

**Service Switching Model (SSM): A Model of Customer Switching Behavior
in the Services Industry**

by
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**A thesis submitted in partial fulfillment of the requirements for the degree of
Ph.D. in Management**

**Queen's University
Kingston, Ontario
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March, 1997

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0-612-20548-7

ABSTRACT

Services are rapidly growing into a major contributor to the North American as well as the world economy, providing an ever increasing proportion to their GDPs (Lovelock 1992). It is no exaggeration, then to say, that retaining customers for a service provider will be the key to long term economic success. As such, it is important to understand why customers switch service providers. Such diagnosis can act as a guide to actions that must be taken by the service provider to retain its present customers and hence avoid the negative outcomes that may result as a consequence of switching.

This research build on Keaveney's (1995) work and used related studies from the disciplines of economics, psychology, and marketing to develop a model of service switching. The proposed model (SSM) was empirically examined with data collected from customers of mortgage services of various Canadian financial institutions. Data on factors deemed responsible for switching behavior, along with switching intentions were collected from mortgage customers. Subsequently, self reports of their actual behavior were also collected via telephone. As means of comparison, two variants to the SSM were also proposed and empirically examined.

The results of the empirical test suggested that one's attitude towards switching behavior, one's perceived control over switching or perceived switching costs and one's perceptions of satisfaction with the service provider were strongly associated with one's intentions to switch financial institutions for mortgages. In addition, one's subjective norms, one's perceived relevance of service quality and perceptions of service quality offered by their financial institution were strong predictors of one's attitude towards switching. Lastly, but importantly, switching intentions were the only significant predictor of customers actual switching behavior. Interestingly, the two variants proposed did not add significantly to our understanding of customer switching behavior over and above that offered by the SSM.

Theoretical implications, directions for future research and managerial implications of this study are then discussed.

ACKNOWLEDGEMENTS

I am indebted to a number of people for their efforts, concern and support in the completion of this dissertation: to my supervisor, Shirley Taylor, for her mentoring, sponsorship, encouragement and availability; to the members of my thesis committee, Steve Arnold, Ida Berger, Lea Fagbrigar and Peter Todd, for their constructive comments and criticisms, Ron Turner, for his role as a mentor during my stay in the Ph.D. program. I would also like to thank Farhad Simyar, dean, and the members of the marketing group at UNB, for their help in providing me course relief when I needed it the most.

More removed from the actual production of this thesis, but very important towards its completion are my family and friends who have been a source of constant support and encouragement: my parents, for instilling in me the love of learning, their love and support; my sisters, for their love and still accepting me as their brother even after five years of having not seen each other; my grandparents, my uncle and aunt and my cousins in Montreal, my family away from home; Maureen Sterling; for a long standing friendship that I will value forever; my friends Dave and Danica, Sangita, Al and Diana, Ashwin and Kiran, Paritosh and Reena, Shinder, Heikki and Nina, Barry and Mary, Mike and Sharron, for some memorable times during my stay in Kingston.

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Chapter 1

INTRODUCTION

Services are rapidly growing into a major contributor to the North American as well as the world economy. In industrialized economies, the service sector is quickly outpacing the goods-producing sector not only in the amount of dollars spent on buying, but also in employment growth, thus contributing an ever increasing proportion to their GDPs (Lovelock 1992). It is no exaggeration, then to say, that retaining customers for a service provider will be the key to long term economic success.

Because of the significant financial impact that customer switching can have on a service firm, it is important to understand why customers switch service providers. Indeed, these objectives are what my research questions aim at achieving. What factors influence the decision to switch service providers and how they influence the decision making process of the consumers to switch service providers is the focus of this research.

Prior work with a primary focus on service switching is extremely limited. In fact, there is only one published article (Keaveney 1995) that explicitly explores the issue of service switching as its main focus. Research in that article is exploratory in nature which aims primarily at *providing foundation for future systematic investigation* in the area of customer switching in service industries. Clearly, a strong theoretical grounding to study the phenomenon is required if the objective of *systematic investigation* is to be accomplished. My research builds on Keaveney's work and uses related studies from the disciplines of economics, psychology, and marketing to develop a model of service

switching. This is essential because research on product/brand switching cannot be directly applied to a service context due to well-established differences between the two (ibid. 1995). Characteristics that are unique to services include: (a) that which is delivered is a performance, (b) the customer is involved in production, (c) other customers are often similarly involved in production, (d) quality control can only be performed during delivery, (e) service cannot be inventoried, (f) delivery is “realtime” and (g) distribution channels are nonexistent or compressed (Oliver 1993b).

The model proposed indicates how the various elements referred to below relate to each other and ultimately to the consumer’s decision to switch service providers. This research focuses on understanding the process of customer switching in service industries with respect to the following elements incorporated into a model :

- (1) Satisfaction: I explore the influence of customer satisfaction with the service provider on her/his propensity to switch.
- (2) Service Quality: I explore the influence of service quality perceived by the customer on his/her propensity to switch.
- (3) Theory of Planned Behavior: I explore the theory of planned behavior as a critical determinant of switching behavior. More specifically, how factors such as the customer’s attitude towards switching, customer subjective norms, perceived behavioral controls, which manifest themselves in terms of perceived switching costs, and switching intentions influence service switching. In addition, I examine the moderating effect of perceived relevance of an attitude in the relationship between customer attitude towards switching service providers and service quality.

Four main contributions to the literature can be ascribed to this dissertation. This research is the first to develop a model for customer switching in service industries. In

addition to developing this model, the research affords an opportunity to explore the relationships between general attitudes (service quality) and specific behaviors (switching service providers), a critical but vastly unexplored area of research. This is possible and appropriate because conceptualization of service quality as an attitude is gaining significant acceptance in the light of an increasing criticism of its traditional perception-expectation gap formulation (cf. Cronin and Taylor 1994). The attitude conceptualization of service quality also affords an opportunity to bring an attitude - behavior framework to the domain of services literature, another uninvestigated area. Lastly, given the problems in using behavioral intention measures as proxy for actual behavior and the need for understanding the relationship between behavioral intentions and actual behavior, this dissertation contributes incorporating both behavioral intentions and actual behavior in one model and explicitly examining the relationship between the two.

Further, this research offers potential for significant managerial implications. Such diagnosis can act as a guide to actions that must be taken by the service provider to reduce switching on the part of its present customers and hence the negative outcomes that may result as a consequence of switching.

In this dissertation, a model of customer switching in the services industry (SSM) is developed incorporating the elements suggested earlier. It proposes that service switching behavior is influenced by customer perceptions of various attitudinal, normative, affective and control factors. Also included in this dissertation are details of the

research design and methodology used in an empirical examination of the service switching model. The empirical test focuses on customer switching in the context of mortgage services offered by various Canadian financial institutions. Data on factors deemed responsible for switching behavior, along with switching intentions were collected from mortgage customers. Subsequently, self reports of their actual behavior were also collected via telephone.

The following chapter addresses some definitional issues, presents the rationale for this study and reviews past research on switching behavior in the context of both services and products. Based on this review, chapter 2 proposes a general form of the service switching model. Chapter 2 ends by providing a layout and composition of the subsequent chapters in this dissertation.

Chapter 2

SERVICE SWITCHING BEHAVIOR

2.1 Service Defined

What is a “service”? Kotler (1991, p. 455) defines a service as follows

A service is any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product.

Services include such activities as banking, medical care, consulting, transportation, etc..

Kotler (1991) further suggests that all market offerings fall in the continuum of a) *pure goods such as soap and toothpaste*, b) *tangible goods with accompanying services such as cars and computers*, c) *major services with accompanying minor goods and services such as transportation and banking*, and d) *pure services such as consulting*. Emphasis in this thesis is on market offerings where the primary component of an offering is a service.

2.2 Services versus Goods

Key differences between services and goods have been highlighted in the services marketing literature over the past decade (e.g., Berry 1980; Lovelock 1981; Kotler 1991).

Four major characteristics have been used to differentiate services from goods. 1)

Intangibility - refers to the fact that services cannot be seen, tasted, felt etc. before they are bought; 2) *Inseparability* - refers to the fact that services are produced and consumed at the same time; 3) *Variability* - refers to the fact that services are variable, since they depend on who provides them and when and where they are provided, and 4)

Perishibility - refers to the fact the services cannot be stored. In addition, goods marketing has tended to focus on the goods end of the spectrum than the consumer

(Bateson 1989). Research in goods marketing has emphasized the four P's as agents responsible for varied behavioral responses on part of the consumers rather than consumer factors such as their perceived attitudes, perceptions of quality and satisfaction, etc.. The effects of these distinctions are twofold. Not only do these characteristics greatly effect the design of marketing programs for services, they have implications for research efforts directed at consumer behavior in the services industry. Service switching behavior which translates into significant financial consequences for service firms, but has remained unexplored in the services literature, is the focus of this research.

2.3 Switching Defined

Though no one explicit definition for switching in services or brands/products exists in the marketing literature, it has been described as: *the loss of a continuing service customer* (Keaveney 1995), *customer defections* (Reichheld and Sasser 1990), *interbrand substitutability* (Bucklin and Srinivasan 1991), *brand changing* (Holland 1984), *movement of buyers from one product to another* (Carpenter and Lehmann 1985), *curtailing patronage* (Yi 1990), *changes in brand choice* (Morgan and Dev 1994), *'non' repeat purchase behavior* (Kasper 1988), *'inconsistency' of brand choice from purchase to purchase* (Sambandam and Lord 1995). Clearly, the central notion is a movement away from the current brand/product/service when a subsequent need arises.

The Oxford English Dictionary, second edition, defines switching as *changing or transferring from one position to another; exchanging*. It implies the act of replacing something that one currently has with another that is available. Hence, for this research

service switching will be defined as the act of replacing or exchanging the current service provider with another that is available to the consumer in the market.

2.4 Rationale for the Study

Services organizations contribute a sufficiently large portion of the world economy and even a larger portion of the North American economy. It is estimated that more than 70 percent of the all jobs in Canada and US are accounted for by the service sector. In addition the percentage of GNP being provided by the service sector is well over 70 percent (Rust, Zahorik and Keiningham 1996). This has resulted in a fundamental shift in understanding the role of marketing. The emphasis has shifted from a primarily offensive (new customer) orientation to an extended defensive (customer retention/ reduction in customer switching) perspective, essentially as a result of a displacement from the *product world* to the *service world* (ibid. 1996). As discussed earlier, the *service world* differs from the *product world* not only in terms of *Intangibility, Inseparability, Variability, and Perishability*, but also in the fact that a greater focus is warranted on consumer factors such as consumers attitudes, perceptions of service quality and satisfaction, etc., rather than on product characteristics. Consequently, as a means of exploring consumer behavior in the services industry, research distinct from the products literature is required. Keaveney (1995) acknowledges the differences and suggests that reasons for switching services may not conform to reasons for switching goods, thereby requiring research with a primary focus in the area of services marketing. Since defensive marketing is the key to success in the *service world*, understanding switching behavior of consumers in the

services industry becomes a valuable endeavor. The need for such an investigation becomes acute, given the paucity of research on the topic.

Marketing literature remains devoid of any systematic research on the topic, primarily because service switching, when investigated, has been limited to tests of nomological, measurement, or predictive validity of service quality-satisfaction models (Keaveney 1995). In addition, service quality and satisfaction have been shown to be related to some measure of a behavioral intention to repurchase as opposed to actual switching behavior (LaBarbera and Mazursky 1983; Kasper 1988; Bitner 1990; Boulding et al. 1993; Cronin and Taylor 1992; Zeithaml, Berry, and Parasuraman 1996). However, because an intention is only a tentative measure of behavioral loyalty (Oliva, Oliver and MacMillan 1992), direct application of the results is problematic (Anderson and Fornell 1994; Keaveney 1995). In fact, Keaveney (1995, p. 72) explicitly identifies three problems with using only behavioral intention measures

1. Behavioral intentions are an imperfect proxy for behavior
2. In some studies, "intentions to switch" is one item in a composite "behavioral intentions" variable, thereby confounding the contribution of quality or satisfaction uniquely to service switching (cf. Bitner 1990; Boulding et al. 1993)
3. Most studies emphasize intentions to engage in behavior *beneficial* to an organization rather than intentions to engage in behaviors *harmful* to an organization. Variables and relationships that predict positive outcomes may be asymmetrical with those that predict negative outcomes (LaBarbera and Mazursky 1983)

Hence, research efforts should be geared towards investigating behavioral intentions to switch services in integrative frameworks and not use them as proxies for actual behavior. Despite the constraints on the availability of literature on service switching, research in related areas provides meaningful insights on factors that exhibit significant influence on the service switching behavior of consumers.

2.4.1 Related Research on Switching Behavior in Services

Though negative effects of customer switching such as reduced market share, impaired profitability and increased costs has been an area of great concern for service firms (Reichheld and Sasser 1990; Rust and Zahorik 1993; Rust, Zahorik, and Keiningham 1995), service switching from the customer's perspective has remained virtually unexplored in the marketing literature (Keaveney 1995). To understand the process, we first explore factors which have been recognized in the literature as possible determinants of switching behavior in consumers. Customer satisfaction with the service, the overall quality of service perceived by the customer, perceived costs, and attitude towards behavior when a customer thinks about switching service providers, are predominant variables that impact service switching decisions of consumers.

Customer satisfaction is an evaluative process of perceiving discrepancy between prior expectations and the actual performance of a product/service after it's consumption (cf. Tse and Wilton 1988). This is often referred to as the *expectancy disconfirmation*

model of consumer satisfaction. Several responses to customer satisfaction or dissatisfaction have been explored in the literature, an important one being that of switching from one supplier to another. Specifically, dissatisfaction with the present service provider will increase the customer propensity to switch to another and a satisfactory experience will encourage repatronage or loyalty. Crosby and Stephens (1987) related customer switching behavior in the insurance industry to their overall dissatisfaction with the insurer. In their two wave study, a test of significant contrasts showed that the group who retained the same insurer for the next year (internal replacement) had been significantly more satisfied with their current insurer than the group that switched insurers (external replacement). Using cross-sectional data on their past switching behavior, Rust and Zahorik (1993) identified customer satisfaction as a key factor influencing customer switching behavior in the banking industry. Likewise, Lubin (1992) stressed the importance of the link between customer satisfaction and customer retention for the banking industry. In the event of dissatisfaction with a service provider, Singh's (1990) study showed that variables like attitudes towards behavior had an impact on private complaint behavior (Singh 1988) which comprised intentions of non repatronage. The results were fairly consistent in this cross-industry study which included service industries such as grocery shopping, automotive repair, medical care, and banking services.

Service quality has been long recognized as an important variable responsible for consumers' decisions to switch. Service quality, most commonly defined as a judgment

about a service provider's overall excellence (cf. Oliver 1993b), has a similar impact on service switching as satisfaction. If the service provider is perceived to have high service quality, it will encourage the consumer to stay with the present service provider. On the other hand, a perception of low service quality will facilitate the loss of a continuing customer to an alternate service provider. In their article, Schlesinger and Schulenburg (1995b) argued that doubts about the insurance quality might cause consumers to switch insurers. This was the result of a probit analysis that examined the influence of various quality factors on the consumer's probability to switch insurers, who were identified as switchers or nonswitchers based on whether they had switched insurers in the past or not. Reichheld and Sasser (1990) argued that continuous improvements in service quality were the key to reducing customer defections in services. In a health care industry study, Andreasen (1985) used Hirschman's (1970) theory of Exit-Voice to argue that in the event of poor service quality, customers will exhibit switching behavior. The analysis was based on consumers past experiences with health service providers.

Switching costs have been identified as another key factor influencing the switching behavior of consumers. Switching costs can be described as the difficulty that a consumer faces to switch to another supplier. These costs could include perceived costs involved in searching for a new supplier, emotional costs of switching, costs in loss of loyal customer discounts and explicit financial cost such as budget constraints. Indeed, the higher the switching costs perceived by the consumer, the lower is the inclination to switch to a alternate service provider. In an empirical application of their semi-Markov

model, Hauser and Wisniewski (1982) provided evidence that perceived constraints on the budget had a significant effect on switching between different transportation services and modes. Further, Schlesinger and Schulenburg (1995a) provided evidence that satisfaction with the organization as well as the consumer's perceived switching costs played an important role in the consumer's decision to switch insurers.

2.4.2 A Model of Customer Switching Behavior in Service Industries

Keaveney's (1995) article was the first one to distinctly address service switching behavior as opposed to behavioral intentions and to come up with a comprehensive list of antecedents to switching behavior in the service industries. Given the constraint of no prior research, her research was exploratory in nature and aimed at introducing a grounded model of customer switching in the services industry.

Using the critical incident method for 45 different service businesses, the study identified eight causal antecedents to service switching behavior namely: *price, inconvenience, core service failure, service encounter failure, response to service failure, competition, ethical problems, and involuntary switching*. Core service failure was the single most important category responsible for service switching (44%). It has been successfully argued in the literature that service quality is directly influenced only by perceptions of performance (cf. Cronin and Taylor 1992). Based on this reasoning, it can be established that perceptions of inconvenience, core service failure, service encounter failure and response to service failure comprise the evaluation of service quality by

consumers. Hence, Keaveney's work validates suggestions by researchers that service quality is an important antecedent to service switching behavior.

Finally, to complement limited research in the area of service switching, literature on switching of brands/product might provide some important insights in identifying some variables and relationships for a general model of customer switching behavior.

2.5 Prior Research on Switching Behavior in Products/Brands

Though characteristics as *intangibility*, *perishability*, *variability*, and *inseparability from the service provider* are unique to services, there is a certain overlap in factors influencing switching decisions in services and brands/product. Satisfaction with the product and perceived cost of switching are significant variables in such decisions. In addition to variables such as variety seeking, marketing mix variables such as the product itself, price, and promotion have been identified as factors influencing the brand switching behavior of consumers.

Satisfaction appears to be the critical variable influencing brand switching decisions of the consumer. Fornell (1992) explicitly stated that a prime reason for enhancing customer satisfaction with a brand was to reduce switching to a competitor's brand. A strong influence of satisfaction on switching has been proposed and empirically explored in the literature (see, for instance, Diener and Greyser 1978; Richins 1987; Kasper 1988; Fornell and Wernerfelt 1987; Oliva, Oliver and MacMillan 1992; Rust and Zahorik 1993). This association confirms the conventional wisdom that customers who are less happy with a chosen brand on one occasion will switch to a competitor on the next (Morgan and

Dev 1994). Hence, customer satisfaction is likely to increase repeat purchase behavior and brand loyalty and hence reduce brand switching (Yi 1990).

Factors such as perceived barriers or costs to switching are seen to have a strong influence on the propensity of a customer to switch (Fornell 1992). If consumers perceive significant disutility in terms of search costs, learning costs, cognitive effort involved, financial risks and psychological risks, they are less likely to make changes in their brand choice.

Holland (1984) conducted a laboratory experiment to test the reasons for brand-switching when purchasing products for physical and social enhancement and for enjoyment. The results revealed that variety seeking was a primary reason for switching in enjoyment product brands, but performance was the only factor responsible for brand switching in products used for enhancement purposes. This supports Kahn, Kalwani and Morrison's (1986) claim that variety seeking is a major determinant of brand switching by consumers, but limited to the extent that it is not a consistent reason for switching across product types.

Agents such as product features/attributes are important determinants of brand switching behavior. Blin and Dodson (1980) developed a brand switching model combining stochastic modeling with the multiattribute models of brand choice. Their empirical examination of the data on eight soft drinks established that stochastic models of buyer behavior (brand switching) can be linked to a behavioral basis (attribute evaluation). Hence, product features/attributes might be responsible for brand switching. In fact,

Stephan and Tannenholz (1994) stressed that the difference in desirable attributes was a major reason for switching within a set of brands.

Carpenter and Lehmann (1985) found evidence that marketing mix elements such as price and advertising influenced the consumer's brand switching behavior. Specifically, high relative price appeared to be associated with increased switching, advertising effects, when significant, reduced the likelihood of switching. Vilcassim and Jain (1991) provided further support for such effects. Summarily, the rates of switching between brands that are a result of promotional activities and price reductions, are in reverse order to the share of purchase of the different brands. Other studies have also identified price changes as a critical factor influencing brand switching (Mahajan, Green and Goldberg 1982; Mazursky, LaBarbera and Aiello 1987; Bucklin and Srinivasan 1991).

In summary, the literature on switching in brands and products corroborates as well as augments the work in services in identifying possible antecedents to the switching behavior in services. The above discussion clearly reveals the importance of such variables as perceived quality of the service, satisfaction levels, perceived costs/barriers to switching, attitudes towards behavior, and intentions to switch in a consumer's decision to switch services. However, "the process of customer switching in service industries still remains unknown" (Keaveney 1995, p.80). This is the thesis. This dissertation will develop a model for customer switching behavior in service industries, henceforth called the SSM.

2.6 A General Form of the Service Switching Model

Despite limited research in service switching, a number of possible relationships among some variables of interest have been suggested above. Research from a variety of other areas in marketing, psychology and economics can be drawn upon to investigate some other factors and the relationships among them, and will be discussed in the subsequent chapters.

