likely to increase the probability that the brand in question will be retained in the customer's consideration set and will increase the customer's preference for the brand (Westbrook and Oliver, 1981):H4(a).=Customer satisfaction has a direct positive effect on brand preference.

Customer satisfaction upon customer loyalty

It has been argued that customer service relationships are built one interaction at a time (Bitner, 1995; Bitner *et al.*, 1990). A series of very positive encounters will increase customer satisfaction, trust, relationship commitment and continuity (Bolton, 1998; Morgan and Hunt, 1994; Selnes, 1998).

However, the positive relationship between customer satisfaction and repurchase behaviour has been challenged in the literature (Andreassen and Lindestad, 1998; Colgate *et al.*, 1996; Fornell, 1992; Liljander and Strandvik, 1995; Srinivasan, 1996; Stauss and Neuhaus, 1997; Storbacka *et al.*, 1994). In general, it is argued that the customer is influenced by a mixture of positive and negative bonds. Negative bonds (e.g. consumer inertia, brand promotion, customer information processing limitations, supplier monopoly) tie the customer to the service supplier, even though customer satisfaction with the company may not be particularly high.

It has also been found that while dissatisfaction encourages switching, satisfaction does not ensure customer commitment and loyalty (Danaher and Mattsson, 1998; Heskett *et al.*, 1994; Mittal and Lassar, 1998; Söderlund, 1998; Stum and Thiry, 1991). Bloemer and de Ruyter (1998), and Bloemer and Kasper (1995) have established that the positive relationship between satisfaction and loyalty is moderated by the extent to which customers undertake brand expectation-performance comparisons. This paper tests whether there is a positive causal link between customer overall satisfaction with a service supplier and past patronage of that supplier: H4(b).=Customer satisfaction has a direct positive effect on customer loyalty to the company.

Customer satisfaction upon expected switching cost

Opportunity cost analysis suggests that customer satisfaction has a positive causal effect on the expected disadvantage or cost in switching service suppliers. That is, the higher the level of the customer's overall satisfaction with the service, *ceteris paribus*, the larger the opportunity cost or satisfaction foregone the customer can expect to incur in switching service suppliers. However, the positive relationship between satisfaction and switching cost may be confounded in the short term when companies adopt defensive marketing strategies which utilise switching costs as a means of retaining dissatisfied customers (Fornell, 1992). In the long-term though, the ability of switching cost barriers to retain the patronage of dissatisfied customers is probably quite limited (Jones *et al.*, 2000; Maute and Forrester, 1993):*H4(c)*.=Customer satisfaction has a direct positive effect on customer expected switching cost.

Satisfaction upon repurchase intention

A direct positive relationship between customer satisfaction and repurchase intention is supported by a wide variety of product and service studies (Anderson and Sullivan, 1993; Bolton, 1998; Cronin and Taylor, 1992; Fornell, 1992; Oliver, 1980; Patterson and Spreng, 1997; Rust and Zahorik, 1993; Selnes, 1998; Swan and Trawick, 1981; Taylor and Baker, 1994; Woodside *et al.*, 1989). These studies establish that overall customer satisfaction with a service is strongly associated with the behavioural intention to return to the same service provider. However, it must be kept in mind that the direct positive relationship of satisfaction upon repurchase intention is a simplification of the matter. While customer satisfaction is a major factor, it is only one of the many variables that can impact upon customer repurchase intention (Jones and Sasser, 1995; Liljandar and Strandvik, 1995; Mittal and Lassar, 1998; Sharma and Patterson, 2000; Srinivasan, 1996; Storbacka *et al.*, 1994):*H4(d).*=Customer satisfaction has a direct positive effect on repurchase intention.

Perceived value upon customer satisfaction

Recently, conceptual frameworks have been developed that integrate customer perceived value and customer satisfaction (Heskett *et al.*, 1994; Liljander and Strandvik, 1995; Storbacka *et al.*, 1994; Woodruff, 1997). To date, however, only a small number of studies have provided empirical evidence of the causal links between perceived value and satisfaction (Andreassen and Lindestad, 1998; Cronin *et al.*, 2000; Crosby and Stephens, 1987; McDougall and Levesque, 2000; Patterson and Spreng, 1997).

The proposed relationship of perceived value upon customer satisfaction is supported by value disconfirmation experience. When a single purchase of a product or service is made, the customer expects to receive a benefit greater than the cost, that is, the customer expects to receive value. If anything happens after the purchase that unexpectedly reduces or increases the cost incurred or benefit received, the perceived value is altered. The customer becomes less or more satisfied, which in turn influences subsequent customer value expectations, purchase behaviour and overall customer satisfaction (Carr, 1990; Voss *et al.*, 1998; Woodruff, 1997). Customer perception of overall service value positively impacts upon customer overall service satisfaction.

The proposed perceived value-customer satisfaction relationship is also supported by the argument that in situations where a particular company service consists of multiple choice options, customers do not simply consume value. In a relationship with the service supplier, customers select options and create value to themselves (i.e. added value) and so increase their product or service satisfaction (Carr, 1990; Grönroos, 1997; Normann and Ramírez, 1993; Ravald and Grönroos, 1996; Rosen and Surprenant, 1998; Woodruff, 1997):*H5(a)*.=Perceived value of service has a direct positive effect on customer satisfaction.

Perceived value upon brand preference

The proposition that perceived value has a direct positive effect upon brand preference is consistent with the early findings of Jacoby and Kaplan (1972), and Kaplan *et al.* (1974), that financial risk is the major customer perceived risk when purchasing life insurance. Since then, only a small number of studies have examined aspects of the perceived value-brand preference association (Dodds *et al.*, 1991; Grewal *et al.*, 1998a; Sinha and DeSarbo, 1998). However, recent evidence by Erdem and Swait (1998) provides direct support for the causal link between customer perceived value and brand preference: *H5(b)*.=Perceived value of service has a direct positive effect on brand preference.

Perceived equity upon customer satisfaction

Several studies have found that customer equity perceptions influence the amount of satisfaction that the customer has, following a purchase transaction (Erevelles and Leavitt, 1992; Oliver and DeSarbo, 1988; Oliver and Swan, 1989). Customer overall satisfaction is therefore often understood by market researchers to be a consequent variable of equity and other processes (Swan and Oliver, 1989; Szymanski and Henard, 2001; Takala and Uusitalo, 1996). The research literature also supports the view that dissatisfied customers who successfully obtain redress (procedural, distributive and interactional justice) are likely to experience improved overall satisfaction with the service (Andreassen, 2000; Bitner *et al.*, 1990; Blodgett *et al.*, 1995; Boshoff and Leong, 1998; de Ruyter and Wetzels, 2000; Tax *et al.*, 1998):*H6(a).*=Perceived equity of service has a direct positive effect on customer satisfaction.

Perceived equity upon perceived value

The association of perceived equity and perceived value (Erevelles and Leavitt, 1992; Oliver and Swan, 1989) is supported by arguments that complaint management and the reduction of buyer service failure costs (time, effort and money) can assist customer retention. The reduction of these buyer costs increases the consumer's utility from the purchase (Fornell and Wernerfelt, 1988; Ravald and Grönroos, 1996; Reichheld, 1996; Woodruff, 1997). Goodwin and Ross (1992) found, in an experimental written response study of customers seeking redress, that customer perceived overall fairness is positively associated with the customer's perceived value of the service. In addition, Smith *et al.* (1999) have shown that customers prefer service retrieval and financial redress, in type and amount, commensurate with the service failure experienced.

Although no empirical studies have been published which specifically examine the causal link between customer perceived equity and customer perceived value, the proposition advanced in this paper is that perceived equity of service has a positive direct effect on the perceived value of the service:H6(b).=Perceived equity of service has a direct positive effect on the perceived value of the service.

Perceived quality upon customer satisfaction

The relationship of quality to satisfaction at either the transaction-specific or global level of analysis is not universally agreed upon (Parasuraman *et al.*, 1994b; Taylor and Baker, 1994; Zahorik and Rust, 1992). Some analysts treat perceived quality as a relatively stable perception of the service which is influenced as customers experience satisfaction or dissatisfaction with specific instances of the service over time (Athiyaman, 1997; Bejou *et al.*, 1996; Bolton and Drew, 1991a, b; Boulding *et al.*, 1993).

Other researchers represent perceived quality as an antecedent, rather than a result of satisfaction (Anderson and Sullivan, 1993; Cronin and Taylor, 1992; Crosby and Stephens, 1987; Danaher and Gallagher, 1997; Fornell *et al.*, 1996; Spreng and Mackoy, 1996; Wels-Lips *et al.*, 1998; Woodside *et al.*, 1989). Furthermore, some studies, upon examining the causal order between customer perceptions of overall service quality and customer satisfaction, find it difficult to establish that one empirically precedes the other (McAlexander *et al.*, 1994; Taylor and Baker, 1994; Taylor and Cronin, 1994).

Even where perceived quality is understood to be antecedent to satisfaction, some researchers indicate that there can be diminishing satisfaction returns to an increase in the level of service quality (Anderson and Sullivan, 1993; Caruana and Pitt, 1997; Johnston, 1995; Mittal $et\ al.$, 1998; Woodruff, 1997). It is also argued that perceived quality may not be a significant determinant of customer service assessments when the service has high credence attributes (Powpaka, 1996). This paper tests the view that perceived quality is a direct positive antecedent to satisfaction:H7(a).=Perceived quality of service has a direct positive effect on customer satisfaction.

Perceived quality upon perceived equity

In service transactions, customers judge service contact employees on their ability to deliver the service right the first time, and by their capacity to recover if things go wrong. Customers also judge contact persons on how well they deal with special requests, and their involuntary actions and attitudes (Bitner *et al.*, 1990, 1994; Goodwin and Ross, 1992). As the service encounter meets the sequence of events expected by the customer (the expected service script) and meets service promises, the customer will perceive that they have been treated fairly and reasonably (Berry *et al.*, 1994; Bitner, 1995; Bitner *et al.*, 1994; Zahorik and Rust, 1992). That is, the greater the reliability, responsiveness, assurance and empathy of the service delivery process, the more the customer will perceive the service as treating them justly and fairly (Berry *et al.*, 1994). Support for a perceived quality-equity relationship is also provided by Wells and Stafford (1995). They show that for car insurance, the higher the customer perceived service quality, the lower the customer complaints as a ratio of total

premiums written or number of insurance policies in force: *H7(b)*.=Perceived quality of service has a direct positive effect on the perceived equity of the service:

Perceived quality upon perceived value

Customer perceived value can be positively influenced by perceived quality and negatively influenced by perceived price (Chang and Wildt, 1994; Dodds *et al.*, 1991). There is not necessarily a positive relationship between the customer's perception of quality and their perception of value. Customers can at times obtain more value from a lower quality product or service, because the low overall price compensates for the reduction in quality (McDougall and Levesque, 2000; Zeithaml, 1988).

However, many studies have found the relationship between perceived quality and perceived value to be positive (Andreassen and Lindestad, 1998; Bolton and Drew, 1991b; Dodds *et al.*, 1991; Erdem and Swait, 1998; Grewal *et al.*, 1998b; Ostrom and Iacobucci, 1995; Smith Gooding, 1995; Sweeney *et al.*, 1999).

Assuming other factors constant, an increase (decrease) in perceived quality can be expected to be accompanied by an increase (decrease) in perceived value: H7(c).=Perceived quality of service has a direct positive effect on the perceived value of the service.

Survey method

The data used to test the research propositions were obtained by a stratified random sample. A postal questionnaire was used to survey metropolitan customers of personal superannuation or comprehensive car insurance, from four large insurance companies.

The insurance industry was selected for several reasons:

- Insurance is an example of a complex highly intangible service, where it is difficult to determine a priori the nature of the customer service perception-repurchase relationship. On the one hand, such services consist largely of credence properties, that is, service characteristics that are difficult for customers to evaluate even after purchase and use (Zeithaml, 1988). On the other hand, we might expect to find a positive relationship between service delivery and customer retention for insurance companies. These companies do not normally recover selling and claims costs until several years have lapsed, losing money if the customer cancels or switches service providers (Heskett *et al.*, 1990).
- Despite the customer service emphasis and actions taken by the insurance industry, there is little published research that evaluates customer perceptions of the service provided by insurance companies (Crosby and Stephens, 1987; Crosby et al., 1990; Stafford and Wells, 1996; Stafford et al., 1998).
- Insurance companies have well developed customer databases from which customers can be selected for survey.
- Several companies within the industry were willing to undertake the administration and meet the financial costs of customer selection and questionnaire mail-out.

To ensure sufficient variation across the components to be analysed, customers from two different types of insurance companies and two different types of insurance services were surveyed. Customers from retail and wholesale insurance companies were included in the study. This enabled the model to be applied to customers who purchased directly from the company (retail companies) and those who purchased the service via an intermediary or agent (wholesale companies). From these companies, customers of either personal superannuation or comprehensive car insurance were surveyed. This also enabled the model to be applied to services of different contract length and with different repurchase or continued purchase cycle times. Comprehensive car insurance is usually a one-year renewable contract based on an annual premium payment. In contrast, personal superannuation is a long-term contract to which payments may be made as defined by the terms of the contract.

A stratified random sample survey approach was adopted so that various subgroups were adequately represented in the sample. To ensure that customers with reasonable experience of their company's service were included in the survey, 50 per cent of those selected for survey had made a change to, or a claim on, their car insurance policy in the last three years. Conversely, 50 per cent of those selected for survey had not made a change to, or a claim on, their policy.