Consumer satisfaction and service quality play a central role in the area of services marketing (Rust, Zahorik and Keiningham 1996) and, hence, are critical to the success of defensive marketing efforts of a service organization. Research in the area of consumer satisfaction suggests it to be an immediate antecedent to a consumer's intention to switch a service provider, which in turn is an immediate antecedent to consumer switching behavior. Service quality, conceptualized as a general attitude, is established as a superordinate construct to consumer satisfaction, thus suggesting an indirect effect of service quality on a consumer's intention to switch a service provider.

Identification of intentions to switch as a determinant of switching behavior is of significant consequence here. It is recognized that when intentions guide behavior, then the behavior is planned and deliberate and involves considerable cognitive work. Such *deliberative processing* involves scrutiny of available information and analysis of cost and benefits of engaging in the behavior (Fazio 1990). This form of behavior is clearly different from a behavior that is more *spontaneous* in nature, not deliberate and reasoned. In the context of this thesis this means that the search for frameworks that might be used as building blocks for a model of switching behavior in the services industry is best

confined to models based upon deliberative processing. The framework provided by the Theory of Planned Behavior (Ajzen 1991) is most appropriate here. Not only is this a framework based on deliberative processing, it also incorporates variables such as attitudes towards behavior, subjective norms, and perceived behavioral control [for which an equivalence to perceived switching costs is established later] along with intentions and behavior in a cohesive manner. This is important because above stated variables have been recognized as important determinants of a consumer's decision to switch either a service or a product. Thus, the extent to which customer attitudes towards the behavior, subjective norms, and perceived behavioral control effect the decision making to switch service providers, is unknown. This is a significant limitation, given the fact that the theory of planned behavior has been recognized as a fundamental model for explaining social action (Bagozzi 1992). In addition, it's East (1993) contention that decisions about various aspects of services is an avenue where the role of the theory of planned behavior needs to be investigated. He goes on to suggest further that decisions about various financial services "should belong to this group". Hence strong arguments exist for the need to investigate the role of such frameworks in developing a model for customer service switching behavior.

Figure 1 illustrates the relationships between intention to switch services, switching behavior, and the factors influencing these behavioral variables. This figure includes the variables suggested by the research reviewed in this chapter and also includes some variables which are suggested by other areas of research. Specifically, Figure 1 identifies

switching intentions as an antecedent to switching behavior. Further, it also indicates the variables that are expected to influence switching intentions, namely:

1. Perceived service quality of the service provider
2. Consumer satisfaction with the service provider
3. Consumer attitude towards service switching
4. Perceived switching costs faced by the consumer in the event of switching
5. Consumer subjective norms

The discussion of the conceptual and empirical components of this research are as follows. Examining specific relationships among the variables identified above will be the focus of the next five chapters. The importance of consumer satisfaction and service quality in influencing switching decisions has been stressed earlier. Consequently, chapter 3 will explore the role of consumer satisfaction in the SSM and Chapter 4 will concentrate on the role of service quality in the SSM context in predicting satisfaction and attitude towards switching. Because we are dealing with deliberate decision making on part of the consumer to switch services, the use of a deliberative processing model, such as the theory of planned behavior, is most appropriate. Hence, chapter 5 will discuss the role of the theory of planned behavior in the SSM. When trying to forge a link between their global attitudes like service quality and specific behavioral choices like service switching, consumers may resort to defining whether their attitudes are in fact relevant and appropriate guides to the behavioral choices at hand. Incorporating this idea, chapter 6 will examine the moderating role of perceived relevance in the relationship between service quality and consumer attitude towards service switching. Chapter 7 will present the full fledged SSM. For each of these, prior direct and indirect research will be

considered as an aid to building links between the various antecedents of service switching behavior. Chapter 8 is a discussion on the research design, methodology and results for both the pretest study and the main study. Finally, this dissertation concludes with the discussion of the results in Chapter 9. Theoretical implications, managerial implication, limitations and directions for future research based on the results are laid out in this chapter.

Chapter 3

CONSUMER SATISFACTION

3.1 Introduction

Consumer satisfaction has been recognized as a key concept in marketing thought and practice. The realization of its importance had led to a proliferation of research in order to understand this concept (Yi 1990). This has resulted in various definitions of consumer satisfactions being proposed in the literature. The definitions include: “an evaluation rendered that the [consumption] experience was at least as good as it was supposed to be” (Hunt 1977, p. 459); “the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer’s prior feelings about the consumption experience” (Oliver 1981, p. 27); and “the consumer’s response to the evaluation of the perceived discrepancy between prior expectations [or some other norm of performance] and the actual performance of the product as perceived after its consumption” (Tse and Wilton 1988, p. 204).

Presenting the most recognized view of *consumer satisfaction*, Westbrook and Oliver (1991, p. 84) commented:

Consumer satisfaction has been variously defined in the literature, but the conceptualization that appears to have the greatest support is the view that satisfaction is a postchoice evaluative judgment concerning a specific purchase selection (Day 1984).

Further, this evaluative judgment was a function of an initial standard and some perceived discrepancy from the initial reference point (Oliver 1980). Oliver (1980, 1981) employed Helson’s adaptation level theory to develop the widely recognized *expectancy*

disconfirmation model of consumer satisfaction. His major theme was that performance specific expectations and expectancy disconfirmation, play a major role in satisfaction decisions. Specifically, expectations were thought to create a frame of reference about which one made a comparative judgment. Thus, outcomes poorer than expected (a negative disconfirmation) were rated below this reference point and those better than expected (a positive disconfirmation) were evaluated above the base.

This additive interpretation is well modeled in the adaptation level theory which posited that one perceived stimuli in relation to an adapted standard. As applied to satisfaction decisions, one's level of expectation about product performance, however created, could be seen as an adaptation level. Expectations were influenced by such factors as 1) the product itself including one's prior experience, brand connotations and symbolic elements, 2) the context including the content of communication from the sales people and social referents. 3) individual characteristics including persuasibility and perceptual distortion. Postdecision deviations were thought to be caused by the degree to which the product exceeded, met, or fell short of one's expectations i.e., positive, zero or negative disconfirmation. Satisfaction then, could be seen as an additive combination of the expectation level and the resulting subjective disconfirmation.

Churchill and Suprenant (1982) followed up the disconfirmation paradigm to further assess the determinants of customer satisfaction. Their modification included a

direct effect of performance on satisfaction - a relationship not hypothesized by the Oliver (1980). In addition to the direct effect of performance, their results supported the relationships hypothesized by the Oliver (1980) study for a nondurable product (a plant) but the results did not conform for a durable product (a video disc player). Specifically, for the nondurable product they found that expectations had a negative effect on disconfirmation and the performance had a positive effect on disconfirmation. Further, disconfirmation positively effected satisfaction, when individuals perceived the product performance better than expected. Also, performance and expectations directly effected satisfaction and in with disconfirmation they explained most variance in satisfaction. However, for the durable product, performance solely determined satisfaction with the product.

Next to follow was Bearden and Teel's (1983) study which was primarily aimed at incorporating customer complaining behavior in the customer satisfaction literature. Nevertheless, their research on automobile repair and service provided additional support for the Oliver (1980) model of customer satisfaction in the area of services.

Woodruff, Cadotte and Jenkins (1983) provided a modification to the disconfirmation of expectation model of satisfaction by replacing the concept of expectations with *experience-based norms*. These norms were standards that reflected the belief about the performance that a brand should provide to meet the consumers' needs/wants. They could further be categorized as either *brand-based norms* or *product-based norms*, depending on whether the norms were formed as a result of the consumers'

experience with a different brand or with a group of similar brands. In essence they were characterized by 1) the fact that they reflected desired performance in meeting needs/wants and 2) that they were constrained by performance consumers believed was possible based on their experience with known brands.

Cadotte, Woodruff and Jenkins (1983) provided evidence that either of the experience-based norms were better constructs in the satisfaction model than expectations. Specifically, the product norm model provided the best fit for the data, followed by the brand norm model and lastly the brand expectation's model. Though the product-based norm disconfirmation explained most variance for satisfaction, there was negligible difference in the results between the other two models. Hence, the disconfirmation paradigm was generally supported in the study, but it raised doubts about the conceptualization of the comparison standards i.e. the expectations construct as suggested in the Oliver (1980) study.

Following the Churchill and Suprenant (1982) study, Tse and Wilton (1988) found further support for the inclusion of performance as an antecedent of satisfaction in addition to expectations and disconfirmation. Their study also examined the viability of alternative disconfirmation and comparison standard conceptualizations. For the comparison standards they found though *expected performance* and the *ideal performance* provided a good fit in the satisfaction model, *equitable performance* failed as an operationalization of the comparison standard. For disconfirmation, they provided evidence that *subjective disconfirmation* performed much better than *subtractive disconfirmation* as a disconfirmation operationalization. In addition, they found support

for the proposition that consumers may use multiple comparison standards in the process of satisfaction formation. Their study revealed that both expectation standards and ideal standards relate individually to satisfaction and that this multiple-standard model was more robust in comparison to any single-standard model of satisfaction.

Elaborating on the work of Westbrook and Oliver (1991), which provides an insight into the correspondence between the consumption emotion patterns and consumer satisfaction, Oliver (1993a) proposed an expanded model of satisfaction. The model incorporated both negative and positive affect along with the established antecedent of satisfaction namely cognitive disconfirmation, where the positive and negative affect was explicitly modeled as emerging from consumer's reaction to product performance. In short, satisfaction was modeled as a function of affect, cognitive disconfirmation and direct experience.

In summary, the expectancy disconfirmation (and performance) paradigm is considered robust enough to be used across various contexts including product experience, interpersonal dealings and services (Oliver 1993b). Indeed, Rust and Oliver (1994) consider it to be a dominant model of consumer satisfaction in the services literature also (Taylor and Baker 1994). Lastly alternative frameworks for conceptualizing and operationalizing satisfaction have been proposed in the literature i.e., the value-precept disparity model by Westbrook and Reilly (1983) and most recently, the desires-congruency model by Spreng and Olshavsky (1993). Nevertheless, the expectancy

disconfirmation model continues to enjoy vast support in the literature over the other formulations.

3.2 Predicting Switching Intentions from Satisfaction

Though Oliver (1981) made no explicit test of the association between satisfaction and intentions to switch, he differentiated the two and proposed a summary causal relationship between the two. He suggested that intention to repatronize a service (a retail service, in his study) was a consequence of the satisfaction level of the consumer. Hence, a customer who had high satisfaction levels with a service provider would be more likely to repatronize. In their study on consumer experiences with automobile repairs and services, Bearden and Teel (1983) also hypothesized a negative path between satisfaction and intentions to repatronize (*decision to stop further purchases*). However, these intentions to repatronize were combined with other measures of complaint behavior to form an index of complaint activity. Data were collected in a two-phase longitudinal study with a four month measurement interval from 1200 members of a consumer panel. The results were based on a usable sample size of 375. Though the authors did not directly test for a relationship between the intentions to switch and satisfaction levels, a significant negative relationship was found between satisfaction and complaint behavior.

In an automobile purchase context, Oliver and Swan (1989) specifically tested the hypothesis of intention to repatronize as a function of the satisfaction level. Summarily, brief, higher levels of customer satisfaction should predict strong intentions to deal with the same salesperson on their next car purchase if s/he were still available. The results

showed that satisfaction was related very strongly to the intention to repatronize, as hypothesized. Support for such a relationship between switching intentions and customer satisfaction can be found in several other studies, including Andreasen (1985), Fornell and Wernerfelt (1987), Fornell (1992), and Oliva, Oliver and MacMillan (1992).

In the services context, there has also been empirical evidence that consumer satisfaction judgments are immediate antecedents to switching intentions (c.f. Woodside, Frey, and Daly 1989; Cronin and Taylor 1992; Gotlieb, Grewal, and Brown 1994). In addition, Rust and Zahorik (1993) used this causal relationship between switching intentions and satisfaction as a building block for developing a mathematical framework that linked customer satisfaction to individual loyalty, aggregate retention rate, market share and profits. Their assumption is that , “propensity to be loyal to the firm results from satisfaction on the loyalty factors”. Anderson (1993) also reiterates that dissatisfaction leads to greater likelihood that a customer will switch. Indeed, proposition 1 results from the above discussion.

P1: Higher levels of the consumer satisfaction judgments with the service provider should result in a lesser propensity to switch service providers.

Chapter 4

SERVICE QUALITY

4.1 Introduction

The construct of service quality has been recently defined as “The consumer’s overall impression of the relative inferiority/superiority of the organization and its services” (Bitner and Hubbert 1994, p. 77). This is consistent with the conceptual definition of service quality first proposed by Parasuraman, Zeithaml, and Berry (1988, p. 15) which represents service quality as “the consumer’s judgment about an entity’s overall excellence or superiority”.

Published research has illuminated issues from which a controversy as how best to conceptualize and measure the construct *Perceived Service Quality* has arisen. The following discussion gives a brief account of the debate. First I present a chronological account of the debate as it unfolded in the literature. Then I build up an argument for the best way to conceptualize and measure service quality. Finally, I discuss the role of service quality in the service switching context. However, before I begin to discuss the literature on service quality, it might be worthwhile to differentiate it from the construct of satisfaction.

4.2 Service Quality versus Satisfaction

Emerging literature suggests that though service quality and satisfaction are closely related, they are distinct constructs (c.f. Bitner 1990; Cronin and Taylor 1992; Oliver 1993b; Rust and Oliver 1994; Taylor and Baker 1994). The first distinction between the

two constructs is that whereas service quality is an overall evaluation, similar to an attitude, satisfaction is a more immediate reaction to a specific service experience (Parasuraman, Zeithaml, and Berry 1988; Bitner 1990; Cronin and Taylor 1992; Spreng and Singh 1993). A second distinction between the two is that whereas service quality evaluations are expected to be more cognitive (Parasuraman, Zeithaml, and Berry 1988; Bitner 1990; Dabholkar 1995), satisfaction evaluations are expected to be primarily affective in nature (Woodruff, Cadotte, and Jenkins 1983; Gotlieb, Grewal, and Brown 1994; Dabholkar 1995). A third distinction stems from the disconfirmation of expectations approach. Though disconfirmation of expectations effect both service quality and satisfaction, the difference lies in the way disconfirmation is operationalized (Parasuraman, Zeithaml, and Berry 1988). They suggest that in measuring service quality the comparison is between the performance and what a consumer *should* expect, whereas in measuring satisfaction the comparison is between the performance what a consumer *would* expect. However, expectations for service quality and satisfaction have been operationalized in a very similar manner in the literature, and as such, this distinction may not be an effective discriminant between the two constructs (Spreng and Singh 1993).

Recently, more efforts have been made to distinguish the constructs of satisfaction and service quality. Oliver (1993b) suggested four such differences located at *fundamental levels* which discriminate between the two constructs. Firstly, whereas the dimensions underlying quality judgments are rather specific (whether they be cues or attributes), satisfaction judgments, can result from any dimensions, quality related or not. Secondly, whereas expectations for quality are based on ideals or “excellence” perceptions,

nonquality referents including needs and equity “fairness” perceptions, can be used in satisfaction judgments. Thirdly, whereas experience is not required for quality judgments, satisfaction, is primarily, experiential in nature. Fourthly, whereas service quality has fewer conceptual antecedents, satisfaction appears to be influenced by a number of cognitive and affective processes.

Hence, it seems plausible that though service quality and satisfaction are closely related, they could be differentiated at both the conceptual and measurement levels. Taylor and Baker (1994, p. 165) espouse similar sentiments

... evidence in the services literature supports the position that service quality and satisfaction are best conceptualized as unique constructs that should not be treated as equivalents¹ in models of consumer decision making.

4.3 The Perceptions - Expectations Gap Conceptualization of Service Quality

Perhaps the most established work in the area of Service Quality has been a product of research by A. Parasuraman, Valerie A. Zeithaml and Leonard L. Berry spanning over a decade. In their first article (Parasuraman, Zeithaml and Berry 1985), they identified Service Quality as a distinct construct from the then established concept of *Goods Quality*. The authors argued that Services were distinct from goods because of their three well documented characteristics - *intangibility, heterogeneity, and inseparability*. Hence knowledge of goods quality was insufficient to fully understand service quality. Their research on a limited literature on service quality and some general

¹ Underscored for emphasis. Not underscored in the original.

literature on services was the foundation for the conceptual model of service quality. In their own words (1985, p. 42):

Service quality has been discussed in only a handful of writings (Gronroos 1982; Lehtinen and Lehtinen 1982; Lewis and Blooms 1983; Sasser, Olsen, and Wyckoff 1978). Examination of these writings and other literature on services suggests three underlying themes:

- Service quality is more difficult to evaluate than goods quality.
- Service quality perceptions result from a comparison of consumer expectations with actual service performance.
- Quality evaluations are not made solely on the outcome of a service; they also involve evaluation of the *process* of service delivery.

The authors conceptualized service quality in a manner very similar to how satisfaction had been specified in the literature. Briefly, the authors proposed that consumers harbor *expectations* of performance on some service dimensions, observe performance on those particular dimensions and subsequently form *perceptions* regarding the performance. Service quality is then specified as the *gap between customer's expectations and perceptions*. A (Perceptions-minus-Expectations) score/gap of zero or a positive value indicates that the service provided is of high quality. A negative score/gap identifies a deficiency in the service quality.

Exploratory research (focus group and in-depth executive interviews) for four service categories - retail banking, credit card, securities brokerage, and product repair and maintenance revealed 10 service dimensions that consumers used in forming expectations about and the perceptions of services, namely *reliability, responsiveness,*

competence, access, courtesy, communication, credibility, security, understanding/knowing the customer, tangibles.

Based on the Perceptions - Expectations gap theory, Parasuraman, Zeithaml and Berry (1988) developed a multiple-item scale called SERVQUAL for assessing customer perceptions of service quality. In this study, items denoting various aspects of the 10 service-quality dimensions (Parasuraman, Zeithaml and Berry 1985) were generated to from a pool of 97 items. Two statements, one to measure expectations about firms in the general service category and the other to measure perceptions about the firm whose service quality was being assessed, were generated for each item. This 97-item scale was subjected to two stages of evaluation. The first stage involved condensing of this instrument by retaining only those items that discriminated well across the pooled data of respondents. The second stage involved exploring the dimensionality of the scale and ascertaining the reliability of its components.² The process generated 22 items spread across five dimensions for the SERVQUAL scale - *Tangibles, Reliability, Responsiveness, Assurance, and Empathy*, . Hence 3 out of the original 10 dimensions were retained and the last 2 were composite dimensions containing items representing the other 7 original dimensions.

4.3.1 The First Challenge

Carman (1990) was the first article to replicate and test the SERVQUAL instrument since its development. Four different service settings were chosen to

accomplish the task. Some modifications such as the wording of the items or inclusion/deletion of some items to administer them to particular settings were made. His major conclusion on the SERVQUAL “battery” was that the dimensions reported by Parasuraman, Zeithaml, and Berry (1985) were not as generic as they were thought to be. In addition he recommended that items on 7 to 8 dimensions (rather than 5) should be retained until factor analysis showed that they weren’t unique, specially if it is believed that those dimensions were of particular importance.

His major critique, however, was on the validity of analyzing differences between expectations and perceptions for evaluating Service quality. He was concerned about the measurement properties of “difference” between the items expressed in expectations (before) form and those expressed in perception (after) form. He comments (1990, p. 47):

Even if one could guarantee that the cognitive structure of an individual has not changed from one administration to another, it is not clear what the psychometric properties of such a difference may be. Thus, from an analytical standpoint, this procedure is suspect if not appropriate.

He found the procedure even less desirable from a practical viewpoint. Because there was not a before and after administration in the PZB (1988) study, they concluded that the expectation responses could be of little value.

Following closely on was an empirical assessment of the SERVQUAL scale (Babakus and Boller 1992) which proposed various *methodological shortcomings* in the instrument. In particular four issues were examined - the dimensionality of SERVQUAL, the definition of service quality as a expectation/perception gap, effects of item wording

² For details of the two stage development of the SERVQUAL scale, please refer to the cited article.

on response quality and factor analysis, and the problems of reliability and validity with SERVQUAL.

It was argued that though there may be a consensus on SERVQUAL as being a second-order construct, there were alternative conceptualizations if deemed as a first-order construct. Further, dimensionality was a function of the type of service sector under investigation. Indeed, their empirical analysis suggested that rules of convergence and discrimination do not support the original 5 SERVQUAL dimensions. In fact the study indicated two distinct dimensions which were a function of the way items were worded (positively worded items loaded on one factor and negatively worded on the other). The authors argued that the original study lacked in stringent indicators not only for the individual item reliabilities but also for the convergent and the discriminant validity of the measure.

Defining a construct as a gap score, though intuitively appealing, may be problematic (1992, p. 255-256).

. . . . when people are asked to indicate a “desired level” and “existing level” on a particular attribute, a number of psychological constraints may be activated to make the resulting deficiency scores problematic. . . . As a consequence of this psychological constraint, the resulting “deficiency” scores may be dominated by primarily the “existing level” scores.

This was reflected in the empirical results of their study where they found that the dominant component in the difference scores was “clearly” the perceptions scores.

To address such concerns, PZB (1991) published a follow-up study in which they refined SERVQUAL and replicated it in additional service settings. The refinements

included changing the wording of expectation items so that they in fact reflected normative expectations. To address concerns of confusion, awkwardness and low reliabilities, negatively worded items were all changed to a positive format in the final instrument.