Stratification by this experience criterion was found to be inappropriate for the personal superannuation customer survey. Claims are not generally made on superannuation policies until employment termination or retirement. Also, company records could not be used as a basis for stratifying customers by company experience, as the superannuation company (Company A) did not have an adequate record of customer queries and complaints. The superannuation survey was stratified by age, to control for an over or under-representation of respondents approaching retirement age. The sample frame is provided in Table II.

The sample size was determined with the goal of obtaining at least 200 respondents from each company. This was based on a minimum response rate of 10 per cent for companies A, B and D, and 20 per cent for Company C. Table III provides sample and response rate details.

To ensure customer confidentiality, each company administered the random selection of the sample from its customer database and arranged the mail-out of the survey package. After careful consideration of the respondent data, the management of each participating company confirmed that respondent characteristics (age, household type, work classification, years with company, policy complaints, changes and claims, and annual contribution or premium) were, in their opinion, an accurate representation of the characteristics of the survey population. In the case of the stratification criteria, 35.7 per cent of Company A respondents were aged 50 or more years and 44.7 per cent of total respondents were more experienced customers. The companies required the effect of the survey upon customers be kept to a minimum and would not permit follow-up data collection procedures.

The research model (Figure 1) contains eight factors. The literature from which each factor measurement was developed is provided in Table IV.

The Appendix lists the variable questions constituting each factor measurement. A minimum seven-point Likert scale was used for each variable question, except for the loyalty component which was adapted from the Burford *et al.* (1971) loyalty index (see Appendix).

The construct and internal validity of each measurement scale is broadly supported by the research literature from which it is derived. The validity of the measurement scales was also confirmed by evaluations provided by the participating company marketing executives and an independent advisory panel; both groups provided recommendations throughout the exploratory, pilot and primary phases of the study.

Construct validity may be threatened when factors in a proposed relationship are not linearly related along the whole continuum of the independent factor. Scatter plot analysis of preliminary data prior to the primary study indicated that confounding constructs and the levels of constructs are unlikely to compromise the validity of the study.

Structural equation analysis

A structural equation model using EQS (Bentler, 1992) was applied to the research model. The scale for each factor was set by fixing the factor loading to one of its indicator variables and then applying the maximum likelihood estimation method. The resulting parameter estimates for the unstandardised solution are shown in Figure 2. The statistical significance of the path coefficients should, however, be interpreted with caution due to the low survey response rate. It should also be noted that the data are cross-sectional, so the directions of the effects in the model are ultimately supported by the theory underpinning the causal linkages of the model (Asher, 1976).

The Bentler-Weeks normed fit index for the research model was 0.921, indicating a good fit to the data. All the factor loadings to the indicator variables were highly significant, which supports the overall factor structure of the model. All except one path parameter between the factors were significant at the 0.05 level. However, the link between perceived quality and customer satisfaction was not significant and the Wald test suggested that the model fit could be improved by removing this path. This was done and the resulting model (with the perceived quality-customer satisfaction path omitted) was then applied to the data sets for the different companies and to data for respondents of different experience levels. In doing this, some limitations were found in relation to the loyalty factor and to the direct path between customer satisfaction and repurchase intention. In particular, paths to and/or from loyalty were either not significant or very weak for individual companies and when respondents were grouped by level of experience. In addition, the indicator variables for loyalty were narrowly defined in terms of past customer behaviour (see discussion in the "Research findings and implication" section).

It was decided to remove the loyalty factor from the model. It was then found that the direct customer satisfaction-repurchase intention path was not significant for the whole group. The Wald test indicated that the model fit could be improved by removing this path. The unstandardised path estimates and factor loadings for the model incorporating the above changes are shown in Figure 3. In the following discussion, this model is called the modified model.

The Bentler-Weeks normed fit index for the modified model (NFI=0.924) was marginally higher than that for the original research model (NFI=0.921), though the modified model is more parsimonious. More importantly, the modified model was reasonably stable when applied to data for the various company groups and customer experience groups. A summary of the modified model parameters for these respondent groups is provided in Table V.

In each cell of Table V, the top value is the computed unstandardised path coefficient estimate, the standard error of the estimate is printed on the second row and the implied approximate 95 per cent confidence interval (estimate±1.96×standard error) is provided on the bottom row.

Several minor changes to the modified model were also tested. The fit indices were approximately the same for these variations, indicating that a distinction between models could not be made on statistical grounds. For example, the application of the modified model to respondent data found that the perceived quality-value path coefficient, although significant for the total data set, was not significant for each individual company group (Table V). A model with this path removed was tested with the total data, but there was no change in the fit index. The modified model was therefore retained as the best analytical model.

Research findings and implications

The generalisation of the research results to all insurance customers, even to those of the participating insurance companies, should be undertaken with care, as the results may be affected by non-response bias. The on-going temporal validity of the results may also be threatened by market entry events during the 18 months that preceded the customer questionnaire mail-out. Company D's entrance into the car insurance market was accompanied by an extensive and repetitive advertising campaign based on the customer having quick, efficient telephone access to the company and lower premium costs.

It is clear from the customer unconstrained questionnaire responses that the entry of Company D into the market heightened respondent awareness of the dollar premium rates and telephone assisted insurance service delivery. Whether the results of the study are applicable to other financial service customer groups and wider customer populations is still to be researched.

The level of overall support (Table V, all companies group) provided by the structural equation modelling for the research hypotheses is summarised in Table VI.

This study supports the view that customer satisfaction does not influence repurchase intention directly, but indirectly via brand preference. Perhaps this is to be expected as the perceptions measurement of customer satisfaction, unlike the disconfirmation measure, may be less likely to include an assessment of other brand (company) insurance alternatives. Consistent with the work of Manrai (1995), Sheppard *et al.* (1988) and Storbacka *et al.* (1994), the study finds brand preference to be an intervening variable between customer satisfaction and repurchase intention. This is in contrast to recent

studies, which see the assessment of alternatives only as a moderator of the satisfaction-repurchase relationship (Bloemer and de Ruyter, 1998; Bloemer and Kasper, 1995; Sharma and Patterson, 2000).

The direct effect of brand preference on customer repurchase intention is weaker for superannuation services, Company A, than for the car insurance companies. This can be seen by comparison of the confidence intervals for these groups in Table V (Super group compared to Total car group). Unconstrained customer questionnaire responses indicate that several factors, exogenous to the modelling, affect personal superannuation repurchase intentions. These factors included:

- employment security;
- · alternative expenditure options;
- multiple superannuation company patronage;
- the lack of financial incentive to terminate superannuation policies with previous companies; and
- changing government regulations which impact on personal superannuation, taxation and social security entitlements.

Overall, the study found that perceived value is more important than customer satisfaction as a factor influencing brand preference, having a significantly higher path coefficient in the modified model for all companies combined (Table V, all companies group). In addition, customer value perceptions influence brand preference both directly and indirectly via satisfaction. The importance of perceived value may be because the study examined financial services where cost, financial returns and risk are predominant issues for the customer.

The negligible direct relationship between customer satisfaction and customer loyalty for some subgroups is contrary to the general findings of Bitner (1995) and Bitner *et al.* (1990). However, the lack of a satisfaction-loyalty causal relationship is generally supported by more recent research (Andreassen and Lindestad, 1998; Bolton, 1998; Mittal and Lassar, 1998; Söderlund, 1998; Stauss and Neuhaus, 1997).

The study also finds that for some subgroups, respondent past loyalty had little direct effect on current brand preference. This could be due to the high credence characteristics of the services studied. One reason for consistent service brand preference is to reduce the risk of purchase loss (Murray, 1991; Perry and Hamm, 1969; Roselius, 1971). However, it is often the case with insurance type services where that purchase risk is not reduced by using the current service supplier. When there is also no positive relationship between satisfaction and past loyalty, there is little imperative for previously loyal customers to prefer the present service supplier.

However, the very weak role of the customer loyalty factor could also be a result of measurement inadequacies. Measures of customer loyalty based on repeat purchase behaviour focus on discrete transaction activities, rather than the dynamic process of exchange concerned with establishing, maintaining and enhancing relationships (Grönroos, 1997; Rosen and Surprenant, 1998; Selnes, 1998). Some evidence suggests that a repeat

purchase behaviour measure of loyalty is unlikely to distinguish true customer loyalty based on positive brand commitment from spurious customer loyalty based on inertia and indifference (Bloemer and Kasper, 1995). Where this spurious component is substantial, there may be little positive relationship between customer satisfaction and customer loyalty, and between customer loyalty and current brand preference.

The paths to and from switching cost were not significant for personal superannuation respondents. However, this study provides some support for the view that for car insurance customers, switching costs can be an important barrier to switching, or conversely, can increase preference for the current service brand (Table V). The reasons for the limited effect of expected switching cost may be that there are a large number of competing companies supplying similar personal superannuation and services. The likely similarity in satisfaction anticipated by respondents meant that expected opportunity costs associated with brand switching were not substantially increased, even when respondent satisfaction with the initial company was high. The many superannuation and car insurance service suppliers, and the ease with which respondents could obtain information by telephone and switch companies (e.g. electronic fund transfer facilities), also meant that expected switching cost in general was not a major variable determining respondent brand preference.

For the services examined, the study supports the hypothesis that perceived quality influences respondent satisfaction indirectly, via perceptions of service equity and value (Figure 2).

Contrary to our expectations and the research literature (Andreassen and Lindestad, 1998; Bolton, 1998; Grewal *et al.*, 1998a), the level of customer experience was not an important characteristic distinguishing respondents. Only the effect of perceived quality on perceived equity was statistically different between the two level of experience groups, with the effect of quality on equity being stronger for more experienced respondents. There is also some weak evidence that the effect of perceived equity on perceived value is not very strong for more experienced customers (Table V). This indicates that while more experienced respondents more clearly perceive levels of service fairness to be influenced by the standard of service delivery, this did not necessarily result in a stronger assessment of the positive effect of equity on perceived value or satisfaction.

The study establishes several differences between superannuation and car insurance customers. A number of factor relationships were weaker for the superannuation group. However, perceived value had a stronger positive effect on satisfaction for superannuation customers (Table V, Super group compared to the Total car group).

There were some differences between car insurance customers who purchased directly from the insurance company (Company C and D respondents) compared with those who purchased through a selling intermediary (Company B respondents). For customers who purchase via a selling agent, perceived quality had a smaller direct effect on equity perceptions, though brand preference had a larger direct effect on repurchase intention (Table V, Company B group compared to the Retail companies group). Unconstrained questionnaire responses provide an explanation for these differences. Company B

respondents who purchased car insurance as part of a salary sacrifice package or via an employee association – credit union arrangement – often were more aware of the inconvenience in changing this arrangement than of the quality and equity attributes of the actual insurance service provided.

Possible implications of the study findings for the operation and management of service organisations are canvassed in the remainder of this section. This study suggests that, in general, perceived value may well have a greater direct effect on brand preference than either satisfaction, loyalty or expected switching cost (Table V). There is a critical role for management to determine the items and the weighting of the items that customers perceive as value (Neal, 1999; Sweeney *et al.*, 1999). Furthermore, items that constitute perceived value can differ between customer groups. For example, Company C customers appear to rank additional options (e.g. auto club membership) and assistance (e.g. road-side assistance) more highly than Company D customers. On the other hand, Company D customers rank low dollar premium cost and policy flexibility higher than Company C customers.

This study finds that for most respondent groups the direct effect of service satisfaction on repurchase intention is very weak (see structural equation analysis section). Unconstrained customer responses indicate that environmental factors appeared to have an important influence on personal superannuation repurchase intention. Similarly, credence factors appeared to have a considerable effect on repurchase intention of less experienced respondents with Company D, the new entrant company to the car insurance market. This suggests that service managements would be wise to determine the presence of environmental or situational factors that may negatively impact on customer value perceptions, satisfaction and brand preference assessments and to take account of these in the "value package" provided to customers.

This study finds that customer loyalty may not be an important intervening factor between customer satisfaction and brand preference. The implication is that previously loyal customers are not necessarily presently satisfied customers or committed future customers. The study suggests that management cannot rely upon past behavioural loyalty to ensure current brand preference and customer repurchase intention. There is likely to be substantial customer mobility between companies due to customer perceptions of value, incorporating financial return and risk assessment (Kaplan *et al.*, 1974), and the range of service suppliers and options. The study found that for one-third of Company A and Company B respondents (and for most Company D respondents), the respective company was not the major supplier of the designated service over the previous three years.

This study also suggests that management cannot rely on a strategy of increasing the costs of switching to retain customers. For individual companies, expected switching cost had either a non-significant or a small positive effect on brand preference (Table V). The latter applied even to the respondents of the new entrant, Company D, 42 per cent of whom indicated that they were likely to lose money if they switched to another car insurance company. Expected switching cost was not a major factor determining respondent brand preference.

The study finds that perceived quality influenced satisfaction only indirectly, via service equity and value perceptions. The implication here is that management needs to understand that with rapidly improving general standards of service delivery, perceived quality may have little direct impact on customer satisfaction. This finding is consistent with recent research on diminishing returns to service quality improvements. Powpaka (1996) found that for services with substantial credence characteristics, a high standard of service delivery may be necessary, but not sufficient, to increase customer overall satisfaction. Similarly, Stafford *et al.* (1998) argued that there is the possibility that management may even run the risk of advancing the level of service delivery, or aspects of the service delivery, to a point beyond that deemed appropriate by the customer.

The study indicates the relative importance of perceived service equity for some customer groups. Perceived equity impacted on satisfaction directly and/or indirectly via the value perception (Figure 3). The customer's sense of being treated fairly or "right" is likely to be an important direct determinant of satisfaction for car insurance customers (Table V). The implication is that customer assessment of the standard of fairness and justice of the company's service transaction and its problem and complaint handling process is an important contributor to customer service satisfaction.