Their empirical findings supported a five factor solution with high item reliabilities and construct validity. Though the refinements still reflected the basic five-dimensional structure of the original scale, the key difference from the PZB (1988) study was that the factor Tangibles split into two subdimensions - one pertaining to physical facilities/equipment and the other pertaining to employees/communication material. Despite their refinements, the authors failed to provide a convincing response to the concerns raised about the expectation - minus - perception measurement of Service Quality. Their support rested on the observation that gap score format was of diagnostic value for the managers. On the theoretical front, they argued that “various replication studies indicate that the gap scores along the five SERVQUAL dimensions possess adequate reliability as measured by Cronbach’s alpha”, and concluded that the support for validity issues for SERVQUAL was mixed in the literature.

4.3.2 The Second Round

Cronin and Taylor (1992) took issue with the conceptualization and measurement of Service Quality. They argued that there is barely any empirical or theoretical evidence that supported the “relevance of the expectations-performance gap as the basis for

measuring service quality”. They proposed that, in fact, marketing literature offers substantial support for simple performance-only based measures.

Brown, Churchill, and Peter (1993) concurred with Cronin and Taylor (1992) and further investigated the “serious problems” in conceptualizing service quality as a difference score. Their research primarily dealt with identifying and empirically corroborating psychometric problems arising as a result of using difference scores in SERVQUAL measure. They proposed and demonstrated that the SERVQUAL measure faced problems of poor reliability, failure to achieve discriminant validity, variance restriction, and non-normal distribution of SERVQUAL scores.³ An important conclusion of their study was that the perception component of the SERVQUAL scale alone performed almost as well as the SERVQUAL scale. Further, that the inclusion of expectation component led to a “suppressor effect rather than explain variance”. The authors proposed a scale which utilized both the expectation and the perception component, but in a way that captures the gap in a single item. They also demonstrated it to be psychometrically superior to the SERVQUAL scale.

In their response to the concerns raised by Brown, Churchill, and Peter (1993), PZB (1993) argued that the superiority of the formulation by the former authors is debatable. They also offered some more support for their gap conceptualization. They stressed that reliability was not a concern in their study. They argued that BCP’s (1993) inference of poor discriminant validity was inconsistent with the definition of discriminant validity and therefore inappropriate. Moreover because the SERVQUAL scale was

predominantly used for diagnostic purpose and not in multivariate analysis, variance restriction did not appear to be a problem. It was also stressed that SERVQUAL items represented a *core* evaluation criterion that transcended specific companies and industries and context-specific items could be incorporated when deemed necessary.

From a theoretical point of view, Gronroos (1993) found the perceived service quality model true as a static model and the confirmation/disconfirmation concept valid.⁴ However, he argued against the use of this confirmation/disconfirmation concept from a measurement point of view. Positing directions for future research, his Proposition 2 states (1993, p. 61):

In developing methods of measuring service quality, it does not seem possible to make independent measurements of customer expectations; therefore, and the confirmation/disconfirmation concept probably has to be replaced. It seems valid, at least in certain situations, to develop measurement models based on customer experiences of quality only.

Teas (1993) also stressed problems in the P-E service quality model, specially in the cases of the conceptual and operational definition of the expectation component of the model. Essentially he found the SERVQUAL P-E measurement specification was incompatible with both the “classic ideal point” interpretation of E as well as the “feasible ideal point” interpretation of E (when finite classic ideal point attributes are involved). This led to “ambiguity concerning the interpretation and theoretical justification of the P-E perceived quality concept”. His study also evaluated alternative measurement frameworks

³ For more details on the problems with use of difference scores, please see Peter, Churchill, and Brown (1993) in “Caution in the use of Difference scores in consumer research”, *Journal of Consumer Research*. Vol. 19. PP 655-662.

⁴ The confirmation/disconfirmation concept is the foundation for the PZB's (1985, 1988) expectation-perception gap conceptualization of service quality. Gronroos (1982) introduced the concept which posits

for assessing service quality and found those conceptualizations superior to the P-E framework.

Rebuttal to both Cronin and Taylor (1992) and Teas (1993) appeared in the PZB's (1994) article. Whereas the former argued against the use of Expectation component and had problems with the dimensionality of the SERVQUAL instrument, the latter was more concerned about the superiority of alternative specifications of measurement of service quality.

Defending against the criticisms of Cronin and Taylor (1992), PZB (1994) argued that there was indeed enough evidence in the literature to support a perception-expectation gap conceptualization. Further the dimensionality issues as raised by Cronin and Taylor (1992) were invalid because their study did not allow intercorrelations amongst the five latent constructs which PZB (1988) did allow for. Moreover the SERVQUAL instrument was of more diagnostic value if both the components i.e. expectations and perceptions are measured as compared to Cronin and Taylor's (1992) operationalization of service quality via SERVPERF which used only performance measures. Their major criticism of Teas (1993) was that his conceptual and mathematical arguments were susceptible to several assumptions which needed to be closely reexamined.

In a reply to the PZB (1994), Cronin and Taylor (1994) defended their stand in the earlier article by the same authors regarding the conceptualization of service quality as a perception - expectation gap. They cited the work by the co-authors of SERVQUAL

that "the level of quality perception depends on the degree to which quality expectations are confirmed or disconfirmed by the consumer's expectations of a given service".

(Boulding, Kalra, Staelin and Zeithaml 1993, p. 24) to substantiate their argument, who concluded

Our results are incompatible with both the one-dimensional view of expectations and the gap formation for service quality⁵. Instead, we find that service quality is directly influenced only by perceptions of performance.

They further suggested that advances in the services literature pointed increasingly to the fact that the gap based SERVQUAL scale was not measuring service quality. They stressed that the *domain of service quality should be restricted to long term attitudes* in order to enhance our understanding of how construct like service quality, consumer satisfaction interact in consumer decision making process. The following discussion extends such a line of thinking.

4.4 Service Quality as a General Attitude

The conceptual definition of attitude that I refer to is the one offered by Eagly and Chaiken (1993) where *Attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor*. Here *psychological tendency* refers to a state that is internal to the person, and *evaluating* refers to all classes of evaluative responding, overt or covert, cognitive, affective, or behavioral. Further *entities* that are evaluated are called *attitude objects*. Particular entities, classes of entities, behaviors and classes of behaviors can all function as attitude objects.

Service Quality is defined as the consumer's judgment about a firm's overall excellence or superiority, similar in many ways to the consumer's general attitude towards the firm (Parasuraman, Zeithaml and Berry 1988; Zeithaml 1987; Zeithaml 1988; Bitner

1990; Bolton and Drew 1991; Oliver 1993b). Although some researchers view this stand as *hesitancy to call perceived service quality as an attitude* (Cronin and Taylor 1992) and seek to establish equivalence rather than just similarity in the conceptualization and operationalization of the perceived service quality construct to a general attitude (Cronin and Taylor 1992; Cronin and Taylor 1994). Given that service quality can be considered an attitude, additional insights can be gained if the measurement of service quality conformed to an attitude-based conceptualization (Cronin and Taylor 1992). The following discussion presents one such approach, drawing primarily from the work of Cronin and Taylor (1992).

In drawing their conclusions, Cronin and Taylor (1992) suggested that perceived service quality is best conceptualized as an attitude and that “adequacy-importance” model was the most effective “attitude-based” operationalization of service quality. The “adequacy-importance” model is due to Cohen, Fishbein and Ahtola (1972), in which a person’s attitude is defined by her/his importance weighted evaluation of the performance of a specific dimension of a product or service. Following that work, Mazis, Ahtola and Klippel (1975) compared the predictability of four multi-attribute attitude-based models. Three experiments contrasted the relative predictability of four approaches: Fishbein’s model, “adequacy” model and Rosenberg’s model using both values and product characteristics. The adequacy-importance model, though an adaptation of Rosenberg’s and Fishbein’s model, is not based on the expectancy-value theory. Another important observation is that while the two Rosenberg models and the adequacy-importance model

⁵ Underscored for emphasis. Not underscored in the original.

talk refer to *attitude towards an object*, the Fishbein model talk about *attitude towards an act of behavior*.

The study revealed that in addition to its ease of administration over its expectancy-value counterparts, “the “adequacy” model appeared to be superior with respect to the expectancy-value formulations (if the investigator’s goal is prediction of attitudes and behavior)”. An important result was that the performance dimensions alone could predict attitudes and behavior almost as well as the complete model. This result was the key behind Cronin and Taylor’s (1992) performance based approach to measurement of service quality with scale called SERVPERF.

It is clear from above that there has been an increasing hesitancy to conceptualize service quality as a perceptions-expectations gap, because of the various methodological and theoretical shortcomings. Further, if service quality is indeed an attitude than it follows that we should look for attitude-based conceptualization in order to operationalize it. Based on the preceding discussion, the best specification seems to be in form of the “adequacy-importance” framework from which an equivalence between *Service Quality* and *Attitude towards the Object* follows. Further, SERVPERF which is consistent with the “adequacy-importance” model, appears to be an effective instrument to capture the consumers’ perception of service quality offered by a specific service provider. Support, for such a conceptualization and measurement, is forthcoming in the literature. Dabholkar

(1993, p. 16), who also regards the attitudinal view of service quality as logical, further contends

Regarding the inclusion of disconfirmation, it is suggested that service quality should simply be conceptualized as perceptions [of performance]; measures of service quality should not explicitly include expectations. The rationale is that perceived service quality is likely to be based on some type of internal standard; thus, disconfirmations may actually be incorporated in the perceptions themselves. Asked to evaluate whether a service is excellent or poor, individuals may base their perceptions of performance on ideal expectations, some type of industry standard, promises made by service providers, or on past experience.

Indeed, Gotlieb, Grewal, and Brown (1994) use a performance-only based scale to measure perceived service quality which was found to exhibit a high reliability ($\alpha = .95$).

More recently, the original proponents of the gap operationalization of service quality offer a contingency based approach. According to Zeithaml, Berry, and Parasuraman (1996, p.20)

While this issue [whether to use a gap measurement or a perceptions of performance only approach] to be debated, there is some agreement that a study's purpose may influence which measure to use: the perceptions-only operationalization is appropriate if the primary purpose of measuring service quality is to attempt to explain the variance in some dependent construct; the perceptions-minus-expectations difference score measure is appropriate if the primary purpose is to diagnose accurately service shortfalls.

Since service quality is being utilized as an exogenous variable in this thesis, a perceptions-only measurement approach should be appropriate. Hence, for the purpose of this thesis, a scale similar to SERVPERF will be employed to measure perceived service quality.

4.5 Predicting Satisfaction from Service Quality

Though past literature has conceptualized service quality and satisfaction as distinct constructs, there has been minimal investigation as to a causal relationship between the two (Dabholkar 1995). The few attempts, aimed at validating the nature of the relationship between service quality and satisfaction, have provided conflicting results. Studies by Bitner (1990) and Bolton and Drew (1991) proposed service quality as a subordinate concept and hence satisfaction was seen as an antecedent of service quality. Bitner (1990) saw *service encounter satisfaction as an input into the more general construct, perceived service quality (or attitude)*, . . . and reported a significant path from satisfaction to perceived service quality based on data on consumer perceptions of satisfaction and service quality at an international airport. Bolton and Drew (1991) drew similar conclusions from a longitudinal study in a telephone service context. However, these studies had some inherent weaknesses which undermine the conclusions put forth. According to Oliver (1993b, p. 77)

Evidence for this assumption [that satisfaction is viewed as an antecedent of service quality] exists only at a theoretical level, however, because the concepts were not tested as hypothesized. In Bitner (1990), quality was actually measured as *attitude* using bipolar adjectives in semantic differential format . . . In Bolton and Drew (1991), overall satisfaction was not measured ; the satisfaction concept was represented only by satisfaction with billing disputes in the context of telephone service and was not directly linked to the quality measure.

Linking service quality, customer satisfaction and behavioral intentions in a health service context , Woodside, Frey and Daly (1989) provide empirical results that suggest that service quality is indeed an antecedent to customer satisfaction, which in turn

influenced behavioral intentions. Using a nonrecursive structural model, Cronin and Taylor (1992) provided the first comprehensive test of the causal path between service quality and satisfaction across eight service companies (two each of banking, pest control, dry cleaning, and fast food). Though they hypothesized that satisfaction was superordinate to service quality, the results of their LISREL analysis indicated that service quality was in fact an antecedent of satisfaction.

To give a theoretical underpinning to the debate, Gotlieb, Grewal and Brown (1994) use the Lazarus's (1991) *appraisal - emotional response - coping* theoretical framework. Based on the developments to this framework proposed by Bagozzi (1992), Gotlieb, Grewal and Brown (1994, p. 877) seek to explain the nature of the relationship between service quality, satisfaction and behavioral intentions. In their words

. . . definitions of perceived quality (a consumer's appraisal of a product's overall excellence or superiority, Zeithaml, 1988) and empirical evidence (Bolton and Drew, 1991; Brown and Swartz, 1989; Parasuraman et al., 1988) indicate that it is an appraisal construct . . . Therefore, consumers are likely to make an appraisal (i.e., judge perceived quality). Bagozzi's (1992) framework then suggest that perceived quality (i.e., appraisal) will be followed by satisfaction (i.e., an emotional response). In addition, his theoretical framework indicates that satisfaction has a direct effect on behavioral intentions (i.e., a coping response) . . .

Clearly the framework proposes service quality as superordinate to satisfaction. However for a more stringent test of the theory, the authors tested for the reciprocal effect as well. Data of consumer perceptions on measures of interest were collected from 232 respondents who had been discharged from a hospital. Their structural model results indicated significant standardized path coefficients for the service quality effects satisfaction hypothesis. The reciprocal hypothesis of satisfaction influencing service quality

was not supported. Further, satisfaction had a positive effect on behavioral intentions of repatronage. Dabholkar (1995) suggest that such a sequence is congruent with that predicted by traditional attitudinal models, i.e., when the order of evaluation is cognitive (service quality), then affective (satisfaction) and then conative (intentions of repatronage). For this thesis, this is a significant result as service quality has indeed been conceptualized as an attitude. This lends support to Oliver's (1993b) argument that attitude is properly a superordinate concept to satisfaction. Hence, proposition 2.

P2: Perceived service quality of the service provider will have a positive effect on the customer satisfaction level.

Chapter 5

THEORY OF PLANNED BEHAVIOR

5.1 Introduction

The *theory of planned behavior* provides a useful framework for understanding how attitudes, subjective norms, and behavioral control should combine to influence both planned and realized behavior. The theory was developed as a response to the criticisms of the theory of reasoned action (Fishbein and Ajzen 1975; Ajzen and Fishbein 1980)⁶. Ajzen (1985) proposed it as an alternate theory which enhanced the *theory of reasoned action* by incorporating an additional variable *perceived behavioral control* in the prediction of intentions and behaviors. In the *theory of planned behavior*, the construct is defined as one's perception of how easy or difficult it is to perform the behavior (Eagly and Chaiken 1993, p.186). The inclusion of this construct extends the theory of planned behavior beyond the boundary condition of pure volitional control specified by the theory of reasoned action (Madden, Ellen, and Ajzen 1992). In brief, the theory of planned behavior suggests that behavior is a direct function of behavioral intention and perceived behavioral control and that behavioral intention is formed by one's attitude, which reflects feelings of favorableness or unfavorableness towards performing a behavior; subjective norms, which reflect perceptions that significant referents desire the individual to perform or not perform a behavior; and perceived behavioral control, which reflects perceptions of internal and

⁶ The Theory of Reasoned Action (TRA) posits that behavioral intentions, which are immediate antecedents to behavior, are a function of normative and behavioral [salient] beliefs about the likelihood that performing a particular behavior will lead to a specific outcome. Further, normative beliefs are postulated to be the underlying influence on an individual's subjective norm about performing that behavior whereas the behavioral beliefs influence one's attitude to performing that behavior. Hence, salient beliefs affect intentions and subsequently behavior through attitudes and/or subjective norms (Madden, Ellen and Ajzen 1992).

external constraints on behavior (Ajzen 1985, 1991). In addition, the determinants of intention, i.e., attitude, subjective norms and perceived behavioral control are a function of their underlying belief structures alluded to as attitudinal or behavioral beliefs, normative beliefs and control beliefs respectively.

The theory further suggests that to the extent the behaviors are easily executed, the theory of reasoned action may suffice. However, for behaviors that are difficult to execute, one's control over the resources, opportunities and skills need to be taken into account and hence the theory of planned behavior should be a better predictor than the theory of reasoned action. Customer switching behavior is recognized as a complex phenomenon on which behavioral factors have a strong influence (Srinivasan 1996). Given that service switching behavior is a complicated behavioral process, forged of a complex combination of variables involved in the customer's decision to switch services (Keaveney 1995) which may not be easily executed, the theory of planned behavior should provide an effective framework for understanding such a process. This should also address the call by East (1993) to investigate the role of theory of planned behavior in various decisions pertaining to financial services.

5.2 Predicting Behavior from Intentions

A critical factor in the theory of planned behavior is an individual's intention to perform a particular behavior. According to Ajzen (1991, p. 181-182)

Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how much of an effort they are planning to exert, in order to perform the behavior. As a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance. It should be clear, however, that a behavioral intention can find expression in behavior only if the behavior in question is under volitional control, i.e., if the person can decide at will to perform or not to perform behavior.

The evidence for prediction of behavior from intentions can be found in the applications of the theory of reasoned action and the theory of planned behavior in several behavioral contexts. For example, Fishbein and Ajzen (1981) found high correlation between people's voting intentions and their reported voting choice in a presidential election. Similarly, Manstead, Proffitt, and Smart (1983) found convincing evidence that the intention regarding the choice of a feeding method (breast versus bottle) for her still to be born baby was highly predictive of the actual choice for her newborn baby. Van den Putte's (1991) meta-analysis of 113 articles provided a mean r of .62 in predicting behavior from intentions to perform behavior. Ajzen and Driver (1992) used the theory of planned behavior to predict leisure intentions and behavior amongst college students. The authors found evidence that the choice of five leisure activities: *spending time at the beach, jogging or running, mountain climbing, boating, and biking* could be predicted from respondent's intentions, which had been collected the preceding year. East (1993) found in his three studies of "application for shares" in a privatized British industries context, the application of shares was accurately predicted by one's measured behavioral intention.

The effect of intentions to switch service providers on the switching behavior has not previously been considered in the literature. Indeed, in giving directions for future research in the context of service industries, Zeithaml, Berry, and Parasuraman (1996, p. 27) suggest that: "the association between behavioral intentions and remaining with or defecting from the company merits study". Given strong evidence for the prediction of

behaviors from intentions in varied behavioral contexts, it seems intuitively plausible that a strong intention to switch service providers is more likely to translate into switching behavior. Conversely, if the intention to switch a service provider is not strong, the likelihood of exhibiting switching behavior may be low. Assuredly, one of the assumptions made by Rust and Zahorik (1993) in developing a mathematical model to predict the effect of customer satisfaction on retention in the services industry is that, "loyalty is a probabilistic process, based on the propensity to be loyal". Proposition 3 follows from this discussion.

P3: The stronger the intention to switch service providers, the greater the likelihood of that intention being translated into switching behavior.

5.3 Predicting Intentions from Attitude Towards Behavior and Subjective Norms

Similar to the role of switching intentions in predicting switching behavior in the services industry, the role of one's attitude towards switching and one's subjective norms in prediction intentions to switch remains unexplored. However evidence for the direction and strength of such relationships can again be found in the various applications of the theory of reasoned action and the theory of planned behavior. As a general rule, the more favorable the attitude and subjective norm with respect to the behavior in question, the stronger should be an individual's intention to perform (Fishbein and Ajzen 1975; Ajzen and Fishbein 1980; Ajzen 1991).

Applying meta-analytic techniques to 87 studies of the theory of reasoned action, Sheppard, Hartwick, and Warshaw (1988), reported a mean R of .66 for the prediction of intention to perform behavior from attitude towards the behavior and subjective norms. These results were further substantiated by the work of Van den Putte (1991), who

reported a mean R of .68 for the prediction of intentions to perform behavior from attitude towards behavior and subjective norms. His results were based on a meta-analysis of 113 articles. More recently, Ajzen and Driver (1992) provided strong evidence for the prediction of leisure intentions from the attitudes and subjective norms with respect to the leisure activity under investigation. East (1993) provides support for such relationships in a financial decision context. The study found that one's attitudes and subjective norms were strong predictors of one's decision to turn in share applications. Taylor and Todd's (1995) study on the usage of information technology also provides convincing support for the prediction of intentions to use a particular computer resource center from the attitudes and subjective norms in relation to that resource center.

The effects of one's attitude towards switching service providers and the subjective norms that one faces in a situation of switching service providers on one's intentions to switch service providers has also not previously been considered in the literature. However, given persuasive evidence for the prediction of intentions from attitudes and subjective norms in diverse behavioral contexts, it seems intuitively plausible that favorable attitudes towards switching service providers and subjective norms should be strong predictors of intention to switch service providers. Conversely, unfavorable attitudes and subjective norms should be weaker predictors of intention to switch a service provider. Propositions 4 and 5 follows from this discussion.

P4: The more favorable the attitude towards switching , the stronger should be the intention to switch service providers.

P5: The more favorable the subjective norms, the stronger should be the intention to switch service providers.