Management should also be aware that the strength of customer perception relationships may vary over time, as the customer becomes more experienced with the company. For more experienced respondents, perceived quality has a greater direct influence on perceived equity (Table V). This suggests that as customer experience increases, customer assessment of the standard of the service delivery process becomes a more important antecedent to customer assessment of the fairness and justice of the service. Partial support for this finding is provided by Rao and Monroe (1988).

In summary, this study suggests that organisations need to orientate their strategies towards superior customer value and equity delivery. The implication is that when programs are being developed to attract potential long-term customers, management needs to identify exactly what customers do value and how to continuously create net worth for them. To retain customers, management strategies also need to concentrate on, and improve, customers' perceived fairness and justice of the service.

Future research directions

The findings of this study point to the need for further inquiry into a number of areas. Analysis of a broad range of services using cross-sectional and longitudinal data is needed to test the extent to which the structural equation modelling of this paper is applicable to other services.

Studies are needed to refine the general research model components, particularly perceived equity and value, and to confirm the important role that customer value perceptions play in influencing customer retention (Day and Crask, 2000; Hoffman and Kelley, 2000). Further research is required to extend structural equation modelling to provide a much richer description of the satisfaction-brand preference-repurchase intention relationship for different types of services.

Research is also required to better delineate the effect that expected switching cost and past loyalty have on brand preference and repurchase intention. Determination of appropriate customer loyalty measurements and analysis of the effects of advertising, crossprice elasticity, equity, attitude, trust and commitment will help clarify the role of customer loyalty in the buyer-seller relationship (Bloemer and Kasper, 1995; Garbarino and Johnson, 1999; Sharma and Patterson, 2000).

Future research should test the weak direct effect of perceived quality on customer satisfaction. This needs to be undertaken in a variety of service situations, and from a relationship, as well as a transaction perspective. This will include the on-going relationship influence of internal (employee) service encounters on external customer satisfaction.

The research of Fornell and Wernerfelt (1988), McGahan and Ghemawat (1994) and Rust and Zahorik (1993) indicate that increases in retention rates can have a significant positive effect on market share. Furthermore, studies by Blodgett *et al.* (1995), Colgate *et al.* (1996), Hallowell (1996), Payne and Rickard (1997) and Rust *et al.* (1995) indicate that an increase in customer retention can have a positive effect on a company's net operating cash flow and profit. To enable the development of a comprehensive theory of customer retention, further research is required on the effect of customer satisfaction and repurchase intention upon repurchase behaviour (Mittal and Kamakura, 2001).

Finally, this study briefly examined the impact of differently administered selling personnel (in-house company employees or independent intermediaries) on customer repurchase intention and antecedent variables. Further research, incorporating transaction cost analysis, is necessary to establish under what circumstances financial and other service companies should engage intermediary sellers of services and contract out aspects of service delivery.

satisfaction \rightarrow attitude \rightarrow repurchase intention.

Equation 1

satisfaction \rightarrow brand preference \rightarrow repurchase intention.

Equation 2

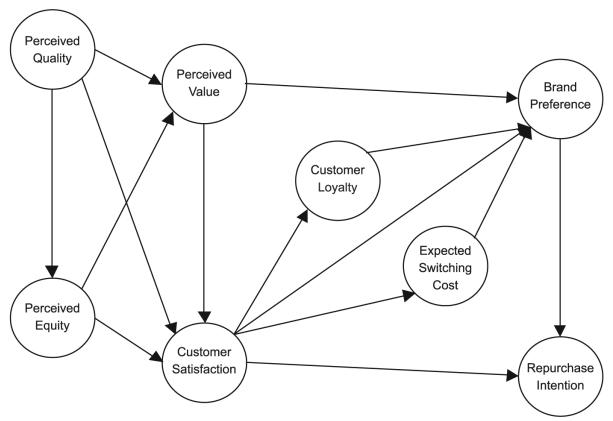


Figure 1The research model

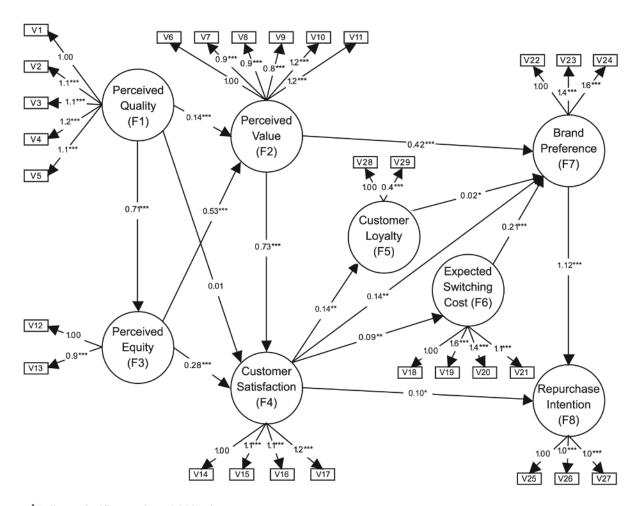


Figure 2Research model with unstandardised parameter estimates

^{*} Indicates significant at the p<0.05 level.

*** Indicates significant at the p<0.01 level.

**** Indicates significant at the p<0.001 level.

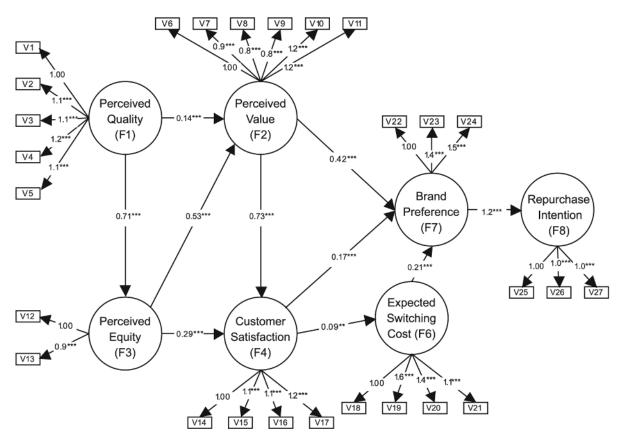


Figure 3The modified model

^{*} Indicates significant at the p<0.05 level.