5.4 Predicting Attitudes Towards Behavior from Subjective Norms

Consistent with Eagly and Chaiken's (1993) composite model, attitudes towards targets (here service quality) could "consist of evaluations of targets of behavior at any level of abstraction" (p.209), normative influences being one of the significant ones. If such was the case, than subjective norms could also be seen as influencing behavior through their direct impact on attitude towards behaviors. This can happen in addition to a direct impact of subjective norms on behavioral intentions which is discussed in the previous section. In the present context, it signifies that if one has favorable subjective norms, i.e. one perceives favorable outcomes in terms of approval that the significant others are expected to express if s/he engages in switching behavior, one will have favorable attitude towards switching service providers. Conversely, if one anticipates disapproval by significant other in relation to such a behavior, one is likely to have an unfavorable attitude towards switching service providers. Hence, proposition 6

P6: The more favorable the subjective norms, the more favorable stronger should be the attitude towards switching service providers.

5.5 Predicting Intentions and Behavior from Perceived Behavioral Control

5.5.1 Perceived Behavioral Control

Similar to the way that behavioral beliefs determine attitude towards the behavior and normative beliefs determine subjective norms, control beliefs determine perceived behavioral control in the theory of planned behavior. These "salient" control beliefs are the *beliefs about the likelihood that one possesses the resources and opportunities thought necessary to execute the behavior. . . .* (Eagly and Chaiken 1993, p. 187). Hence an

individual's assessment of the resources and opportunities needed to perform a behavior, or alternatively, the constraints that s/he faces in the immediate situation that might prevent the performance of behavior, are equivalent to the construct perceived behavioral control (Ajzen 1985; Ajzen and Madden 1986; Ajzen 1991; Ajzen and Driver 1992; Madden, Ellen, and Ajzen 1992; Eagly and Chaiken 1993,).

According to Taylor and Todd (1995), this notion of perceived behavioral control includes two components. The first component being the idea of *self-efficacy* espoused by Bandura (1977, 1982). Bandura (1982, p.122) defined the construct as the one that , “is concerned with judgments of how well one can execute courses of action required to deal with prospective situations” or it is “the conviction that one can successfully execute behavior...” (Bandura 1977, p.193). In the stream of research by Albert Bandura and his associates (Bandura 1977; Bandura, Adams and Beyer 1977; Bandura , Adams, Hardy and Howells 1980; Bandura 1982), self-efficacy has been shown to strongly influence one's behavior. Indeed, Ajzen (1991) views the work on self-efficacy as the major contributor to the knowledge of the role of perceived behavioral control in predicting behavior. The second component of perceived behavioral control is the idea of *facilitating conditions* proposed by Triandis (1977). Facilitating conditions reflect the availability of such resources as time, money, etc. required to perform a behavior. Hence constraints in performing a particular behavior can arise due to lack self-efficacy and lack of facilitating conditions.

5.5.2 Perceived Switching Costs as Perceived Behavioral Control

One such source of constraints that consumers face in case of switching related behaviors are perceived switching barriers/switching costs, which make it costly for the customer to switch to another supplier (Andreasen 1985; Fornell and Wernerfelt 1987; Fornell 1992). The abstract notion of switching cost has been viewed in the literature as the “difficulty” or “disutility” involved in changing over or switching (to a new product/service/system) (Gilbert 1989), which is highly subjective, even emotional and difficult to assess (Weiss and Anderson 1992). Search costs, transactions costs, learning costs, loyal customer discounts, customer habit, emotional cost and cognitive effort, coupled with financial, social and psychological risks on the part of the buyer, all add up to perceived switching barriers/costs (Fornell 1992).

Few marketing studies have explored the notion of switching costs in decision making. Weiss and Anderson (1992) conducted a study to examine the role of “perceived switching cost” in the decision to convert from an independent salesforce to a direct salesforce for various manufacturers. The study clearly established that the manufacturers are less likely to convert if the overall “cost” (difficulty) of switching is perceived to be high. Further, the perceived overall switching cost was influenced by such factors as the perceived *set-up costs* for the new system, the perceived *take-down* costs of the existing system and the *age of relationship* between the manufacturer and the independent salesperson. In studying vendor consideration and switching behavior for buyers in high-

technology markets, Heide and Weiss (1995) suggest and empirically establish that switching costs act as a disincentive for the buyer to explore new vendors and that “buyers will be motivated to stay in existing relationships to economize on switching costs”. Based on the work of Jackson (1985), they conceived switching costs arising as a result of prior commitments to 1) a particular technology and 2) to a particular vendor. It is recognized that the above two studies fall in the domain of business to business marketing. However, the nature of theoretical reasoning behind the propositions in these studies and their results lends itself to applications in the context of consumer marketing. Hence, my contention that the notion of switching costs is equally meaningful in consumer marketing is supported by Fornell (1992, p. 10). He suggests

Those [switching] barriers tend to be more formidable in business-to-business markets, but they can play an important role in consumer markets as well.

The results above reflect relationships postulated by the theory of planned behavior. According to the theory of planned behavior, perceived behavioral control can effect behavior in two ways. It can indirectly influence behavior through the intention to perform behavior, and it may have a direct influence on the behavior. The indirect effect is based on the assumption that perceived behavioral control has motivational implications for behavioral intentions (Madden, Ellen, and Ajzen 1992). If an individual believes that for lack of requisite resources, s/he has little control in performing a behavior, then their intentions to perform that behavior will be low. This may happen even if the individual has favorable attitudes and/or subjective norms towards the target behavior. Consequently, in hypothesizing a relation between perceived behavioral control and intention to perform

behavior, the theory assumes that individuals intend to engage in behavior to the extent they have confidence in their ability to perform that behavior (Eagly and Chaiken 1993).

Hence, Proposition 7.

P7 : The lower the switching costs perceived by an individual in a service switching context, the stronger is her/his intention to switch a service provider.

On the other hand, the direct effect of perceived behavioral control on behavior reflects the actual control that an individual has over performing the behavior. This effect should be significant when (a) the behavior in question is likely to have some aspect not under volitional control and (b) perceptions of control over behavior are accurate (Madden, Ellen, and Ajzen 1992). Consequently, in the context of switching a service provider, the implication is that perceptions of switching costs will also have a direct influence on the switching behavior. Consistent with the theory of planned behavior, the following proposition is suggested.

P8: The lower the switching costs perceived by an individual in a service switching context, the more likely s/he is to switch a service provider.

5.6 Summary

Till now I have looked at two different streams of literature in establishing relationships amongst factors identified as consequential in a consumer's decision to switch service providers. On one hand, research in the areas of consumer satisfaction and service quality has provided us with propositions relating to relationships amongst service quality, consumer satisfaction and consumer's intentions to switch service providers. Service quality, which is a general attitude, has an indirect effect on a consumer's decision to switch service provider through a consumer satisfaction. On the other hand, theory of

planned behavior links consumer's switching behavior to the consumer's intention to switch, consumer's attitude towards switching, consumer subjective norms and switching costs perceived by the consumer with respect to her/his decision to switch a service provider. Specifically, switching intentions are immediate antecedents of switching behavior. The extent to which one's intentions to switch could be translated into switching behavior depends on one's attitude towards switching, one's subjective norms and switching costs perceived by the consumer. Favorable subjective norms can also be responsible for formation of favorable attitudes towards switching. Further, switching costs can also have a direct influence on switching behavior.

The insights offered by both streams are significant and discrete. While both streams add to our understanding of the process of switching behavior, there remains a *missing link* which can bring perspicacity offered by the two streams into one integrative framework. While one stream seeks to predict switching behavior from a general attitude [an indirect effect of service quality on a consumer's intention to switch], the other stream seeks to predict switching behavior from its more proximal determinants [consumer's attitude towards switching, subjective norms, and perceived switching costs]. Research in the area of attitude - behavior relations provides an excellent avenue for bringing the two streams together into one integrative framework. This indeed, is the focus of the next chapter.

Chapter 6

ATTITUDE BEHAVIOR RELATIONS

6.1 The Impact of Attitudes On Behavior

In the research on impact of attitudes on behavior, two distinct streams have emerged over the years. One school adheres to expectancy-value models where attitudes towards a particular behavior, specified in terms of action, target, context, and time, are deemed predictors of the behavioral choices at hand. The theory of reasoned action (Fishbein and Ajzen 1975; Ajzen and Fishbein 1980) and the theory of planned behavior (Ajzen 1991) are classic examples of such an approach. The other stream of thought focuses entirely on predicting behavior from more general attitudes. A major assumption of this school of thought is that general attitudes are often poor predictors of behavior (Berger 1993). Hence, the emphasis is on identification of moderator variables, i.e., examination of circumstances under which the general attitudes influence specific behaviors (see Berger and Mitchell 1989 for a review). Variables as *level of moral reasoning* (Rholes and Bailey 1983) and *having a doer self-concept* (McArthur, Kiesler, and Cook 1969) have been shown to influence the magnitude of attitude behavior relationships (Eagly 1992). However, one moderator variable, *attitude accessibility* (c.f., Fazio, Chen, McDonel, and Sherman 1982; Fazio, Powell, and Herr 1983; Fazio 1986) has emerged as a dominant variable that has been shown to influence the magnitude of the attitude-behavior relationships.

Clearly, both attitude towards a particular behavior and the general attitude towards the target have significant influence on behavior. While both schools add to our

knowledge on the impact of attitudes on behavior, each misses out on the critical insights offered by the other. Hence, a more integrative approach is needed to understand the attitude - behavior relationships. Fazio's (1990) MODE model and a composite model by Eagly and Chaiken (1993) have been the recent efforts in such a direction. Eagly and Chaiken (1993) offer a causal sequence that takes into account both a general attitude towards the target and, the more specific , attitude towards behavior , i.e., one that is directed from the general attitudes to a specific attitude. This is consistent with the *external variable* argument in the theory of reasoned action (Fisbein and Ajzen 1975), where attitude towards targets are assumed to influence attitude towards behavior, through behavioral beliefs (see also Berger 1993). Despite some efforts at the theoretical level (e.g., Eagly and Chaiken's (1993) composite model and work by Berger (1993) on environmental behaviors), *there remains uncertainty about the psychological processes that account for the influence that attitudes towards targets have on behavior* (Eagly and Chaiken 1993, p.206). However, work by Mark Snyder and his associates provides insights into processes that intervene between the activation of attitudes towards targets and the elicitation of attitude relevant behaviors (ibid. 1993).

6.2 Perceived Relevance

In his work on consistency between attitudes and behavior, Snyder (1982) proposed the *availability principle* which held that one's general attitudinal orientation must be available before that individual could use attitudes to guide behavior. He also

proposed a related *principle of relevance*, which posited that before one could act upon one's [activated/available] attitudes, one must define those attitudes as relevant and appropriate guides to the behavioral choices at hand. Thus, an activated attitude may not effect a "seemingly" relevant behavior, if one did not perceive it's relevance for the particular behavior (Eagly and Chaiken 1993).

Snyder (1982) further suggested that the personality variable of *self-monitoring* moderated the attitude-behavior relationship. Specifically, those individuals who monitored or guided their behavioral choices on the basis of situational information (*high self-monitoring individuals*), correspondence between behavior and attitude ought to be minimal. By contrast, those individuals who guided their behavioral choices on the basis of information from relevant inner states (*low self-monitoring individuals*), the correlation between behavior and attitude ought to be quite substantial.

To explore the effects of both the relevance principle and the availability principle, Snyder and Kendzierski (1982) conducted two experiments. They created three experimental conditions of neither relevant nor available attitudes, available only attitudes and relevant only attitudes. Perceived relevance was conceptualized with the characteristics of *Importance* (regarding one's behavior as having important implications for furthering one's attitudinal viewpoint, or regarding one's attitudes as having important implications for one's actions) and *Connectedness* (the decision that therefore one's attitude ought to be connected meaningfully to one's behavioral decisions). The authors

suggested that both importance and Connectedness went hand in hand. It was hard to imagine one's behavior and attitudes as having important implications for each other without also believing that one's attitudes should be meaningfully connected to one's actions and vice versa.

The results indicated that the attitude-behavior consistency increased for the low self-monitoring subjects in the attitude-available condition only whereas the attitude-behavior consistency was high irrespective of the level of self-monitoring in the attitude-relevant condition. The authors concluded that perceived relevance may be a sufficient requirement for generating the correspondence between attitudes and behaviors. Eagly and Chaiken (1993) liken the availability principle to the concept of *attitude accessibility* (e.g., Fazio 1986). They further suggest that accessibility is not a sufficient condition to ensure a strong attitude-behavior consistency, because high-self monitoring individuals might not regard their attitudes as relevant to their behavior even if their accessibility increased. In contrast, the low-self monitoring individuals who consider attitudes as relevant and appropriate guides to action, should show a strong attitude-behavior consistency if the attitudes were made accessible. Hence, irrespective of the level of self-monitoring, once attitudes were perceived as relevant to guiding actions, a strong correspondence between the accessed attitude and the particular behavior should emerge.

Snyder and Kendzierski (1982) thought there were reasons to believe that relevance actually subsumed availability. When one regarded attitudes as relevant guides to choosing one's behavioral choice, one had to be knowledgeable about one's attitude before one could use those attitudes to guide action. Accordingly, increasing the relevance

of attitudes as guides to action could induce individuals on their own to increase the availability of their attitudes to serve as guides to action.

The authors further indicated that the source of the particular effectiveness of the relevance strategy was in the fact that this strategy concentrated its effect directly on the forging of a link between general attitudes and specific behaviors - a link that endows attitudes with necessary implications for action. That is, Relevance strategy was a fundamental motivational strategy that provided individuals with a “believing means doing” *action structure* for linking attitudes to their behaviors. An action structure being a set of instructional rules that directed individuals to use a general attitudes of relevance to their current situation as guidelines for enacting specific behaviors that accurately reflected those relevant general attitudes.

Borgida and Campbell (1982) provide strong support for such an argument where they demonstrated that the degree to which global attitudes and their behavioral implications are cognitively accessible/relevant may be a key determinant of attitude-behavior consistency. Their result however restricted such an effect of perceived relevance to the area in which individuals had relatively little personal experience with the behavioral implications in a given behavioral domain. Nevertheless, that case for a significant influence of subjective relevance on global attitude-specific behavior consistency is strong.

6.2.1 Predicting Attitude Towards Switching from Service Quality

The above discussion has critical implications in the context of service switching.

Perceived service quality has been conceptualized as a general attitude and the attitude towards behavior has been expressed as attitude towards switching. Since the relationship between attitude towards switching and switching behavior has been established earlier in the paper, our interest here is restricted to the relationship between service quality and attitude towards switching. Following the discussion above, how perceived service quality will impact one's attitude towards switching which in turn may translate into switching behavior, will depend on the influence exerted by the perceived relevance of service quality attitude. In other words, the relationship between service quality and attitude towards switching will be moderated by perceived relevance of service quality in guiding the decision to switch service providers. This is consistent with Eagly and Chaiken's (1993) assertion that a subjective assessment of relevance is required to link attitude towards targets to attitude towards behavior. Such is the understanding behind

Proposition 9.

P9: Perceived relevance of service quality will moderate the relationship between service quality and attitude towards switching. At higher levels of perceived relevance, service quality will be positively associated with attitude towards switching. At lower levels of perceived relevance service quality will not influence attitudes towards switching service providers.

Chapter 7

HYPOTHESES APROPOS SSM and VARIANTS

7.1 Introduction

Figure 2 illustrates the complete SSM. The model builds on relationships between different variables established in the earlier chapters and incorporates them into one cohesive framework. The model hence obtained is a process model of switching behavior in the service industries. This chapter summarizes this model and lists hypotheses suggested by earlier chapters.

7.2 Model Summary

The ultimate variable of interest in our research is the switching behavior exhibited by consumers of a service. Variables as switching intentions, consumer attitude towards switching, consumer subjective norms, and switching costs have been borrowed from the theory of planned behavior and the relationships between them are consistent with those proposed by the theory and with the limited research on service switching. In brief, switching intentions are immediate antecedents of switching behavior. The extent to which one's intentions to switch could be translated into switching behavior depends on one's attitude towards switching, one's subjective norms and switching costs perceived by the consumer. Subjective norms can also influence one's attitude towards switching. Further, switching costs can also have a direct influence on switching behavior.

Satisfaction with the service provider is also expected to effect intentions to switch service providers. Satisfaction in turn is influenced by consumer's perception of

service quality of the service provider. In addition, service quality is expected to effect one's attitude towards switching. However this relationship is expected to be moderated by one's perceived relevance of the attitude.

7.3 Hypotheses

A large number of hypotheses are presented here by applying the model and propositions suggested earlier in this paper to switching in service industries. The nature and strength of the relationships between different variables hypothesized will be determined by an empirical test.

7.3.1 Hypotheses Apropos Satisfaction with the Service Provider

H1: Switching Intentions can be expected to be influenced by the consumer's perceived satisfaction with the service provider. That is, the lower the perceived satisfaction with the service provider, the stronger should be the consumer's intention to switch service providers.

7.3.2 Hypotheses Apropos Perceived Service Quality of the Service Provider

H2: Satisfaction with the service provider can be expected to be influenced by the consumer's perception of the service quality. That is, the more favorable the perceptions of service quality, the higher should be the consumer's perceived satisfaction with the service provider.

7.3.3 Hypotheses Apropos the Theory of Planned Behavior

H3: Switching behavior can be expected to be influenced by the intention to switch service providers. That is, the stronger the consumer's intention to switch the service provider, the more successful they are predicted to engage in switching behavior.

H4: Switching Intentions can be expected to be influenced by the consumer's attitude towards switching. That is, the more favorable the attitude towards switching, the stronger should be the consumer's intention to switch service providers.

- H5: Switching Intentions can be expected to be influenced by the consumer's subjective norms. That is, the more favorable the subjective norms, the stronger should be the consumer's intention to switch service providers.
- H6: Attitudes towards switching can be expected to be influenced by the consumer's subjective norms. That is, the more favorable the subjective norms, the more favorable should be the consumer's attitude towards switching service providers.
- H7: Switching Intentions can be expected to be influenced by the consumer's perceived switching costs. That is, the lower the switching costs perceived by the consumer, the stronger should be the consumer's intention to switch service providers.
- H8: Switching behavior can also be expected to be influenced by the consumers' perceived switching costs. That is, the lower the switching costs perceived by the consumer, the more successful they are predicted to engage in switching behavior.

7.3.4 Hypotheses Apropos Perceived Relevance

- H9: Attitude towards switching can be expected to be influenced by the consumer's perceptions of service quality of the service provider. However, the effect can be expected to be moderated by the consumer's perceived relevance of the service quality attitude.

Specifically

H9 (a): At higher levels of perceived relevance, perceptions of service quality can be expected to be positively associated with the consumer's attitude towards switching service providers.

(b): At lower levels of perceived relevance, perceptions of service quality can be expected not to be associated with the consumer's attitude towards switching service providers.

7.4 Variant Models to the SSM

Two variants of the SSM are presented in this section, as means for comparison.

Firstly, I explore the notion of habit or past behavior as an additional predictor in the SSM

Secondly, the *external variables* argument in the theory of reasoned action is used to propose another variant to the SSM.

7.4.1 Influences of Past Behavior or Habit

Triandis (1977, 1980) introduced the notion of *habit* and postulated that behavior was a joint outcome of intentions and *habit*. Further, similar to the theory of reasoned action, intentions were formed by attitude towards the act as well as social-normative considerations. The concept of habit as a determinant of behavior parallels the notion of *past behavior* (Bentler and Speckart 1979) as an additional determinant of behavior in the theory of reasoned action. Past behavior was postulated to have a direct effect on behavior in addition to an indirect effect through intentions. Commenting on Bentler and Speckart's model, Eagly and Chaiken (1993, p. 179) suggest that

The addition of past behavior to the model is eminently sensible from behaviorist perspectives which postulate that behavior is influenced by habit, or more generally, by various types of conditioned releasers or learned predispositions to respond that are not readily encompassed by the concept of attitudes and intentions.

Hence, for situation-specific sequences that are or have become automatic and hence occur without self-instruction (Triandis 1980), past behavior or habit ought to contribute in predicting subsequent behavior over and above behavioral intentions (Charng, Piliavin, and Callero 1988; Granberg and Holmberg 1990). Extending this reasoning to the theory of planned behavior, East (1993) demonstrated that past behavior was a significant predictor of intentions in addition to attitude, subjective norms and perceived control. His study investigated the application of the theory of planned behavior to explain and predict investment decisions for British government share offers. Hence, evidence to incorporate past behavior as an additional predictor in a attitude - behavior model is strong. This is the first variant to the SSM that is proposed. Past switching behavior is included as an

additional variable having a direct effect on subsequent switching behavior as well as an indirect effect through intentions to switch. Figure 3 presents this variant model.

7.4.2 The “External Variables” Argument

The theory of reasoned action (Fishbein and Ajzen 1975; Ajzen and Fishbein 1980) was proposed as a complete theory of behavior under volitional control. In other words, no other variable influenced behavior through intentions, except for one's subjective norms and attitudes towards the behavior. Variables not specified by the model such as one's attitude towards the target, demographics, personality traits etc. were labeled as *external variables*, which could effect the volitional behavior only through the proximal determinants of behavior specified by the model. Even the theory of planned behavior (Ajzen 1991), which extends the theory of reasoned action beyond the realm of behaviors under volitional control, assumes *external variables* effect behavior through proximal determinants specified by the theory of reasoned action.

The discussion above suggests one more variant of the SSM model. Consistent with the external variables argument, satisfaction, like all variables that are not included in the theory of reasoned action, might have some influence on the terms of the model (Eagly 1993), attitude towards behavior being the most significant. Hence, consumer satisfaction can effect her/his switching behavior through its impact on one's attitude towards switching. Consequently, the next variant includes a direct path from consumer satisfaction to attitude towards switching. This variant model is presented in Figure 4.

The variants have been suggested as a means for comparison in terms of the extent to which each can be used to predict a consumer's intention to switch a service provider and subsequently her/his switching behavior. The assessment of this comparison will be made using structural equation modeling, comparing the models on the basis of their overall fit, explanatory power and significance of paths. This approach is consistent with that followed by Taylor and Todd (1995) in comparing models of information technology usage.

7.5 Summary

In summary, the question of what makes a consumer switch from one service provider to another can be examined by looking at factors influencing the immediate antecedent to switching, the intentions to switch. The theory of planned behavior offers a comprehensive model of the factors influencing one's behavioral intentions. In the context of service switching, one's attitude towards switching, one's subjective norms and the perceived costs that one faces in a switching situation effect one's intention's to switch. Further, satisfaction with the service provider has also been known to effect one's intentions to switch. As superordinate construct to satisfaction, service quality is another important variable incorporated into the model. Since service quality has been conceptualized as an attitudinal construct, then a mechanism to link this global attitude to the specific attitude of one's attitude towards switching is required. For this, the principle of perceived relevance of the service quality attitude is employed. As a result of such

associations, a model of switching in the services industries is proposed. In addition, two variants of the SSM are proposed as means for comparison.

Chapter 8

RESEARCH DESIGN, METHODOLOGY and RESULTS

8.1 Methodology

In the previous chapters, literature from marketing, psychology and economic traditions was explored to develop a process model for switching in the services industry by juxtaposing various propositions amongst constructs of interest. For an empirical examination of the proposed model, measures needed to be adapted and improved. This chapter presents the proposed setting for an empirical test of the model and the results of a pretest conducted to develop and refine measures of the various constructs of interest. This chapter also includes a brief discussion on the proposed methodology for the main study.

8.2 Proposed Research Setting and Selection of Respondents

Calder, Phillips, and Tybout (1981) suggest that in *theory falsification* contexts, respondents be selected from a sample homogeneous on nontheoretical variables. In addition, the research setting chosen should be one that allows operationalization of theoretical constructs and is free of external sources of variation, e.g., free of variation on variables not of theoretical interest. The reasoning is that (*ibid.*, p. 202)

Extraneous variation can produce spurious effects on the dependent variable, and, at a minimum, inflate error variance (Cook and Campbell 1975). To the extent that theoretically irrelevant factors are at work, significant relationships between the phenomenon under study may be obscured and the risk of Type II error may be increased. Insulated test settings minimize such irrelevancies.

This could be achieved by using controlled laboratory settings. However, when research involves variables not easily measured under laboratory settings, field settings are appropriate (ibid., 1981). This is a relevant assertion in the present context because valid data on switching behavior is difficult to obtain in a laboratory setting. Hence, a field setting is appropriate.

To minimize the effect of extraneous sources of variation, it was suggested that the data be collected using survey data from the customers of only one “Service” provided by their banks or trust agencies. Customers who faced a decision whether to repurchase that “Service” from their financial institution or not at some point in time, were used as a focus for the survey. It is recognized that the study will be limited to only one service in the financial institutions. However, as suggested by Calder, Phillips, and Tybout (1981), early empirical work can be productively done on small subsets of the general population and then progressively replicated on more diverse sub-samples over time. Hence, by choosing customers of only one “Service”, confounds associated with differences resulting from including other financial services in the analysis are minimized. In other words, factors extraneous to those being tested in the SSM model but idiosyncratic to a particular service can potentially confound the analysis and hence results. In such contingencies, selecting respondents which are homogeneous on nontheoretical variables is appropriate (ibid. 1981).

The “Service” to be examined in the present context was **mortgage**, available from a wide variety of Canadian banks and trust agencies. For an empirical examination of the

SSM, two factors were responsible for the choice of mortgages as the “Service”. Firstly, mortgages are well defined in terms of the four major characteristics that are used to differentiate services from goods. A mortgage possesses the characteristic of *Intangibility* to the extent that it cannot be experienced, seen, felt etc. before it is actually bought. A mortgage possesses the characteristic of *Inseparability* to the extent that both the service provider and the service buyer are involved in the production of the mortgage contract. A mortgage possesses the element of *Variability* to the extent that the nature of the mortgage contract is largely dependent on who provides it and when and where it is provided. A mortgage also possesses the characteristic of *Perishability* to the extent that a mortgage contract cannot be stored or inventoried. Secondly, mortgages have a fixed renewal date and hence there is an opportunity for the collection of actual behavioral data along with behavioral intentions - an undertaking not possible in many service settings.

8.3 Pretest Study

A pilot study was conducted with a convenience sample comprising staff, faculty and graduate students at Queen’s University, between February 6th and February 14th, 1995. The primary aim of this pretest was to test and validate the various scales that would be used for the final test of the SSM model. Out of the 100 questionnaires administered, 52 usable responses were received. Appendix 1 contains the pretest questionnaire that was administered to the convenience sample.

8.3.1 Measures

The measurement of the study concepts involved a combination of new and existing scales. Scales for Perceived Service Quality, Perceived Overall Service Quality, Perceived Satisfaction, Attitude Towards Switching, Switching Intentions, and Subjective Norms were adapted from existing scales. New scales were developed for measuring Perceived Switching Costs and Perceived Relevance.

Perceived Service Quality was measured using a modification of an existing scale: Zeithaml, Parasuraman, and Berry's (1990) 22 item scale for measuring perceptions of performance and features of a service provider. The 22 items intended for measuring consumer expectations were not used. Items **A1, A2, A3, and A4** in the questionnaire represent the *Tangibles* dimension of perceived service quality. Items **A5, A6, A7, A9, and A10** represent the *Reliability* dimension of perceived service quality. Items **A11, A12, A13, and A18 (reverse)** represent the *Responsiveness* dimension of perceived quality. Items **A14, A15, A17, and A19** represent the *Assurance* dimensions of perceived service quality. Items **A16, A20, A21, A22, and A23** represent the *Empathy* dimension of perceived service quality. Studies that have used such performance-only scales have reported reliabilities in excess of the $\alpha = .70$ norm (Nunnally, 1978). For example, Cronin and Taylor (1992) report an $\alpha = .925$ for Banks, $\alpha = .964$ for Pest Control, $\alpha = .932$ for Dry Cleaning, and $\alpha = .884$ for Fast Food, using the 22 item scale for measuring perceived service quality of these service providers. However, they treated the SERVPERF as unidimensional based on their factor analytic results. Gotlieb, Grewal, and Brown (1994)

used a similar scale with 10 items (2 for each dimension) and reported an $\alpha = .95$ in a health care context. Though they composed two items from each suggested dimension, the scale was treated as unidimensional. In addition, overall service quality was measured using a three item scale used by Taylor and Baker (1994), who reported an $\alpha = .8840$ for the scale. Items **A8**, **A24** (reverse), and **B2** were the relevant measures.

Perceived satisfaction was measured by adapting the six item satisfaction scale used by Oliver and Swan (1989) which is derived from the bipolar adjective scale of satisfaction tested by Westbrook and Oliver (1981). Items **B1a**, **B1b**, **B1c**, **B1d**, **B1e**, and **B3** were the relevant measures. Oliver and Swan (1989) reported a reliability coefficient $\alpha = .953$ for their satisfaction scale in an automobile purchase situation. Variations on the scale have also reported strong reliabilities. For example, Spreng and Singh (1993) used a four item bipolar adjective scale using poles as *Very Dissatisfied-Very Satisfied*, *Very Displeased-Very Pleased*, *Terrible-Delighted*, *Frustrated-Contented*. Gotlieb, Grewal, and Brown (1994) used a three item 7-point Likert type scale (Strongly Agree-Strongly Disagree) with items “I am happy about my decision to use the *named* hospital”, “I believe I did the right thing when I used *named* hospital”, and “Overall, I am satisfied with the decision to use the *named* hospital”. They reported a reliability coefficient $\alpha = .97$ for their scale.

Perceived switching costs were conceptualized earlier as being equivalent to the construct of perceived behavioral control in the theory of planned behavior. Perceived

behavioral control further encompasses two components: *facilitating conditions* and *self efficacy*. To measure such a construct, items that reflected both an individual's belief regarding access to resources and opportunities as well his/her self confidence for engaging in a behavior of switching were required. Consistent with that notion, the scale for perceived switching costs was developed by adapting four items from the perceived behavioral control scale used by Madden, Ellen, and Ajzen (1992): C3, C4, C5, and C7, one item from the perceived behavioral control scale used by Taylor and Todd (1995): C8, one item from the perceived switching cost scale used by Heide and Weiss (1995): C9 (reverse), and two items from the perceived overall switching costs scale used by Weiss and Anderson (1992): C10 and C12 (reverse). All studies reported reliability coefficients in excess of $\alpha = .70$.

The scale for attitude towards switching was adapted from the attitude towards the act scale used by Ajzen and Driver (1992). Seven of the original 12 bipolar adjective items considered pertinent in the present context were chosen⁷. Items C1a, C1b, C1c, C1d, C1e, C1f, and C11 represent the relevant measures. The authors reported a reliability coefficient of $\alpha = .89$ within subjects for their scale in the context of a leisure activity choice. The scale for subjective norms was adapted from Taylor and Todd's (1995) scale of the same name for which the reliability coefficient $\alpha = .88$ was reported. Two items, C2 and C6 were used to measure subjective norms. Ajzen and Driver (1992) also used a similar two item scale and reported a reliability coefficient $\alpha = .77$ within subjects.

⁷ For example, an item with poles as *ugly-beautiful* for measuring one's attitude towards switching from one bank to another was not considered suitable.

For measuring switching intentions, Oliver and Swan's (1989) scale of behavioral intention was adapted. Four items: **D1a**, **D1b**, **D1c**, and **D1d** were used to measure behavioral intent of switching. Variations of the scale has been successfully used by researchers in varied contexts. For example, Gotlieb, Grewal, and Brown (1994) use only the *Likely/Unlikely*, *Probable/Improbable*, and *Possible/Impossible* items to measure behavioral intent in re-selection of a named hospital. They reported a reliability coefficient as high as $\alpha = .98$. Bearden and Teel (1983) use only the *Likely/Unlikely* and *Probable/Improbable* items to measure behavioral intent in an automobile repair and services context. Reliability coefficients of greater than $\alpha = .85$ were reported for the initial and the replication samples. For capturing additional variance, one item: **D2** from the behavioral intention scale used by Zeithaml, Berry and Parasuraman (1996) was also included in the switching intention scale. An additional reason was that the item was explicitly stated as a measure of *propensity to switch* in their five dimensional behavioral intention battery.

A new scale had to be developed for measuring perceived relevance of the service quality attitude for couple reasons. Firstly, earlier studies that had used the concept of perceived relevance had done so in an experimental design where perceived relevance was treated as an exogenous variable and was manipulated rather than measured (e.g., Snyder 1982; Snyder and Kendzierski 1982; Borgida and Campbell 1982). Secondly, lack of manipulation checks in any of the three studies yielded no measure for the construct.

However, Snyder (1982, p. 117) very clearly identifies the manifestations of this relevance principle in an individual.

One type of situation that ought to promote such a “believing means doing” orientation [increase perceived relevance] is the one that induces individuals to adopt an “advocacy” role.

This advocacy role manifests itself in the form of an individual seeking every opportunity to say or do things that reflect and communicate those attitudes, to attempt to influence others, and to share those attitudes with others. Consistent with this argument, items **E1**, **E2**, **E3**, **E4**, **E5**, **E6**, and **E7** were developed in consultations with two other independent researchers.

8.3.2 Psychometric Properties of the Pretest Scales

Almost all of the scales, with the exception of scales for perceived switching costs and perceived relevance, have been well tested and shown to be reliable in earlier studies. Reliabilities for scales used to measure different theoretical constructs in the pretest and results of an exploratory factor analysis, are reported in Appendix 2. The reliability of all the scales appear quite adequate given Nunnally’s (1978) standard. For all scales there is either no increase or no substantial increase in the reliability coefficient if one or more items were deleted from that scale. The only exception is the scale for switching intentions where item **D2** appears to be problematic. If item **D2** were deleted from the switching intentions scale, the reliability of the scale would increase from .8514 to .8973. For the final analysis, this item will be deleted from the scale of switching intentions. No item from any scale, except **D2** from the scale of switching intentions, warranted exclusion from their respective scales in the light of high corrected item-total correlations. The

exploratory factor analysis did yield some insight into the dimensionalities of different scales. The scales of switching costs and perceived relevance imply a two dimensional structure, whereas all other scales exhibit unidimensional structures in this preliminary analysis.

Also included in the Appendix 2 are results of an exploratory analysis done on all items except the 22 items of the SERVPERF scale and item D2 from the switching intention scale. These 37 items were representative of 7 underlying constructs. The exploratory factor analysis procedure did extract 7 dimensions which explained approximately 79% of the total data variance. However, the 7 dimensions do not represent the exact structure of the constructs and overlaps exist. For example, Factor 2 seems to be a composite factor of the items of satisfaction and service quality. This is quite reasonable given a strong relationship posited between the two in the literature. Factor 1 seems to be a composite factor of the items representing attitude towards switching and switching intentions. This could be attributed to the fact that attitude towards switching is an immediate antecedent of switching intentions and hence a close relationship between the two exists. Factors 3 and 4 are fairly consistent with the results of exploratory factor analysis on the items of switching costs. However, the items of subjective relevance (C2 and C6) also load favorably on Factor 4, an unexpected result. Factors 5 and 6 are also reasonably consistent with the exploratory factor analysis results on the items of perceived relevance reported earlier in the appendix. Factor 7 is an oddity with only one item from the perceived relevance scale loading on that factor. Though the results do not clearly extract the 7 variables as constructed, the pattern is fairly consistent with what could be

expected given the nature of relationships amongst some variables. A small sample size may also have contributed to some anomalous results.

A preliminary dimensionality analysis of the SERVPERF scale was also done. The final statistics, the Scree plot and the factor pattern matrix, all generated by SPSS-PC, are included in Appendix 3. Consistent with earlier studies in service quality (cf. Cronin and Taylor 1992), the OBLIMIN oblique factor rotation procedure was used to perform factor analysis. The procedure produced a four factor solution which captured nearly 73% of the data variance. This result is partially supported by the Scree plot, which seems to suggest a two or three dimensional structure. This is attributable to the fact that the last two factors account for only 13% of the data variance. For the four extracted dimensions, the factor pattern matrix clearly suggest an overlap on the items belonging to distinct dimensions. For example, Factor 1, is composed of items A6, A7, and A9 belonging to the dimension of *Reliability*, A11 belonging to the dimension of *Responsiveness*, A20 and A21 belonging to the dimension of *Empathy*. The only factor that is somewhat congruent with the proposed dimension is Factor 2. Items A2, A3, and A4 all belonging to the dimension *Tangibles* load favorably on Factor 2. However, the fourth item belonging to *Tangibles* - A1, loads on Factor 4. The results are inconsistent with the five dimensional structure proposed by Parasuraman, Zeithaml, and Berry (1988, 1991) and reflect the concerns raised in the literature about the dimensionality in variations of this 22 item service quality scale (cf. Babakus and Boller 1992; Carman 1990).

So far we have commented primarily on the internal consistency of various constructs. However, conclusions about the issues of validity, reliability and dimensionality of the constructs discussed above can only be drawn from study on a larger scale. The main study will provide stringent tests for such issues in addition to testing the proposed process model of switching behavior in the services industry. Some questions, which from their comments appeared to be problematic for the pretest respondents, were reworded. In addition, two items for the past experience/habit scale, adapted from the East (1993) study, have been included. Appendix 4 contains the cover letter (invitation to participate and confidentiality assurance) and the questionnaire that was used for the main study.

8.4 Main Study

8.4.1 Method Of Data Collection

A database of approximately 50,000 mortgage customers of varied Canadian banks and trust agencies was purchased from the Canada Mortgage and Housing Corporation (CMHC) (However, CMHC are not associated with this study in any form). The database included names, addresses and the mortgage renewal date of customers who were up for renewal between July 1996 and October 1996. Customers whose mortgages were up for renewal in by early October made up the sampling frame. Surveys measuring service quality, satisfaction, attitude towards switching, subjective norms, perceived switching costs, prior experience with switching, perceived relevance and switching

intentions were mailed to 4000 customers one month before their respective renewal dates. The covering letter and the questionnaires were printed with the Queen's University, School of Business logo. Prepaid reply mail envelopes were included with the surveys for the respondents to return the completed surveys. A usable sample of 416 was obtained. Surveys which were filled out after the mortgage renewal dates and surveys for which mortgage renewal dates fell after October 15, 1996 are not a part of this usable sample. Data on the dichotomous variable of actual behavior, that is whether the respondent has renewed the mortgage from their bank or switched to another bank, was then collected from respondents via telephone in late October 1996. Each telephone interview lasted for an average of 3 minutes. Appendix 5 contains the protocol for these interviews. A mail survey was administered to these respondents. Out of the 416 usable samples, a final sample of 371 was obtained for Stage 1 of the analyses after the telephone interviews. Missing data (except for demographic variables) in these surveys was replaced with the series mean.

Respondent demographics (see Appendix 6 for demographic profile charts) were measured by sex, age, education levels, personal income and household income. 68.5% of the respondents were male and the remaining 31.5% were females. 3.5% of respondents for the final sample were less than 26 years of age, 42% were between the ages of 26 - 35, 36.9% were between the ages 36 - 45, and 17.58% were above 45 years of age. 8.4% of the respondents had not completed high school, 23.2% were high school graduates, 36.4% had either a technical or a community college diploma, 19.4 % had an undergraduate

degree, and 12.1% had a post-graduate degree. 0.5% of the respondents did not divulge information about their educational levels. 5.8% of the respondents had personal incomes less than \$20,000, 34% had personal incomes between \$20,000 - \$39,999, 42.5% had personal incomes between \$40,000 - \$59,999, 12.6% had personal incomes between \$60,000 - \$80,000, and only 5.1% had personal incomes exceeding \$80,000. 1.6% of the respondents did not divulge their personal income. For their households, only 3% reported incomes less than \$20,000, 14.3% reported incomes between \$20,000 - \$39,999, 31.3% reported incomes between \$40,000 - \$59,999, 28.1% reported incomes between \$60,000 - \$79,999, 12.1% reported incomes between \$80,000 - \$100,000, and 10% reported incomes exceeding \$100,000. 2.2% of the respondents did not divulge information about their household incomes.

8.4.2 Measurement Model

A three stage analysis was performed for the measurement model. In the first stage, exploratory factor analyses (principal component analysis, varimax rotation) and reliability analyses using SPSS for Windows were performed to refine the scales. In the second stage, the scales obtained as a result of analyses in the first stage were subjected to a confirmatory factor analysis using LISREL8 to assess convergent validity and internal consistency. Discriminant validity for all possible pairs of constructs was performed in stage three of the analysis.

8.4.2.1 Stage 1 - Exploratory Analysis

All 37 items measuring 7 constructs from the pretest study were retained for this stage of the analysis. In addition, a 2 item scale to measure the construct of past experience/habit was included in the main study survey. Similar to the pretest study, some preliminary psychometric analyses were performed on the scales using SPSS for Windows. Appendix 7 contains the summary of these analyses.

For the overall perceived service quality scale, an $\alpha = .8744$ was obtained. Exploratory factor analysis results suggested a one dimensional structure. Items **B8**, **B24** (reverse), and **C2**, were the relevant measures. All items for the scale were retained for stage 2 of the analysis.

For the perceived satisfaction scale, an $\alpha = .9721$ was obtained. Items **C1a**, **C1b**, **C1c**, **C1d**, **C1e**, and **C3** were the relevant measures. However, if item **C3** were to be excluded from the scale, the reliability of the scale increases to an $\alpha = .9779$. Hence, item **C3** was dropped from the perceived satisfaction scale for stage 2 of the analysis. This is further substantiated by results of the exploratory factor analysis which suggested that item **C3** only contributed a minor percentage to the total variance of the construct (0.9 %).

For the attitude towards switching scale, an $\alpha = .9682$ was obtained. Exploratory factor analysis suggested a one dimensional structure. Items **D1a**, **D1b**, **D1c**, **D1d**, **D1e**, **D1f**, and **D12** were the relevant measures. All items for the scale were retained for stage 2 of the analysis.

For the subjective norms scale, an $\alpha = .7534$ was obtained. Items **D2** and **D6** were the relevant items and were retained for stage 2 of the analysis.