*** Indicates significant at the p<0.01 level.

**** Indicates significant at the p<0.001 level.

Hv	not	hes	318

Empirical support

Hypotheses with considerable empirical support

H4(d). Customer satisfaction upon repurchase intention

Anderson and Sullivan (1993), Bolton (1998), Cronin and Taylor (1992), Fornell (1992), Oliver (1980), Patterson and Spreng (1997), Rust and Zahorik (1993), Selnes (1998), Swan and Trawick (1981), Taylor and Baker (1994), Woodside *et al.* (1989)

H6(a). Perceived equity upon customer satisfaction

Andreassen (2000), Bitner et al. (1990), Blodgett et al. (1995), Boshoff and Leong (1998), de Ruyter and Wetzels (2000), Erevelles and Leavitt (1992), Oliver and DeSarbo (1988), Oliver and Swan (1989), Szymanski and Henard (2001), Tax et al. (1998) Berry et al. (1994), Bitner et al. (1990, 1994), Goodwin and Ross

H7(b). Perceived quality upon perceived equity H7(c). Perceived quality upon perceived value

(1992), Wells and Stafford (1995) Andreassen and Lindestad (1998), Bolton and Drew (1991b), Dodds *et al.* (1991), Erdem and Swait (1998), Grewal *et al.* (1998b), Ostrom and Iacobucci (1995), Smith Gooding (1995), Sweeney

et al. (1999

Intuitively obvious hypotheses with limited empirical analysis

H1. Brand preference upon repurchase intentionH2. Expected switching cost upon brand preference

Andreassen and Lindestad (1998), Erdem and Swait (1998), Pritchard *et al.* (1999), Roest and Pieters (1997) de Ruyter *et al.* (1998), Fornell (1992), Grønhaug and Gilly (1991),

Jones *et al.* (2000), Peter and Tarpey (1975), Sharma and Patterson (2000)

H3. Customer loyalty upon brand preference H4(a). Customer satisfaction upon brand Gremler and Brown (1999), Krishnamurthi *et al.* (1992), Murray (1991), Perry and Hamm (1969), Roselius (1971), Roy *et al.* (1996) Innis (1991), Oliver (1980), Oliver and Bearden (1985), Stauss and Neuhaus (1997)

preference *H5(a)*. Perceived value upon customer satisfaction

Andreassen and Lindestad (1998), Cronin *et al.* (2000), Crosby and Stephens (1987), McDougall and Levesque (2000), Patterson and Spreng (1997)

H5(b). Perceived value upon brand preference

Dodds et al. (1991), Erdem and Swait (1998), Grewal et al. (1998a),

Sinha and DeSarbo (1998)

Hypotheses with conflicting empirical evidence

H4(b). Customer satisfaction upon customer loyalty

Andreassen and Lindestad (1998), Bitner (1995), Bitner et al. (1990), Bloemer and de Ruyter (1998), Bloemer and Kasper (1995), Colgate et al. (1996), Fornell (1992), Liljander and Strandvik (1995), Söderlund (1998), Srinivasan (1996), Stauss and Neuhaus

(1997), Storbacka et al. (1994)

H7(a). Perceived quality upon customer satisfaction

Anderson and Sullivan (1993), Caruana and Pitt (1997), Johnston (1995), McAlexander *et al.* (1994), Mittal *et al.* (1998), Powpaka (1996), Taylor and Baker (1994), Taylor and Cronin (1994)

Hypotheses not intuitively obvious with limited empirical analysis

H4(c). Customer Fornell (1992), Jones et al. (2000), Maute and Forrester (1993)

satisfaction upon expected

switching cost

H6(b). Perceived equity Goodwin and Ross (1992), Smith et al. (1999) upon perceived value

Table I. Empirical support for propositions

Table IEmpirical support for propositions

Selling	Se	ervice type
arrangements	Personal superannuation	Comprehensive car insurance
Agent	Company A: 2,000 customers stratified by age	Company B: 2,000 customers stratified by experience
Direct	Not applicable ^a	Company C: 1,000 customers stratified by experience Company D: 1,923 customers stratified by experience

Table II. Sample frame Note: $^{\rm a}$ Most personal superannuation is sold via independent intermediaries or agents for the superannuation company

Table IISample frame

Characteristic	Company A	Company B	Company C	Company D ^a	Total
Financial service	Personal superannuation	Comprehensive car insurance	Comprehensive car insurance	Comprehensive car insurance	
Main selling personnel Customers surveyed	Agents and brokers	Agents and brokers	Company employees	Company employees	
(No.)	2,000	2,000	1,000	1,923	6,923
(per cent)	28.89	28.89	14.44	27.78	100
Stratification criteria	Sample divided equally between four age ranges: 25-34 yrs; 35-44 yrs; 45-54 yrs; 55+ yrs	50 per cent of sample had made a change to, or a claim on the policy in the last three years	50 per cent of sample had made a claim on the policy in the last three years	50 per cent of sample had made a change to, or a claim on the policy in the last three years	
Questionnaires returned					
(No.)	222	362	234	366	1,174
(per cent)	18.91	30.84	19.08	31.18	100
Useable returns					
(No.)	213	350	210	359	1,132
(per cent)	18.82	30.92	18.56	31.71	100
Response rate (per cent)	10.65	17.50	21.00	18.67	16.35

Table IIISample size and response rate

	Model component	Literature source
	Perceived quality	Cronin and Taylor (1992), Parasuraman et al. (1991)
	Perceived value	Dodds <i>et al.</i> (1991), Lundstrom and Lamont (1976), Mano and Oliver (1993), Zeithaml (1988)
	Perceived equity	Oliver and Swan (1989)
	Customer satisfaction	Oliver (1980, 1993), Oliver and Swan (1989), Westbrook and Oliver (1981)
	Customer loyalty	Burford <i>et al.</i> (1971)
	Expected switching cost	Jacoby and Kaplan (1972), Mowen and Mowen (1991), Oliva et al. (1992), Peter and Tarpey (1975)
Table IV	Brand preference	Martensen (1993), Oliva $\operatorname{\it etal.}$ (1992), Oliver and Swan (1989), Singh (1991)
Table IV. Literature sources for development of factor scales	Repurchase intention	Bagozzi (1982), Clawson (1972), Fornell (1992), Granbois and Summers (1972), Oliver (1980), Oliver and Bearden (1985), Oliver and Swan (1989), Rust <i>et al.</i> (1995), Sheppard <i>et al.</i> (1988)