For the perceived switching costs scale, exploratory factor analysis suggested two distinct factors. One consisted of items **D5** (reverse), **D7**, **D8** (reverse), and **D14** and the other factor consisted of items **D11**, **D3** (reverse), **D10**, and **D4** (reverse). Since perceived switching costs were conceptualized and measured comparable to perceived behavioral control, the results are hardly unexpected. The first set of items reflects the notion of *facilitating conditions* (Triandis 1977); dealing primarily with one's belief regarding access to resources and opportunities in performing a behavior, whereas the second set of items reflect the notion of *self-efficacy* (Bandura 1977; 1982); dealing primarily with one's self confidence for engaging in a behavior. Hence, the perceived switching costs scale was divided into two scales, labeled PSWC_1 (**D5**, **D7**, **D8**, and **D14**) and PSWC_2 (**D11**, **D3**, **D10**, and **D4**). Reliability analysis on these scales resulted in an $\alpha = .7736$ for the PSWC_1 scale and an $\alpha = .8238$ for the PSWC_2 scale. Hence, four items were retained for the PSW_1 scale and four items were retained for the PSWC_2 scale for stage 2 of the analysis.

For the prior experience with switching scale, an $\alpha = .5040$ was obtained. **D9** (reverse) and **D13** were the relevant items. The lack in reliability could be due to directionality of wording. Since negatively worded items may produce confounding results (Carman 1990) in long questionnaires, only item **D13** was retained for stage 2 of the analysis.

For the perceived relevance construct, exploratory factor analysis suggested two factors. One factor consisted of items **F3, F5, and F6** and the other factor consisted of items **F1, F2, F4, and F7**. As stated earlier, perceived relevance manifests itself in an individual in terms of an advocacy role that s/he adopts in reflecting and communicating some attitude/attitudes (here service quality). The first three items reflected the notions of advocacy in communicating their attitudes to the employees of a bank and three of the latter four items(**F2, F4, and F7**) reflected the notions of advocacy in communicating their attitudes to people important to the respondents. Hence, the perceived relevance scale was divided into two scales labeled **PREL_1 (F3, F5, and F6)** and **PREL_2 (items F1, F2, F4, and F7)**. Reliability analysis on these scales resulted in an $\alpha = .7750$ for **PREL_1** and an $\alpha = .7179$ for **PREL_2**. However, if item **F1** were to be excluded from the **PREL_2** scale, the reliability of the scale increases to an $\alpha = .7715$. Hence, three items for **PREL_1** and three items for **PREL_2** were retained for stage 2 of the analysis.

For the switching intentions scale, an $\alpha = .9349$ was obtained. The results of exploratory factor analysis suggested a one dimensional structure. **E1a, E1b, E1c, and E1d** were the relevant items. However, if item **E1c** were to be excluded from the scale, the reliability of the scale increased to an $\alpha = .9623$. Hence, only three items were retained for stage 2 of the analysis.

8.4.2.2 Stage 2 - Convergent Validity and Internal Consistency of the Scales

A confirmatory factor analysis was performed on the scales (excluding behavior and the single item scale for the construct of past experience/habit) involving the

measures that were retained for analysis after an exploratory examination in the earlier section. The confirmatory factor analysis was conducted with LISREL8 (Joreskog and Sorbom 1993). For the assessment of the model, multiple fit indices are reported. The traditional χ^2 is reported. However, since χ^2 may be an inappropriate measure to assess the fit of models with large sample sizes (Browne and Cudeck 1993, Marsh 1994), five additional fit indices are also reported: χ^2/df (Chi-square/Degrees of Freedom) (Wheaton, et. al., 1977); AGFI (Adjusted Goodness of Fit Index) (Joreskog and Sorbom 1993); RNI⁸ (Relative Non-Centrality Index) (McDonald and Marsh 1990); RMSEA (Root Mean Square Error of Approximation) (Steiger 1990); and CFI (Comparative fit Index) (Bentler 1990). Acceptable model fits are indicated by the values of χ^2/df below 5.00, AGFI exceeding 0.80 (Taylor and Todd 1995), RNI values exceeding 0.90 (Marsh 1994), CFI values exceeding 0.90, and the RMSEA values below 0.10 with values less than 0.80 suggesting an adequate fit (Browne and Cudeck 1993). Standardized data was used for all subsequent analysis. Standardization of data is desirable when several variables are being used in an analysis because the measures may be sensitive to differing scales. The process of standardization “eliminates the bias introduced by the difference in the scales of the several attributes or variables used in the analysis” (Hair, Anderson, Tatham and Black 1995, p. 435).

The overall model fit indices indicated that the model was reasonably consistent with the data, with the all the fit indices at or better than the recommended values ($\chi^2 = 1203.85$ [$p < 0.01$], $df = 491$, $\chi^2/df = 2.45$, AGFI = 0.80, RNI = 0.94, RMSEA = 0.063, and CFI = 0.94).

⁸ $RNI = (\chi^2_{Null Model} - df_{Null Model}) - (\chi^2_{Estimated Model} - df_{Estimated Model}) / (\chi^2_{Null Model} - df_{Null Model})$

To further assess the validity of the measures, Bollen (1989) suggests a scrutiny of factor loadings as well as the squared multiple correlations between the items and the constructs. Factor loadings of 0.60 are generally considered the minimal level at which convergent validity could be suggested (Bagozzi and Yi 1988). For the squared multiple correlations, values above 0.40 are suggestive of a substantial shared variance with their hypothesized constructs (Taylor and Todd 1995). In addition to assessing validity of the measures, internal consistency measures⁹ (Fornell and Larker 1981) were calculated for each scale/construct with factor loadings obtained from the confirmatory factor analysis. Table 1 provides the factor loadings and the squared multiple correlations for individual items, in addition to the internal consistency measures for each construct.

All measures with the exception of item F2 for the PREL_2 scale exhibited substantive convergent validity with their respective constructs. Since F2 did not meet the minimal criteria for convergent validity based on its factor loadings and the squared multiple correlation, it was deleted from the PREL_2 scale for stage 3 of the analysis. Results from Table 1 are also conclusive of scales/constructs that are adequately internally consistent. Appendix 8 contains the descriptive statistics for the summated scales.

8.4.2.3 Stage 3 - Assessing Discriminant Validity amongst Constructs

Discriminant validity tests were performed on all possible pairs of constructs. A summary of the 45 pairs examined for discriminant validity tests can be found in Tables 2a - 2i. If the correlation between two constructs is significantly different from 1.0,

discriminant validity is established. For all 45 pairs, this is clearly established by looking at the bivariate correlations reported in the tables. In addition, divergent validity can also be statistically demonstrated using a chi-square difference test. Salisbury, Gopal and Chin (1996) suggest one such procedure in which a chi-square difference test is performed between two models: one in which the correlation between the constructs is freely estimated; known as the free model and the other in which the correlation is fixed to be 1.0; known as the fixed model. A chi-square difference greater than 3.84 ($\alpha = .05$) would suggest that two constructs are statistically different. The results of Tables 2a - 2i clearly demonstrate the discriminant validity of constructs in all possible pairings.

8.4.3 Structural Models

Hypothesized paths in each of the three models proposed earlier (See Figures 2, 3 and 4) were tested using LISREL8 (Joreskog and Sorbom 1993) with maximum likelihood (ML) estimation. Since the moderating variable perceived relevance was split into two variables (PREL_1 and PREL_2), a total of six models were estimated. For each model, overall fit, predictive power and the significance of the paths were considered. R^2 for each dependent construct was examined to assess explanatory power, and the significance of individual paths was assessed. Since this study involved a comparison of alternative theoretical models, LISREL, which is suggested as an appropriate technique for such analysis (Joreskog 1993), was used. In conducting the analysis, all hypothesized paths except those leading directly to switching behavior were estimated. Since LISREL is incapable of analyzing data where the dependent variable is a binary variable, an

⁹ Internal Consistency = $(\sum \lambda_{yi})^2 / (\sum \lambda_{yi})^2 + \sum \text{Var}(\epsilon_i)$, where $\text{Var}(\epsilon_i) = 1 - \lambda_{yi}^2$

alternative technique was used to estimate direct paths to the switching behavior constructs. In addition to the complexity of estimating the direct effects to a dichotomous endogenous variable, this study also involved estimating interaction effects in each of the three models. Thus, the analysis proceeds in two stages.

8.4.3.1 Estimating Interaction Effects

Since hypothesis 9 suggests that the constructs of service quality and perceived relevance interact in their effect on the construct of attitude towards switching, procedures for estimating this interaction effect using structural equation modeling were employed. This is appropriate since alternative procedures such as product term regression analysis and subgroup analysis are limited in their ability to provide robust estimates. As suggested by Ping (1995, p. 336)

..., the most popular estimation technique, regression, has been shown to produce coefficient estimates that are biased and inconsistent for latent variable interactions or quadratics (Busemeyer and ones 1983). Alternatives, such as subgroup analysis approaches that involve sample splitting to detect the variables, are criticized for their reduction of statistical power and the resultant likelihood of false disconfirmation (Cohen and Cohen 1983; Jaccard, Turrisi, and Wan 1990).

Product indicant analysis, the technique used to estimate interaction effects using structural equation models, avoids the limitations of product term regression analysis and subgroup analysis (ibid. 1995). Hence, the product indicant analysis technique was used to estimate interaction effects in this study.

To assess the main effects and the interactive relationship between service quality and perceived relevance in predicting attitude towards switching, I used the procedure

suggested by Ping (1995). A linear terms only measurement model was estimated for all constructs. Appropriate loadings and error estimates for the constructs of service quality and perceived relevance were used to construct the loading and error terms for the interaction construct. As opposed to the Kenny and Judd (1984) approach of creating multiple nonlinear indicants of the interaction construct, Ping (1995) suggests creating a single indicant for the interaction construct. The formula are

$$\lambda_{\text{Service Quality: PREL}_1(\text{PREL}_2)} = (\lambda_{B8} + \lambda_{B24} + \lambda_{C2}) (\lambda_{F3} + \lambda_{F5(F4)} + \lambda_{F6(F7)}) \quad (1)$$

$$\theta_{\text{Service Quality: PREL}_1(\text{PREL}_2)} = (\lambda_{B8} + \lambda_{B24} + \lambda_{C2})^2 \text{Var}(\text{Service Quality}) (\theta_{eF3} + \theta_{eF5(F4)} + \theta_{eF6(F7)}) \\ + (\lambda_{F3} + \lambda_{F5(F4)} + \lambda_{F6(F7)})^2 \text{Var}(\text{PREL}_1(\text{PREL}_2)) (\theta_{eB8} + \theta_{eB24} + \theta_{eC2}) \\ + (\theta_{eF3} + \theta_{eF5(F4)} + \theta_{eF6(F7)}) (\theta_{eB8} + \theta_{eB24} + \theta_{eC2}) \quad (2)$$

Where λ 's are the indicant loadings, Var is the variance and θ 's are variances of the error terms.

The estimates for various parameters from the measurement model are given in Table 3.

Parameters calculated for the various structural models to be tested are given in Table 4.

The structural equation model was estimated using LISREL8.

8.5 Estimating Direct Paths to the Switching Behavior Construct

In each of the six models three direct paths to switching behavior had to be estimated: 1) Switching Intentions → Switching Behavior, 2) Facilitating Conditions → Switching Behavior, and 3) Self Efficacy → Switching Behavior. In addition, one direct path: Habit → Switching Behavior had to be estimated in the “habit” variant to the SSM model. To accomplish this, measurement and structural parameters for each of the models were used to calculate factor scores for the constructs of switching intentions, PSWC_1, PSWC_2 and habit. These estimated factor scores were used as inputs to a logit model where factor scores for switching intentions, facilitating conditions (PSWC_1), self efficacy (PSWC_2) and habit (only in the “habit” variant to the SSM) were regressed on

the dichotomous dependent variable of switching behavior. LOGISTIC REGRESSION procedure in SPSS for windows was used to analyze the data.

The results of the logistic regression are generally assessed in a three step fashion. Firstly, the goodness of fit of the model is assessed using the model χ^2 and the classification results. The model χ^2 test represents the hypothesis that the hypothesized model is not statistically different from a model with only a constant term (Hosmer and Lemeshow 1989). Alternatively, the statistic tests the null hypothesis that all model parameters are 0. Obviously, for a model to be robust the model χ^2 needs to be significant. In other words, the goal is to reject the null hypothesis. In addition to the model χ^2 , overall fit of the model may also be assessed by how well the model can classify the data on the predicted binary variable. After, the goodness of fit evaluation, the second step is to assess the directionality and the strength of the regression parameter coefficients. Besides interpreting the sign of the coefficients for directionality, Wald's statistic is employed to test the null hypothesis that the coefficient is not different from 0. Finally, some conclusion about the predictive power of the models could be made by computing its pseudo- R^2 (Aldrich and Nelson 1990).

8.6 Full Models (Structural and Logistic) - Testing the Hypotheses

The estimation of the full models was split up into two batches. First, the SSM and its two variants were estimated for models including the construct of PREL_1. The same procedure was repeated for models including the construct of PREL_2.

8.6.1 Estimating Full Models with PREL 1

8.6.1.1 The SSM

Overall the fit statistics indicate that SSM provides a good fit to the data ($\chi^2 = 1106.33$ [$p < 0.01$], $df = 440$, $\chi^2/df = 2.51$, AGFI = 0.81, RNI = 0.94, RMSEA = 0.064, and CFI = 0.94). Although the χ^2 value is significant, all other fit measures are within the range suggestive of a good model fit. The models accounts for 90% of the variance in satisfaction, 78% of the variance in attitude towards switching and 76% of the variance in switching intentions. Table 5a presents a summary for the structural part of the full model.

As indicated in Figure 5a, most path coefficients were as hypothesized. The paths from satisfaction, attitude towards switching and facilitating conditions (PSWC_1) to switching intentions were significant, as were the paths from service quality to satisfaction and attitude towards switching. The path from subjective norms to attitude towards switching was also significant. The path from self efficacy (PSWC_2) to switching intentions was nonsignificant. Of notable importance is the nonsignificance of service quality - perceived relevance interaction in predicting one's attitude towards switching. However, the model predicts a direct significant effect of perceived relevance on one's attitude towards switching. In brief, I found support for hypotheses H1, H2, H4, and H6. Partial support for H7 was found, since only the *facilitating conditions* component of switching costs had a significant effect on switching intentions. *Self-efficacy* failed to show any significant effect on switching intentions. I could not find any statistical support for hypotheses H5 and H9.

Based on the significant model χ^2 of the logistic regression model, it is plausible that we reject the null hypothesis that all model parameters are 0. Since, the null is rejected, it provides evidence for the goodness of fit of the model. The goodness of fit could be further examined by examining the classification tables. Clearly, a very high percentage of the total cases were correctly classified (88.41%), providing further evidence of the goodness of it as well as a strong predictive power of the model. Examining the standard errors and Wald's statistic for variables of interest in the logistic regression model, a significant effect of switching intentions on switching behavior was detected. However, facilitating conditions and self efficacy failed to have a significant effect in predicting switching behavior. The intercept term is also significant, indicating an innate tendency towards switching even in ideal situations. The predictive power of this regression is measured by a statistic labeled the *pseudo-R²*. Though a number of these pseudo-R² measures have been proposed and employed, in logistic models there is no well defined baseline to measure the computed correct prediction rate against (Aldrich and Nelson 1990). Hence, these summary measures should be used with caution. Based on one formulation of the pseudo- R² measure¹⁰, the logistic regression model accounts for 30% of the variance in switching behavior. Table 5b presents a summary of the logistic regression part of the full model. I found statistical support for hypothesis H3, however hypothesis H8 could not be statistically supported. Table 5c contains the classification results. Figure 5a summarizes the model.

¹⁰ Pseudo-R² (Aldrich and Nelson 1990) = $c/(N+c)$, where $c=\chi^2$ statistic for the overall fit and N is the total sample size

8.6.1.2 The Influence of Past Experience/Habit - Variant 1

Overall, the fit statistics indicate that this variant model also provides a good fit to the data, though again the χ^2 value is significant ($\chi^2 = 1145.21$ [$p < 0.01$], $df = 465$, $\chi^2/df \approx 2.46$, AGFI = 0.81, RNI = 0.94, RMSEA = 0.063, and CFI = 0.94). The fit is comparable to that of SSM.

The model accounts for 90% of the variance in satisfaction, 78% of the variance in attitude towards switching and 76% of the variance in switching intentions. Table 5a presents a summary for the structural part of the full model. There is no addition in the predictive power of this variant in comparison to that of the SSM. The increase in model complexity does not provide a better prediction of intentions to switch. Hence, the addition of habit as a predictor does not, in this case, help to better understand switching intentions relative to the SSM. It is no surprise then, that, the path from habit to switching intentions is non-significant.

As indicated in Figure 5b, path coefficient from satisfaction, attitude towards switching and facilitating conditions (PSWC_1) to switching intentions were significant, as were the paths from service quality to satisfaction and attitude towards switching. The path from subjective norms to attitude towards switching was also significant. The path from self efficacy (PSWC_2) to switching intentions was nonsignificant. Consistent with the SSM results, the service quality - perceived relevance interaction has a nonsignificant effect in predicting one's attitude towards switching. However, the model predicts a direct significant effect of perceived relevance on one's attitude towards switching.

Based on the significant model χ^2 of the logistic regression model, it is plausible that we reject the null hypothesis that all model parameters are 0. Since the null is rejected, it provides evidence for the goodness of fit of the model. The goodness of fit could be further examined by examining the classification tables. As in the SSM, a very high percentage of the total cases were correctly classified (88.14%), providing further evidence of the goodness of fit of the model. Examining the standard errors and Wald's statistic for variables of interest in the logistic regression model, the pattern of the results is identical to those in the SSM. Switching intentions have a significant effect on the switching behavior and both facilitating conditions and self efficacy have a non-significant effect on switching behavior. In addition, there was no significant effect of past behavior/habit on switching behavior. The model accounted for approximately 30% of the variance in switching behavior. Table 5b presents a summary of results for the logistic regression. Table 5c contains the classification results. Figure 5b summarizes the model.

8.6.1.3 The "External Variable" Argument Model - Variant 2

Overall, the fit statistics indicate that this variant model also provides a fit comparable to the SSM and the "habit" variant model, though again the χ^2 value is significant ($\chi^2 = 1111.20$ [$p < 0.01$], $df = 440$, $\chi^2/df = 2.52$, AGFI = 0.81, RNI = 0.94, RMSEA = 0.064, and CFI = 0.94).

The model accounts for 90% of the variance in satisfaction, 78% of the variance in attitude towards switching and 76% of the variance in switching intentions. There is no

addition in the predictive power of this variant in comparison to that of the SSM and the “habit” variant. Table 5a presents a summary for the structural part of the full model.

As indicated in Figure 5c, path coefficient from attitude towards switching and facilitating conditions (PSWC_1) to switching intentions were significant, as was the path from service quality to satisfaction. The path from subjective norms to attitude towards switching was also significant. The path from self efficacy (PSWC_2) to switching intentions was nonsignificant. Consistent with the results of the earlier models, the service quality - perceived relevance interaction has a nonsignificant effect in predicting one’s attitude towards switching. Also, the model predicts a direct significant effect of perceived relevance on one’s attitude towards switching. Though there is no reduction in the variance of attitude towards switching compared to the earlier models, the path hypothesized by this variant is nonsignificant. In addition, the path from service quality to attitude towards switching, which is significant in the earlier models, is also nonsignificant.

Based on the significant model χ^2 of the logistic regression model, it is plausible that we reject the null hypothesis that all model parameters are 0. Since the null is rejected, it provides evidence for the goodness of fit of the model. The goodness of fit could be further examined by examining the classification tables. Identical to prior models, a very high percentage of the total cases were correctly classified (88.41%), providing further evidence of the goodness of fit of the model. Examining the standard errors and Wald’s statistic for variables of interest in the logistic regression model, the pattern of the results is identical to the earlier models. Switching intentions have a significant effect on the

switching behavior and both facilitating conditions and self efficacy have a non-significant effect on switching behavior. A significant intercept term is also present. The model accounted for approximately 30% of the variance in switching behavior. Table 5b presents a summary of results for the logistic regression. Table 5c presents the classification results. Figure 5c summarizes the full model.

8.6.2 Estimating Full Models with PREL 2

8.6.2.1 The SSM

Overall the fit statistics indicate that SSM provides a good fit to the data ($\chi^2 = 1044.97$ [$p < 0.01$], $df = 410$, $\chi^2/df = 2.54$, AGFI = 0.81, RNI = 0.95, RMSEA = 0.065, and CFI = 0.95). Although the χ^2 value is significant, all other fit measures are within the range suggestive of a good model fit. The models accounts for 90% of the variance in satisfaction, 80% of the variance in attitude towards switching and 76% of the variance in switching intentions. Table 6a presents a summary for the structural part of the full model.

As indicated in Figure 6a, most path coefficients were as hypothesized. The paths from satisfaction, attitude towards switching and facilitating conditions (PSWC_1) to switching intentions were significant, as were the paths from service quality to satisfaction and attitude towards switching. The path from subjective norms to attitude towards switching was also significant. The path from self efficacy (PSWC_2) to switching intentions was nonsignificant. This model also exhibits the nonsignificance of service quality - perceived relevance interaction in predicting one's attitude towards switching. The model predicts a direct significant effect of perceived relevance on one's attitude towards switching. In brief, I found support for hypotheses H1, H2, H4, and H6. Partial

support for H7 was found, since only the *facilitating conditions* component of switching costs had a significant effect on switching intentions. *Self-efficacy* failed to show any significant effect on switching intentions. I could not find any statistical support for hypotheses H5 and H9.

Based on the significant model χ^2 of the logistic regression model, it is plausible that we reject the null hypothesis that all model parameters are 0. Since the null is rejected, it provides evidence for the goodness of fit of the model. The goodness of fit could be further examined by examining the classification tables. Clearly, a very high percentage of the total cases were correctly classified (87.60%), providing further evidence of the goodness of fit of the model. Examining the standard errors and Wald's statistic for variables of interest in the logistic regression model, a significant effect of switching intentions on switching behavior was detected. However, facilitating conditions and self efficacy failed to have a significant effect in predicting switching behavior. The intercept term is also significant. The logistic regression model also accounts for 30% of the variance in switching behavior. Table 6b presents a summary of the logistic regression part of the full model. I found statistical support for hypothesis H3, however hypothesis H8 could not be statistically supported. Table 6c presents the classification results. Figure 6a summarizes the full model.

8.6.2.2 The Influence of Past Experience/Habit - Variant 1

Overall, the fit statistics indicate that this variant model also provides a good fit to the data, though again the χ^2 value is significant ($\chi^2 = 1083.30$ [$p < 0.01$], $df = 434$, χ^2/df

= 2.49, AGFI = 0.81, RNI = 0.94, RMSEA = 0.064, and CFI = 0.95). The fit is comparable to that of SSM.

The model accounts for 90% of the variance in satisfaction, 80% of the variance in attitude towards switching and 76% of the variance in switching intentions. Table 6a presents a summary for the structural part of the full model. Again, there is no addition in the predictive power of this variant in comparison to that of the SSM. The increase in model complexity does not provide a better prediction of intentions to switch. Hence, the addition of habit as a predictor does not, in this case also, help to better understand switching intentions relative to the SSM. Consequently, the path from habit to switching intentions is non-significant.

As indicated in Figure 6b, path coefficient from satisfaction, attitude towards switching and facilitating conditions (PSWC_1) to switching intentions were significant, as were the paths from service quality to satisfaction and attitude towards switching. The path from subjective norms to attitude towards switching was also significant. The path from self efficacy (PSWC_2) to switching intentions was nonsignificant. Consistent with the SSM results, the service quality - perceived relevance interaction has a nonsignificant effect in predicting one's attitude towards switching. However, the model predicts a direct significant effect of perceived relevance on one's attitude towards switching.

Based on the significant model χ^2 of the logistic regression model, it is plausible that we reject the null hypothesis that all model parameters are 0. Since the null is rejected, it provides evidence for the goodness of fit of the model. The goodness of fit could be

further examined by examining the classification tables. As in the SSM, a very high percentage of the total cases were correctly classified (88.14%), providing further evidence of the goodness of fit of the model. Examining the standard errors and Wald's statistic for variables of interest in the logistic regression model, the pattern of the results is identical to those in the SSM. Switching intentions have a significant effect on the switching behavior and both facilitating conditions and self efficacy have a non-significant effect on switching behavior. In addition, there was no significant effect of past behavior/habit on switching behavior. The model accounted for approximately 30% of the variance in switching behavior. Table 6b presents a summary of results for the logistic regression. Table 6c presents the classification results. Figure 6b summarizes the above full model.

8.6.2.3 The "External Variable" Argument Model - Variant 2

Overall, the fit statistics indicate that this variant model also provides a fit comparable to the SSM and the "habit" variant model, though again the χ^2 value is significant ($\chi^2 = 1049.62$ [$p < 0.01$], $df = 410$, $\chi^2/df = 2.56$, AGFI = 0.81, RNI = 0.95, RMSEA = 0.065, and CFI = 0.95).

The model accounts for 90% of the variance in satisfaction, 78% of the variance in attitude towards switching and 76% of the variance in switching intentions. Table 6a presents a summary for the structural part of the full model. There is no addition in the predictive power of this variant in comparison to that of the SSM and the "habit" variant.

As indicated in Figure 6c, path coefficient from attitude towards switching and facilitating conditions (PSWC_1) to switching intentions were significant, as was the path from service quality to satisfaction. The path from subjective norms to attitude towards switching was also significant. The path from self efficacy (PSWC_2) to switching intentions was nonsignificant. Consistent with the results of the earlier models, the service quality - perceived relevance interaction has a nonsignificant effect in predicting one's attitude towards switching. Also, the model predicts a direct significant effect of perceived relevance on one's attitude towards switching. Though there is no reduction in the variance of attitude towards switching compared to the earlier models, the path hypothesized by this variant is nonsignificant. In addition, the path from service quality to attitude towards switching, which is significant in the earlier models, is also nonsignificant.

Based on the significant model χ^2 of the logistic regression model, it is plausible that we reject the null hypothesis that all model parameters are 0. Since the null is rejected, it provides evidence for the goodness of fit of the model. The goodness of fit could be further examined by examining the classification tables. As in prior models, a very high percentage of the total cases were correctly classified (87.33%), providing further evidence of the goodness of fit of the model. Examining the standard errors and Wald's statistic for variables of interest in the logistic regression model, the pattern of the results is identical to the earlier models. Switching intentions have a significant effect on the switching behavior and both facilitating conditions and self efficacy have a non-significant effect on switching behavior. A significant intercept term is also present. The model

accounted for approximately 30% of the variance in switching behavior. Table 6b presents a summary of results for the logistic regression. Table 6c presents the classification results. Figure 6c summarizes the full model.

Chapter 9

DISCUSSION

9.1 Summary

This research was aimed at developing a better understanding of how and why customers switch service providers. Specifically, the research involved: identifying factors that influenced customers decision to switch service providers and how these factors influenced the decision making process. These issues were investigated within the framework of Service Switching Model (SSM): a model developed using literature from economics, psychology and marketing. Two variants to this model were also proposed, primarily for means of comparison. Data from a field study of 371 mortgage customers of various Canadian banks and trusts were used to test these models using structural equation modeling. The empirical investigation was limited to testing the proposed models with data from different bank customers on only one type of service. Thus, although theoretical development of the proposed models involved literature from diverse streams across various service settings, generalization of these results outside of mortgage services should be done with caution.

I will first discuss the results of the SSM. Then a discussion on the comparison of the SSM results to the two variants will follow. Since the pattern of results in models involving PREL_1 and PREL_2 are comparable, the discussion is applicable equally to both set of models. I will then proceed with a discussion on theoretical implications and avenues for future research. The chapter concludes with a discussion on the managerial implications of this study.

9.2 The SSM

9.2.1 Determinants of Attitude towards Switching Behavior

This study hypothesized that service quality and perceived relevance would have an interactive effect on one's attitude towards switching. However, the empirical results indicate main effects of both service quality and perceived relevance on one's attitude towards switching service providers and no interactive effect. Higher levels of both factors result in a lower level of one's attitude towards switching service providers. The relationship between service quality and one's attitude towards switching seems plausible. If one perceives that her/his service provider gives her/him high levels of service quality, her/his attitude towards leaving that service provider ought to be unfavorable. This result is consistent with the external variable argument of Fishbein and Ajzen (1975) as well as Eagly and Chaiken's (1993) argument regarding the impact of attitudes towards a target (service quality) on attitudes towards the behavior (attitudes towards switching). Summarily, both attitudes towards behaviors and attitudes towards a target should be retained in any causal models that involves an attitude-to-behavior sequence (Eagly and Chaiken 1993). In such a sequence, "one's attitude towards the target probably does come to mind *before* attitudes towards the behaviors in which one might engage in relation to that target" (Eagly and Chaiken 1993, p.205). For the nonsignificant interaction effect, it might be argued that though an individual might have to perceive some link (perceived relevance) between the general attitude and the behavioral possibilities at hand, at a

minimum, the general attitude (service quality) might have a significant effect on a specific attitude (attitude towards switching) (Eagly 1992). The results suggest that Snyder's (1982) relevance strategy may not work across a broad spectrum of behaviors. Even Snyder and Kendzierski (1982, p.181) suggest that the relevance strategies might work only when they can induce a "believing meaning doing" orientation in individuals. Since the only construct measured was perceived relevance, and no measure was taken to ascertain whether their perceived relevance indeed induced a "believing meaning doing" orientation, a nonsignificant interaction effect could possibly indicate a lack of inducement of such an orientation.

However, it is not very clear why higher levels of perceived relevance might lower one's attitude towards switching to a different service provider. It is uncertain how adopting an advocacy role in communicating and reflecting a general attitude (here service quality) could have an impact on a specific attitude (here attitude towards switching service providers). It may be the case that adopting an advocacy role influences the individual to perceive it as a coping mechanism to alternative behavioral choices at hand. In the present context, a customer might see her/his advocacy role as a means of either reinforcing the service providers good efforts or as a way of informing service provider of their lapses in performance (here service quality) (Ping 1993). In such cases, one is likely to find a significant negative relationship between perceived relevance and attitude towards switching, since the customer sees the advocacy role as a viable alternative to indulging in a switching behavior.

As hypothesized, subjective norms have a significant effect on one's attitude towards switching service providers. The more favorable perceptions of approval from the significant others in relation to switching behavior, the more favorable the attitude towards switching from that service provider, reinforcing the relationship suggested by Eagly and Chaiken's (1993) "composite model of the Attitude-Behavior Relation".

9.2.2 Determinants of Behavioral Intentions

Summarily, the results were sufficiently consistent with the hypothesized relationships in SSM. Though service quality and satisfaction were closely related, a significant distinction between the two could be established. Further, service quality was significant as a superordinate construct to satisfaction. This result is consistent with the current understanding of the relationship between the two constructs in the literature (Cronin and Taylor 1992; Oliver 1993b; Gotlieb, Grewal and Brown 1994). Hence, the higher the level of perceived service quality, the higher the perception of satisfaction with the service provider. In addition, satisfaction with the service provider was a significant predictor of one's intention to switch from that service provider. The more satisfied a customer is with a service provider, the lesser is her/his propensity to switch to a competing service provider.

A customer's attitude towards switching appears to be an important determinant of a customer's intention to switch service providers, with higher levels of this factor being associated with a higher propensity to switch service providers.

Interestingly, subjective norms only have an indirect effect on one's intention to switch service providers. Subjective norms appear to have a significant effect on one's attitude towards switching, and a nonsignificant direct effect on intentions to switch. The direct effect of subjective norms on one's attitude towards switching is as hypothesized. However, the interesting case is the nonsignificance of its effect on switching intentions. This nonsignificant effect remains even when the path between subjective norms and attitude towards switching is eliminated in the structural models. It is possible that respondents perceived other people's preferences/approval for their actions in terms of behavioral beliefs rather than normative beliefs. In such a case, subjective norms could also be seen as a determinant of one's attitude towards the behavior (Smetana and Adler 1980; Eagly and Chaiken 1993) and not that of intentions. Since the present study did not explicitly measure normative beliefs, the control over interpretation of subjective norms in terms of behavioral or normative beliefs might have been lost.

Self-efficacy did not appear to have any significant effect on one's intention to switch service providers. However, facilitating conditions did have a significant effect on one's intention to switch service providers. A possible explanation for the nonsignificant effect of self efficacy on intention to switch service provider may lie in customers evaluation of the behavior. If a behavior is positively evaluated one might find a significant effect of self efficacy on behavioral intention. However, this "causal link seems less reasonable for negatively evaluated behaviors" (Eagly and Chaiken 1993). In the present context, switching behavior might have been evaluated as a negative behavior, and hence,

a nonsignificant effect. It needs to be pointed out here that this evaluation of switching behavior is entirely different from attitude towards switching from a service provider.

While the former is a general evaluation of the behavior known as “switching”, the latter is a specific evaluation of engaging in switching behavior with respect to a particular service provider.

9.2.3 Determinants of Behavior

Though customers intention to switch service providers has a significant impact on one’s switching behavior, neither self-efficacy nor facilitating conditions had a significant direct effect on switching behavior. Hence, both components of perceived switching costs/behavioral control failed to influence the behavior directly. This is plausible because “Strictly speaking, of course, it is *actual* control that is expected to exert a direct influence on behavior, not perceived control.” (Ajzen and Madden 1986). Since we can only measure perceptions of behavioral control and cannot determine actual levels of control, the results obtained are consistent with the argument above. In addition, it is argued that a direct effect of perceived behavioral control can only be observed under certain type of behaviors. As East (1993, p.365) suggests

it is argued here that this[a direct influence of perceived behavioral control] happens when people are trying to do something that they cannot easily do but cannot easily escape from doing, for example to pass an exam or give up cigarettes. In the case of more discretionary actions such as financial investment people who doubt their ability to do something elect not to try; thus PC changes intention and only in this way affects behavior.

Hence, in case of a discretionary behavior such as switching service providers for mortgage services, we are more likely to see only an indirect influence of perceived switching costs on switching behavior through switching intentions.

9.3 Comparing the Variants to SSM

Results from chapter 8 are suggestive of the fact that neither of the two variants add to our understanding of the switching behavior phenomenon. Adding past experience/habit as an additional variable to the SSM resulted in a nonsignificant effect on switching intentions. In addition, neither was there any increase in amount of variance explained in switching intentions nor was there any significant change in the fit statistics. Typically, when the fit statistics and explanatory power of the two models is comparable, the “best” model is the one which is the most parsimonious (Bagozzi 1992). However, one needs to be cautious when establishing tradeoffs between parsimony and contributions to the understanding of a phenomenon. Taylor and Todd (1995, p.168-169) comment

An extensive discussion of the parsimony in the history of science and its relationship to structural equation modeling is provided by Mulaik et al. (1989). By their reasoning, a model that provides good prediction while using the fewest predictors is preferable. Other researchers however, have argued that parsimony, in and of itself, is not desirable but rather is desirable only to the extent that it facilitates understanding (Browne and Cudeck 1993, McDonald and Marsh 1990). Based on this reasoning, we would assert that, assuming reasonable fit and explanatory power, models should be evaluated in terms of both parsimony and their contribution to understanding. For predictive, practical applications of the model, parsimony may be more heavily weighed. In trying to obtain the most complete understanding of the phenomenon, a degree of parsimony may be sacrificed.

Consistent with the above argument, it is not difficult to decide between the SSM and the habit variant. As stated earlier, neither does the addition of habit add to our understanding

of the phenomenon, nor does it have any effect on the explanatory power or the fit statistics. In addition, it is less parsimonious than the SSM. Hence, the SSM appears to be superior model to the habit variant. There is also some argument for not finding habit to be a significant predictor of behavioral intentions in the present setting. Past behavior can generally contribute to behaviors that are more habitual than reasoned (Ajzen 1991). Hence, for a behavior such as switching from a service provider that requires substantial reasoning, one may not find past experience having a significant effect on switching intentions.

The comparison of the SSM and the external variable variant model is however not that straightforward. For one, the overall level of parsimony both models are identical as they employ same number of predictors. Secondly, the variance explained in attitude towards switching, satisfaction, switching intentions and switching behavior is identical. The fit statistics are also equivalent. Hence, fit statistics, explanatory power and parsimony being equivalent, the only basis for comparison between the two models appears to be their contributions to the understanding of the phenomenon.

It is clear that the SSM provides results which are more consistent in our understanding of the services marketing literature as well as psychology literature. Satisfaction is deemed to be an important predictors of one's behavioral intentions (c.f. Cronin and Taylor 1992). Similarly, attitudes towards a target are an important antecedent to attitudes towards behavior, specifically in any causal models that involves an attitude-to-behavior sequence (Eagly and Chaiken 1993). These two relationships supported by the SSM, are nonsignificant in the external variables argument variant. If we choose the

external variables argument model over the SSM, we lose important insights into the role of customer satisfaction and service quality in a model of customer switching behavior in the services industry. For a better understanding of the attitude - behavior links in any phenomenon, it is imperative that other psychological factors that also determine behavior be taken into account (ibid. 1993). In the present context, the choice of the external variables argument model over the SSM amounts to overlooking the impact of such psychological factors on customer switching behavior. Hence omitting contribution of service quality and customer satisfaction to our understanding of the switching behavior phenomenon may be costly because both service quality and satisfaction are critical to the success of any service organization (Rust, Zahorik and Keiningham 1996).

9.4 Theoretical Implications

This research represents one of the first attempts at gaining a full understanding into the phenomenon of customer switching in the services industry. The development of the SSM involved integrating research from such diverse areas as marketing, psychology and economics. Though the negative consequences of service switching has been an area of great concern for service firms (cf. Rust, Zahorik, and Keiningham 1995), service switching from the customer's perspective has remained virtually unexplored in the marketing literature (Keaveney 1995).

This dissertation provides significant contributions to the field of marketing and psychology. Perhaps the most important being the identification of factors that contribute

to a customer's decision making process regarding switching service providers. The real life empirical setting to investigate the phenomenon was also significant for the model development. In addition, the inclusion of actual behavior along with behavioral intentions adds to the validity of the model. Behavioral intentions can only be viewed as an imperfect proxy for behavior, hence application of results obtained from just behavioral intentions is always problematic. Given the paucity of studies that collect actual behavioral data and the problems with using behavioral intention data as a proxy for actual behavior (Keaveney 1995), this research contributes by collecting actual switching behavior data in addition to the behavioral intention data. This should provide insights into the nature of the relationship between behavioral intentions and actual behavior, a cause that merits study in a service switching context (Zeithaml, Berry and, Parasuraman 1996).

This research adds significantly to the field of psychology by exploring the relationships between general attitudes (service quality) and specific behaviors (switching service providers), a critical but vastly unexplored area of research. Further, the attitude conceptualization of service quality also brings in an attitude - behavior framework to the domain of services literature, another uninvestigated area. The implications of this are clear, since the SSM clearly suggests distinct and significant contributions to our understanding of the switching phenomenon offered by both fields (services literature and the attitude-behavior literature).

The results also have some significant implications for the theory of planned behavior. Firstly, the importance of the theory of planned behavior in understanding

customer switching behavior cannot be denied. The results clearly indicate the importance of one's attitude towards the behavior, subjective norms, perceived behavioral control and behavior intentions in predicting behavior. All these factors are integral to the theory of planned behavior. The results reflect the success of the theory of planned behavior in understanding behaviors as diverse as leisure behavior (Ajzen and Driver 1992) and problem drinking (Schlegel, d'Avernas, Zanna, DeCourville and Manske 1990). Hence, understanding of any behavioral domain requires that the theory of planned behavior be used as a fundamental model (Bagozzi 1992). However, one needs to distinguish between a theory that is fundamental to understanding a phenomenon versus a theory that is sufficient to understanding the same phenomenon. As the discussion early on this chapter suggest, sufficiency of the theory may be in question when factors external to the theory of planned behavior are likely to have an impact on behavior. In addition, they may not be relegated to the position of being "external variables" influencing only the determinants of behavior considered in the theory of planned behavior. These additional factors need to be considered in terms of their distinct influences on behavioral intentions or behavior as informed by an appropriate theory. The value of research lies in bringing other theoretical frameworks together with the theory of planned behavior to enhance our understanding of a wide spectrum of behaviors. In addition, many of the relationships suggested by the theory of planned behavior may not necessarily hold across this spectrum. For example, if the behavior is negatively evaluated, self efficacy may not be a significant predictor of one's behavioral intentions, contrary to it's significant effect if the behavior was evaluated

positively; are there conditions under which subjective norms might have an effect on one's attitude towards switching and not on one's behavioral intention?; perceived control only has a direct influence on behavior in when individuals are trying to do something that neither can easily do, nor easily escape from not doing it. Additional research is needed to identify behavioral domains where relationships suggested by the theory of planned behavior may not necessarily hold. However, the research need not end at only the identification of these behavioral domains, but it needs to go further by suggesting alternative relationships which might be of consequence in our understanding of such behaviors.

9.5 Managerial Implications

What do these results suggest to the service provider?. The model helps identify important factors that impact on a customer's decision making process when s/he is faced with the decision of whether or not to switch her/his current service provider. Such diagnosis can act as guide to the actions that may be taken by the service provider to reduce tendencies to switch on the part of it's customers and hence avoid the negative outcomes associated with customer switching.

It is clear from this study that service quality is extremely important. The results of this study suggest to the service provider that not only is it instrumental in changing the perceptions of satisfaction, it is also an agent of attitude[towards switching] change. If increased consumer satisfaction, change in attitudes towards switching and customer retention is indeed the goal, then it is pragmatic that the mangers focus their efforts on

activities that enhances the level of service quality of the firm. However, there is one caveat. Since, the relationship between service quality and customer satisfaction can also depend on the type of the service offered by an organization, there should be an explicit recognition of the relationship between service quality and consumer satisfaction in their service industry. The allocation of resources towards service quality and customer satisfaction programs will be dictated by the existence, directionality and strength of these relationships.

Subjective norms are also important agents of attitude change. This might have implications for the promotional efforts of the service providers, where the service provider might want to establish possible consequences of switching such as stress, inconvenience etc. to people significant to the decision maker in a service switching context.