Table IVLiterature sources for development of factor scales

			-	Patl	n and unstar	Path and unstandardised solution (β)	tion (β)			-
	P qual (F1) ↓	P eq (F3) 1	P qual (F1) ↓	P val (F2)		P eq (F3) Cust sat (F4) P val (F2) Cust sat (F4) Sw cost (F6)	P val (F2)	Cust sat (F4)	Sw cost (F6)	Brand pret (F7)
Group	P val (F2)	P val (F2)	P eq (F3)	Cust sat (F4)	Cust sat (F4)	Sw cost (F6)	Brand pref (F7)	Brand pret (F7)	Brand pret (F7)	Kep intent (F8)
All companies	0.144*** 0.033 (0.08, 0.21)	0.533*** 0.035 (0.46, 0.6)	0.713*** 0.038 (0.64, 0.79)	0.734*** 0.041 (0.65, 0.81)		0.088** 0.027 (0.04, 0.14)	0.425*** 0.053 (0.32, 0.53)	£ 2	0.208*** 0.026 (0.16, 0.26)	1.202*** 0.065 (1.07, 1.33
Company A (super)	0.059 0.035 $(-0.01, 0.1)$	0.452*** 0.047 (0.36, 0.54)	0.475*** 0.071 (0.34, 0.61)	1.469*** 0.186 (1.1, 1.83)	0.037*** 0.008 (0.02, 0.05)	0.048 0.035 (-0.02, 0.1)	0.404** 0.144 (0.12, 0.69)	0.152* 0.076 (0, 0.3)	0.123 0.08 $(-0.03, 0.3)$	0.676*** 0.183 (0.32, 1.03
Company B	0.054 0.063 $(-0.07, 0.2)$	0.575*** 0.067 (0.44, 0.71)	0.514*** 0.073 (0.37, 0.66)	0.56*** 0.053 (0.46, 0.66)	0.324*** 0.042 (0.24, 0.41)	0.243*** 0.058 (0.13, 0.36)	0.335*** 0.069 (0.2, 0.47)	0.241*** 0.071 (0.1, 0.38)	0.203*** 0.042 $(0.12, 0.29)$	1.686*** 0.124 (1.44, 1.93
Company C	0.121 0.096 $(-0.07, 0.3)$	0.46*** 0.091 (0.28, 0.64)	0.959*** 0.094 (0.77, 1.14)	0.607*** 0.102 (0.41, 0.81)	0.363*** 0.063 (0.24, 0.49)	0.301*** 0.075 (0.15, 0.45)	0.551*** 0.132 (0.29, 0.81)	0.089 0.091 $(-0.09, 0.3)$	0.086 0.048 $(-0.01, 0.2)$	1.312*** 0.161 (1, 1.63)
Company D	0.253** 0.086 (0.08, 0.42)	0.349*** 0.074 (0.2, 0.49)	0.919*** 0.084 (0.75, 1.08)	0.648*** 0.071 (0.51, 0.79)	0.323*** 0.048 (0.23, 0.42)	0.22*** 0.057 (0.11, 0.33)	0.53*** 0.088 (0.36, 0.7)	0.21** 0.066 (0.08, 0.34)	0.126** 0.044 (0.04, 0.21)	1.212*** 0.111 (0.99, 1.43
Wholesale companies (A and B)		0.505*** 0.041 (0.42, 0.59)	0.564*** 0.052 (0.46, 0.67)	0.899*** 0.071 (0.76, 1.04)	0.239*** 0.041 (0.16, 0.32)	0.041 0.037 $(-0.03, 0.1)$	0.297*** 0.074 (0.15, 0.44)	0.175*** 0.053 (0.07, 0.28)	0.232*** 0.034 (0.17, 0.3)	1.387*** 0.121 (1.15, 1.62
Retail companies (C and D)	0.234*** 0.07 (0.1, 0.37)	0.395*** 0.062 (0.27, 0.52)	0.935*** 0.063 (0.81, 1.06)	0.6*** 0.056 (0.49, 0.71)	0.336*** 0.037 (0.26, 0.41)	0.258*** 0.046 (0.17, 0.35)	0.467*** 0.069 (0.33, 0.6)	0.187*** 0.054 (0.08, 0.29)	0.108** 0.033 (0.04, 0.17)	1.242*** 0.093 (1.06, 1.42
										(continued
Path mod to										

Table V.
Path coefficients for the modified model applied to respondent groups

Table VPath coefficients for the modified model applied to respondent groups

				Path	n and unstar	Path and unstandardised solution (β)	tion (β)			
			P qual							Brand pref
	P qual (F1)	qual (F1) P eq (F3)	(F1)	P val (F2)	P eq (F3)	P val (F2) P eq (F3) Cust sat (F4) P val (F2) Cust sat (F4) Sw cost (F6)	P val (F2)	Cust sat (F4)	Sw cost (F6)	(F7)
	→	→	→	→	→	→	→	→	→	→
				Cust sat	Cust sat		Brand	Brand pref Brand pref	Brand pref	Rep intent
- Group	P val (F2)	val (F2) P val (F2) P eq (F3)	P eq (F3)	(F4)	(F4)	Sw cost (F6) pref (F7)	pref (F7)	(F7)	(F7)	(F8)
Companies B C	0.119*	0.535**	***950	***0950	***6550	***200	0.414**	0.109***	0.140***	1 497***
companies e, e	777.0	0000	00.0	0000	200.0	0.50	111.0	101.0	0.110	17.7
and D (total car)	0.047	0.046		0.036	0.028	0.036		0.043	0.026	0.073
	(0.02, 0.2)	(0.44, 0.63)	(0.66, 0.85) $(0.5, 0.64)$	(0.5, 0.64)	(0.28, 0.39)	(0.19, 0.33)	(0.32, 0.51)	(0.11, 0.28)	(0.1, 0.2)	(1.28, 1.57)
More experienced	0.118*	0.453***	0.837***	0.761***	0.33***	0.081*	0.549***	0.232***	0.162***	1.174**
	0.051	0.049	0.059	0.061	0.035	0.036	980.0	0.063	0.039	0.074
	(0.02, 0.22)	(0.36, 0.55)		(0.72, 0.95) (0.64, 0.88)	(0.26, 0.4)	(0.01, 0.15)	(0.38, 0.72)	(0.11, 0.36)	(0.09, 0.24)	(1.03, 1.32)
Less experienced	0.159***	0.634	0.591	0.758***	0.205	*260.0	0.299***	0.106*	0.213***	1.237***
	0.043	0.051	0.049	0.059	0.045	0.04	0.063	0.053	0.033	0.118
	(0.07, 0.24)	(0.53, 0.73)	(0.49, 0.69)	(0.64, 0.87) (0.12, 0.29)	(0.12, 0.29)	(0.02, 0.18)	(0.02, 0.18) (0.18, 0.42)	(0,0.21)	(0.15, 0.28)	(1.01, 1.47)
Age			No	models wer	e tested usir	No models were tested using the subgroups defined by age	ps defined l	y age		
Notes: *Indicates significant at the $p < 0.05$ level. **Indicates significant at the $p < 0.01$ level. *** Indicates significant at the $p < 0.001$ level	gnificant at th	he $p < 0.05$	level. ** Inc	licates sign	ificant at th	te $p < 0.01$ lex	rel. *** Indi	cates significa	ant at the $p <$	0.001 level

Table V. | Line of the modified model applied to respondent groups

Hypoth	esis	Support
H1.	The strength of brand preference (F7) has a direct positive effect on repurchase intention (F8)	Very strongly supported***
H2.	Expected switching cost (F6) has a direct positive effect on brand preference (F7)	Very strongly supported***
Н3.	Customer loyalty (F5) has a direct positive effect on brand preference (F7)	Not supported ^a
H4(a).	Customer satisfaction (F4) has a direct positive effect on brand preference (F7)	Very strongly supported***
H4(b).	Customer satisfaction (F4) has a direct positive effect on customer loyalty to the company (F5)	Not supported ^a
H4(c).	Customer satisfaction (F4) has a direct positive effect on customer expected switching cost (F6)	Strongly supported**
H4(d).	Customer satisfaction (F4) has a direct positive effect on repurchase intention (F8)	Not supported ^b
H5(a).	Perceived value of service (F2) has a direct positive effect on customer satisfaction (F4)	Very strongly supported***
H5(b).	Perceived value of service (F2) has a direct positive effect on brand preference (F7)	Very strongly supported***
H6(a).	Perceived equity of service (F3) has a direct positive effect on customer satisfaction (F4)	Very strongly supported***
H6(b).	Perceived equity of service (F3) has a direct positive effect on the perceived value of the service (F2)	Very strongly supported***
H7(a).	Perceived quality of service (F1) has a direct positive effect on customer satisfaction (F4)	Not supported ^a
H7(b).	Perceived quality of service (F1) has a direct positive effect on the perceived equity of the service (F3)	Very strongly supported***
H7(c).	Perceived quality of service (F1) has a direct positive effect on the perceived value of the service (F2)	Very strongly supported***
suppor suppor	: Supported*=p-value in modified model < ted**=p-value in modified model < 0.01 (see ***=p-value in modified model < 0.001 (see ***=p-value in modified model < 0.001 (see ***)	see Table V). Very strongly Table V). ^a The customer loyalty

equation analysis" section. The customer satisfaction \rightarrow repurchase intention path was removed from the model during the refining process, see discussion in the "Structural equation analysis" section. The customer satisfaction \rightarrow repurchase intention path was removed from the model during the refining process, see discussion in the "Structural equation analysis"

section. ^b The perceived quality \rightarrow customer satisfaction path was removed from the model during the refining process, see discussion in the "Structural equation analysis" section

Table VI. Research results

Table VIResearch results

	Factor	Variable	Question
	Perceived quality	1	The company employees (agent) tell me exactly when services will be performed
		2	The company employees (agent) give me prompt service
		3	The company employees (agent) are always willing to help
		4	me The behaviour of the company employees (agent) gives me confidence
		5	The company employees (agent) understand my specific needs
	Perceived value	6	The \$ premium cost for the company's insurance is low, compared to other car insurance companies OR the fees charged for my superannuation policy are low, compared to other financial service companies
		7	The flexibility of the company's insurance (superannuation)
		8	is sufficient to meet my needs The company's insurance policy provides additional financial benefits and assistance OR my superannuation
		9	fund provides me with a high investment return I can readily understand the exclusions in the insurance policy document OR I can readily understand the
		10	superannuation policy document I regard the policy premium as acceptable OR I regard the
		11	company's superannuation charges as acceptable I consider [company name] car insurance to be a good buy OR I consider the superannuation to be a good investment
	Perceived equity	12	I have been treated right by the company (treated justly and honestly)
		13	I have been treated fairly by the company
	Customer satisfaction	14	My decision to purchase car insurance (superannuation) from the company was a wise one
		15	I feel good about my decision to purchase the company's car insurance (superannuation)
		16	I am pleased that I purchased car insurance
		17	(superannuation) from the company I would positively recommend the company's car insurance (superannuation) to other people
	Customer loyalty ^a (1) Expenditure ratio	28	Over the last three years, have you purchased <i>all</i> of your car insurance from (company name)? (If yes, then go to next section). OR Over the last three years, have you made
ible AI. riable questions for eresearch model			superannuation contributions only to your present financial services company and to no other company? (Do not include employer contributions.) (If your answer is yes, then go to the next section of the questionnaire.)
tors			(continued)

Table AIVariable questions for the research model factors

Factor	Variable	Question
	28	Over the last three years, how much of your total expenditure on car insurance (to all companies), have you spent with (company name)? <i>Or</i> Over the last three years, how much of your total superannuation contributions [to all companies], has been made to your present financial services company? (Do not include employer contributions)
(2) Patronage ratio	29	How many insurance companies can you name that compete against (company name) for car insurance customers? (write names or initials of companies, eight spaces provided). OR How many financial services companies can you name that offer superannuation plans, besides your present financial services company? (write names or initials of companies,
	29	eight spaces provided.) Over the last three years, how many companies [including (company name)], have you purchased car insurance from? Or Over the Last three years, how many companies [including, your present financial services company], have you made superannuation contributions to? (Do not include employer contributions)
Expected switching cost	18	What level of \$ costs do you feel would be incurred in switching to another car insurance (superannuation)
	19	company? What amount of inconvenience do you feel would be incurred in arranging to switch to another car insurance
	20	(superannuation) company? What amount of time do you feel would be involved in arranging to switch to another car insurance (superannuation) company?
	21	What is the likelihood that you will lose money if you switch to another car insurance (superannuation) company?
Brand preference	22	[Company name] meets my car insurance (superannuation)
	23	requirements better than other companies I am interested in trying car insurance (superannuation) from another company. [Scale reversed for this negatively
	24	expressed item] I intend, in the near future, to replace my [company name] insurance (superannuation) with car insurance (superannuation) from another company. [Scale reversed for this negatively expressed item]
Repurchase intention	25	Do you intend to continue to purchase, at least the same amount, of car insurance from (company name) over the next 12 months? <i>Or</i> Do you intend to continue to contribute, at least the same amount, to personal superannuation from your present financial services company over the next 12 months?
		(continued)

Table AI.

Factor	Variable	Question
	26	All things considered, how likely is it that you will actually purchase, at least the same amount, of car insurance from (company name) over the next 12 months? <i>Or</i> All things considered, how likely is it that you will actually contribute, at least the same amount, to personal superannuation from your present financial services company over the next 12 months?
	27	What are the chances in ten that you will continue to purchase, at least the same amount, of car insurance from (company name) over the next 12 months? <i>Or</i> What are the chances in ten that you will continue to contribute, at least the same amount to personal superannuation from your present financial services company over the next 12 months? [11-point Likert scale adjusted to a seven-point scale]

Notes: ^aThe loyalty index, adapted from Burford *et al.* (1971), is given by: $Li=7[b_i^{(n+1-pi/n)}]^{1/2}$ Where: L_i is the loyalty of the *i*th customer towards a particular service, measured on a scale of 0.25-7.00. The minimum value of the customer loyalty index is when $b_i=0.01$, n=8 and $p_i=8$, and the maximum value is when $b_i=1$, n=8 and $p_i=1$. b_i is the fraction of the budget for the service class allocated to the particular firm's service during the survey period, by the *i*th customer. (For six superannuation respondents, plus 0.01 was added to nil superannuation contributions, to prevent an index of zero). p_i is the number of firms patronised for the designated service, by the *i*th customer during the survey period. n is the number of firms (to a maximum of eight) named by the respondent, as providing the designated financial service. Plus one is added to the numerator of the patronage ratio to prevent division into zero, which would result in an index of zero

Table AI.

Table Alcontinued

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Appendix

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