Since costs of switching inhibit customers from engaging in switching behavior, it may be a appropriate strategy for the service provider to increase the costs associated with switching. In the mortgage services contexts, banks and trusts already have monetary penalties in place to discourage people from switching to a different service provider. However, in committing to such activities, a service provider may run the risk of discouraging switching behavior on part of the customers from its competitors. For example, let's assume the customer of service provider "A" is thinking about switching to service provider "B". However, if s/he perceives that the service provider "B" has high barriers to exit in place for its own customers (in terms of high switching costs), s/he might see it as a barrier to entry specially if the customer wants control over the length of

stay with any organization. Hence, thought has to be given to the extent to which such strategies are employed.

Last but not the least it is essential that while monitoring service quality and customer satisfaction programs, service providers need to track not just the behavioral intentions of it's customers, but also actual switching behavior statistics. If the congruence between the two is low despite successful service quality and customer satisfaction programs, it might be appropriate to look for alternative explanations of the phenomenon.

9.6 Limitations and Avenues for Future Research

Firstly, it is important to realize that the setting only allowed for an understanding of directional relationships amongst factors of interest, and not causal conclusions. Causal inferences for the hypothesized relationships will probably be best made by under controlled experiments with subsets of the SSM. For example, to test whether service quality effects one's attitude towards switching only under conditions of high perceived relevance may be best done in a controlled experiment where levels of perceived relevance could be manipulated.

For some of the relationships it could be argued that either they work in the direction opposite to that hypothesized or that the relationship was nonrecursive. The classic example is that of the relationship between service quality and satisfaction, where arguments for either of the above relations exist. For example, while Gotlieb, Grewal and Brown (1994) found that service quality influences satisfaction in a medical services context, while Bitner (1990) saw *service encounter satisfaction as an input into the more*

general construct, perceived service quality (or attitude), . . . and reported a significant path from satisfaction to perceived service quality based on data on consumer perceptions of satisfaction and service quality at an international airport. Since these conflicting results came from two different service settings, it may be the case that the type of service setting has a significant effect on the nature of the relationship between the two constructs. It has been suggested that types of service settings where little or no emotion is aroused v/s where strong emotions are aroused and where “essential aspects” of service are absent or present could dictate the nature of relationship between service quality and customer satisfaction (Dabholkar 1995). It will be a worthy project to classify service industries based on the existence/non existence of these effects, so as to explicitly recognize the variety of relationships that can exist between just two factors.

Another area of concern is a very high correlation between service quality and customer satisfaction. Though statistical divergent validity was established, the high correlation may be an indication of fact that respondents saw little difference between the two. Alternatively, service quality could have been perceived as a cognitive evaluation and satisfaction as an affective evaluation of the service. Hence, though the respondents might have perceived the two constructs as different, they might have felt the pressure to respond consistently. In either case, the pencil and paper measures employed in this study are limited in their ability to tease out such differences. Experimental methods may be best suited for such purposes.

Given that this is one of the first attempts at understanding the phenomenon of customer switching in the services industry, it is plausible that there are still additional variables to be investigated. The percentage of variance explained in switching intentions and more importantly in switching behavior suggests that there still is a substantial deal of variance that remains unexplained in these factors. Factors such as price considerations (Mazursky, La Barbera and Aiello 1987; Zeithaml, Berry and Parasuraman 1996), relationship with the service provider (Crosby and Stephens 1987), variety seeking behavior (McAlister 1982), alternative attractiveness (Ping 1994) might be responsible for such unexplained variance.

The nonsignificance of the interactive relationship between service quality and perceived relevance in predicting attitudes towards behavior is surprising. Perhaps more surprising is the unexplained significant relationship between perceived relevance and attitudes towards switching. Since this was the first study in which perceived relevance was measured via a scale, the unexpected results may be an indication that further construct development of perceived relevance is needed. An additional confound could be the use of a proxy for measuring perceived relevance. These concerns may be partly answered if perceived relevance was manipulated in a controlled experiment and than the effects between service quality and attitudes were noted. If the results from the experiment turn out to be as hypothesized in this study, there is a strong likelihood that the measure of perceived relevance employed in this study was a poor one. In such a case, direct rather than proxy measures of perceived relevance need to be developed and examined.

Clearly, an empirical examination of the proposed models in only one service setting is a limitation. Consequently, the reliability of the results from this study could be enhanced by empirically examining other settings of service switching. Lovelock's (1983) classification of services might offer some potential in this regard. The classification has important implications for researchers in the area of services marketing. Research efforts directed at any area of services marketing should explicitly incorporate the nature of the service that is being researched. Lovelock (1983, p. 20) provides rationale for such an argument

These classification schemes should also be of value to researchers to whom they offer an alternative to either broad - brush into services or an industry - by - industry approach. Instead, they suggest a variety of new ways of looking at service businesses, each of which may offer opportunities for focused research efforts.

Hence, Lovelock's classification schemes might be used as frameworks to identify potential settings in which further examination of the model needs to be carried out.

Lastly, the results of this study may be limited to the extent of the non-response bias present in the data. Since a response rate of only around 10% was obtained for the final study, it may be argued that there are systematic differences between the respondents and non-respondents. One logical difference between the two groups could be the difference in the mean levels of satisfaction. Hence, people who were less satisfied and had been considering switching service providers as a viable option might be more inclined to respond. However, a cursory examination of the mean satisfaction level for the respondents does not seem to support this proposition. A mean of 5.11 on a 7 point scale

is suggestive of higher level of satisfaction than average. This study is limited in the availability of additional data for evaluating systematic differences between respondents and non-respondents. Future research should choose research settings in which such evaluations may be possible.

These avenues for future endeavors are but a few examples of the types of research that can follow from this study. This first attempt at understanding the phenomenon of customer switching in the services industry offers the potential for a sustained stream of research. It is hoped that subsequent research on this phenomenon will ultimately result in a full fledged theory of customer switching in the services industry. Since world economies are increasingly becoming service based, and since customer retention is the key to the survival of service organizations, pure and applied research is increasingly needed to enhance our understanding of this phenomenon

9.7 Conclusions

In conclusion, this dissertation presents a model of customer switching behavior in the services industry. Given the financial implications of customer switching for the service providers and the paucity of research in this critical area, this dissertation contributes by bringing in knowledge from diverse streams to enhance our understanding of this phenomenon. Since this dissertation is one of the early attempts at understanding switching behavior from a customer's perspective, additional factors and their interrelationships that might influence a customer's decision making in the context of switching service providers need to be identified and explored. This affords numerous opportunities for future investigations into this exciting and unexplored area. It is hoped

that subsequent research on this phenomenon will ultimately result in a full fledged theory of customer switching in the services industry.

Table 1- Results for the first Stage 2 confirmatory factor analysis				
Construct	Internal Consistency	Items	Factor Loadings¹¹	Squared Multiple Correlations
Service Quality	0.86	B8	0.83	0.68
		B24	0.69	0.47
		C2	0.94	0.89
Satisfaction	0.98	C1a	0.94	0.88
		C1b	0.94	0.89
		C1c	0.97	0.94
		C1d	0.92	0.85
		C1e	0.97	0.94
Attitude Towards Switching	0.96	D1a	0.93	0.87
		D1b	0.92	0.85
		D1c	0.93	0.86
		D1d	0.94	0.88
		D1e	0.86	0.74
		D1f	0.93	0.86
		D12	0.83	0.69
PSWC_2	0.83	D3	0.80	0.65
		D4	0.80	0.64
		D10	0.63	0.39
		D11	0.71	0.50
PSWC_1	0.79	D5	0.82	0.67
		D7	0.68	0.47
		D8	0.69	0.47
		D14	0.61	0.37
Switching Intentions	0.96	E1a	0.97	0.93
		E1b	0.97	0.95
		E1d	0.91	0.82
PREL_1	0.77	F3	0.67	0.45
		F5	0.78	0.61
		F6	0.75	0.57
PREL_2	0.79	F2	0.55	0.31
		F4	0.88	0.78
		F7	0.77	0.59
Subjective Norms	0.78	D2	0.77	0.60
		D6	0.79	0.62

¹¹ The analysis indicated significant loadings for each item on its latent construct ($p \leq 0.05$ in all cases)

Table 2a - Summary of discriminant validity tests for Service Quality paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
Satisfaction	0.95	187.66 (20)	138.00 (19)	49.66
Attitude Towards Switching	-0.69	594.96 (35)	246.83 (34)	348.13
PSWC 1	-0.10	612.23 (14)	18.55 (13)	593.68
PSWC 2	0.11	632.71 (14)	46.81 (13)	585.90
Switching Intentions	-0.63	391.78 (9)	22.67 (8)	369.11
Habit	0.07	604.33 (3)	5.96 (2)	598.37
PREL 1	-0.06	319.41 (9)	11.34 (8)	308.07
PREL 2	-0.12	218.35 (5)	3.61 (4)	214.74
Subjective Norms	-0.58	117.45 (5)	11.88 (4)	105.57

Table 2b - Summary of discriminant validity tests for Satisfaction paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
Attitude Towards Switching	-0.64	2447.59 (54)	282.92 (53)	264.67
PSWC 1	-0.07	494.22 (27)	69.71 (26)	424.51
PSWC 2	0.14	589.41 (27)	78.76 (26)	510.65
Switching Intentions	-0.58	1184.98 (20)	48.86 (19)	1136.12
Habit	0.05	1416.63 (10)	26.44 (9)	1390.19
PREL 1	-0.07	353.87 (20)	45.48 (19)	308.39
PREL 2	-0.14	244.46 (14)	29.92 (13)	214.54
Subjective Norms	-0.51	150.33 (14)	28.04 (13)	122.29

Table 2c - Summary of discriminant validity tests for Attitude Towards Switching paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
PSWC 1	-0.08	651.90 (44)	236.25 (43)	415.65
PSWC 2	-0.44	719.77 (44)	296.79 (43)	422.98
Switching Intentions	0.82	832.97 (35)	267.61 (34)	565.36
Habit	-0.08	1580.71 (21)	200.51 (20)	1380.20
PREL 1	0.02	530.60 (35)	225.00 (34)	305.60
PREL 2	0.10	420.67 (27)	203.72 (26)	216.95
Subjective Norms	0.82	264.36 (27)	221.07 (26)	43.29

Table 2d - Summary of discriminant validity tests for Subjective Norms paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
PSWC 1	-0.15	185.21 (9)	17.09 (8)	168.12
PSWC 2	-0.46	161.76 (9)	33.16 (8)	128.60
Switching Intentions	0.74	93.32 (5)	25.33 (4)	67.99
Habit	-0.05	169.37 (1)	0.00 (0)	169.37
PREL 1	0.09	178.73 (5)	10.72 (4)	168.01
PREL 2	0.25	160.55 (2)	2.60 (1)	157.95

Table 2e - Summary of discriminant validity tests for PSWC 1 paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
PSWC 2	0.74	179.28 (20)	79.15 (19)	100.13
Switching Intentions	-0.22	424.00 (14)	25.57 (13)	398.43
Habit	-0.03	437.73 (6)	11.18 (5)	426.55
PREL 1	-0.07	341.34 (14)	30.99 (13)	310.35
PREL 2	-0.17	226.93 (9)	15.78 (8)	211.15

Table 2f - Summary of discriminant validity tests for PSWC 2 paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
Switching Intentions	-0.47	454.61 (14)	45.22 (13)	409.39
Habit	0.00	547.74 (6)	22.57 (5)	525.17
PREL 1	-0.07	351.37 (14)	43.87 (13)	307.50
PREL 2	-0.23	223.61 (9)	17.66 (8)	205.95

Table 2g - Summary of discriminant validity tests for Switching Intentions paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
Habit	-0.08	1382.90 (3)	1.82 (2)	1381.08
PREL 1	0.10	220.31 (5)	3.36 (4)	216.95
PREL 2	0.10	1421.04 (9)	23.08 (8)	1397.96

Table 2h - Summary of discriminant validity tests for Habit paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
PREL 1	-0.06	312.73 (3)	1.06 (2)	311.67
PREL 2	-0.07	216.00 (1)	0.00 (0)	216.00

Table 2i - Summary of discriminant validity tests for PREL 1 paired with				
Construct	Correlation	χ^2 (d.f.) Fixed Model	χ^2 (d.f.) Free Model	χ^2 difference test with 1 d.f.
PREL 2	0.79	83.98 (5)	34.98 (4)	49.00

Construct	Items	Factor Loadings ¹²	Variances of Error Terms
Service Quality	B8	0.83	0.32
	B24	0.69	0.53
	C2	0.94	0.11
Satisfaction	C1a	0.94	0.11
	C1b	0.94	0.11
	C1c	0.97	0.06
	C1d	0.92	0.15
	C1e	0.97	0.06
Attitude Towards Switching	D1a	0.93	0.13
	D1b	0.93	0.14
	D1c	0.92	0.15
	D1d	0.94	0.12
	D1e	0.86	0.26
	D1f	0.93	0.14
	D12	0.83	0.31
PSWC_2	D3	0.81	0.35
	D4	0.80	0.36
	D10	0.63	0.61
	D11	0.71	0.50
PSWC_1	D5	0.82	0.33
	D7	0.68	0.53
	D8	0.69	0.53
	D14	0.61	0.63
Switching Intentions	E1a	0.97	0.07
	E1b	0.97	0.05
	E1d	0.91	0.18
PREL_1	F3	0.67	0.55
	F5	0.78	0.39
	F6	0.75	0.43
PREL_2	F4	0.85	0.28
	F7	0.79	0.38
Subjective Norms	D2	0.77	0.40
	D6	0.78	0.38

Construct	Items	Factor Loadings	Variances of Error Terms
Service Quality X	PREL_1	Single Indicator	5.41
Service Quality X	PREL_2	Single Indicator	4.06

¹² The analysis indicated significant loadings for each item on its latent construct ($p \leq 0.05$ in all cases)

¹³ These factor loadings and error variances are calculated from the data in Table 3, utilizing formulas 1 & 2

Model	SSM	Variant 1	Variant 2
FIT			
df	440	465	440
χ^2	1106.33	1145.21	1111.20
χ^2/df	2.51	2.46	2.52
AGFI	0.81	0.81	0.81
RMSEA	0.064	0.063	0.064
RNI	0.94	0.94	0.94
CFI	0.94	0.94	0.94
R² <small>switches</small>	0.90	0.90	0.90
R² <small>switches + switches</small>	0.78	0.78	0.78
R² <small>switches + switches</small>	0.76	0.76	0.76

Model	SSM	Variant 1	Variant 2
df	3	4	3
χ^2 (Significance)	158.334 (0.00)	160.640 (0.00)	158.334 (0.00)
Pseudo-R²	0.30	0.30	0.30
$\beta_{switches}$	0.2599	0.2694	0.2599
S.E. $\beta_{switches}$	0.0316	0.0332	0.0316
β_{pswc_1}	0.0309	0.1230	0.0309
S.E. β_{pswc_1}	0.1081	0.1075	0.1081
β_{pswc_2}	-0.1421	-0.1379	-0.1421
S.E. β_{pswc_2}	0.1125	0.1138	0.1125
β_{interc}	—	0.3174	—
S.E. β_{interc}	—	0.2030	—
β_{interc}	-2.4377	-2.4910	-2.4377
S.E. β_{interc}	0.2603	0.2694	0.2603
Wald $\beta_{switches}$ (Significance)	67.4724 (0.00)	66.0177 (0.00)	67.4724 (0.00)
Wald β_{pswc_1} (Significance)	0.0817 (0.78)	1.3097 (0.25)	0.0817 (0.78)
Wald β_{pswc_2} (Significance)	1.5974 (0.21)	1.4673 (0.23)	1.5974 (0.21)
Wald β_{interc} (Significance)	—	2.4449 (0.12)	—
Wald β_{interc} (Significance)	87.7043 (0.00)	85.4781 (0.00)	87.7043 (0.00)

Model	SSM		Variant 1		Variant 2	
	<u>Observed</u> No Switch	<u>Predicted</u> No Switch Switch	<u>Observed</u> No Switch	<u>Predicted</u> No Switch Switch	<u>Observed</u> No Switch	<u>Predicted</u> No Switch Switch
<u>Observed</u> No Switch	276	20	274	22	276	20
<u>Observed</u> Switch	23	52	22	53	23	52
Percentage of Cases Correctly Classified	88.41%		88.14%		88.41%	

Model	SSM	Variant 1	Variant 2
FIT			
df	410	434	410
χ^2	1044.97	1083.30	1049.62
χ^2/df	2.54	2.49	2.56
AGFI	0.81	0.81	0.81
RMSEA	0.065	0.064	0.065
RNI	0.95	0.94	0.95
CFI	0.95	0.95	0.95
R² satisfaction	0.90	0.90	0.90
R² attitude towards switching	0.80	0.80	0.80
R² satisfaction intention	0.76	0.76	0.76

Model	SSM	Variant 1	Variant 2
df	3	4	3
χ^2 (Significance)	160.224 (0.00)	162.435 (0.00)	160.838 (0.00)
Pseudo-R²	0.30	0.30	0.30
$\beta_{\text{satisfaction intention}}$	0.2581	0.2671	0.2566
S.E._{satisfaction intention}	0.0313	0.0328	0.0312
β_{PSWC_1}	0.1057	0.1135	0.1024
S.E._{PSWC_1}	0.1081	0.1074	0.1075
β_{PSWC_2}	-0.1386	-0.1345	-0.1320
S.E._{PSWC_2}	0.1132	0.1146	0.1130
β_{H2000}	—	0.3124	—
S.E._{H2000}	—	0.2042	—
$\beta_{\text{intercept}}$	-2.4569	-2.5094	-2.4734
S.E._{intercept}	0.2634	0.2725	0.2658
Wald_{satisfaction intention} (Significance)	67.9154 (0.00)	66.3655 (0.00)	67.6573 (0.00)
Wald_{PSWC_1} (Significance)	0.9561 (0.33)	1.1185 (0.29)	0.9063 (0.34)
Wald_{PSWC_2} (Significance)	1.4998 (0.22)	1.3760 (0.24)	1.3644 (0.24)
Wald_{H2000} (Significance)	—	2.3411 (0.13)	—
Wald_{intercept} (Significance)	86.9924 (0.00)	84.7692 (0.00)	86.6135 (0.00)

Model	SSM		Variant 1		Variant 2	
	No Switch	Switch	No Switch	Switch	No Switch	Switch
Observed						
No Switch	274	22	275	21	274	22
Switch	24	51	23	52	25	50
Percentage of Cases Correctly Classified	87.60%		88.14%		87.33%	

Figure 1: A General Form of SSM

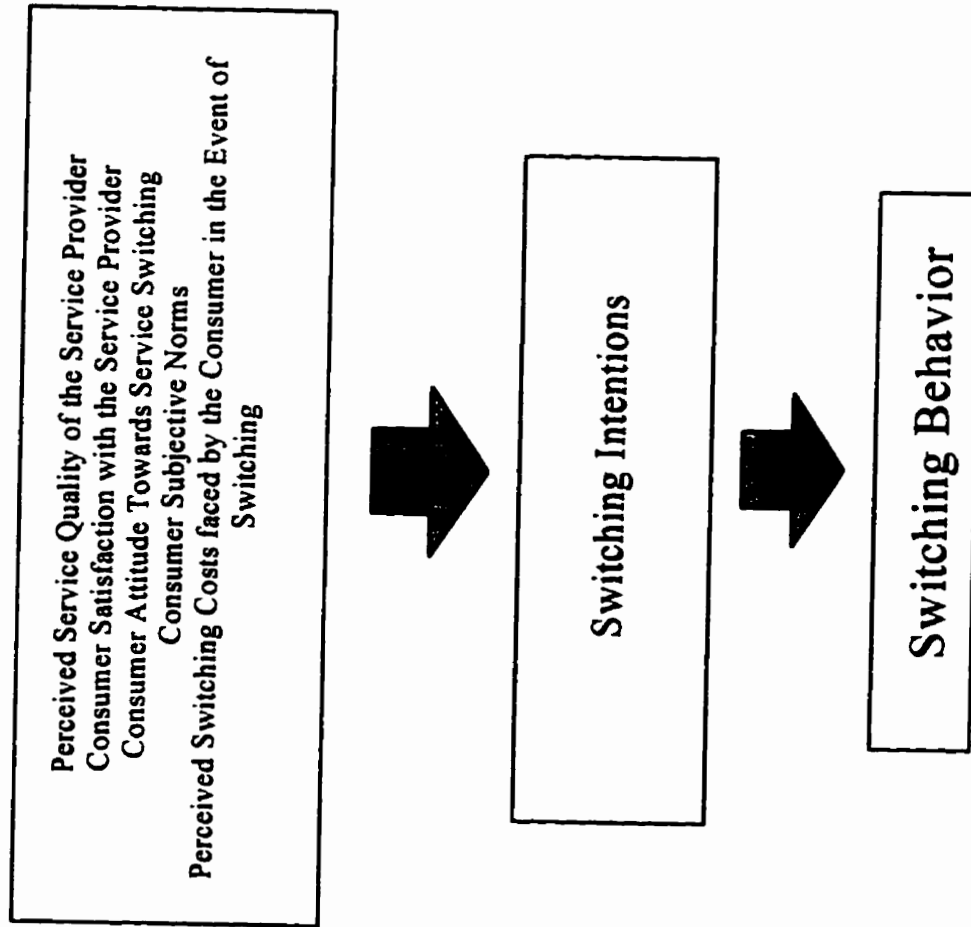


Figure 2: The SSM

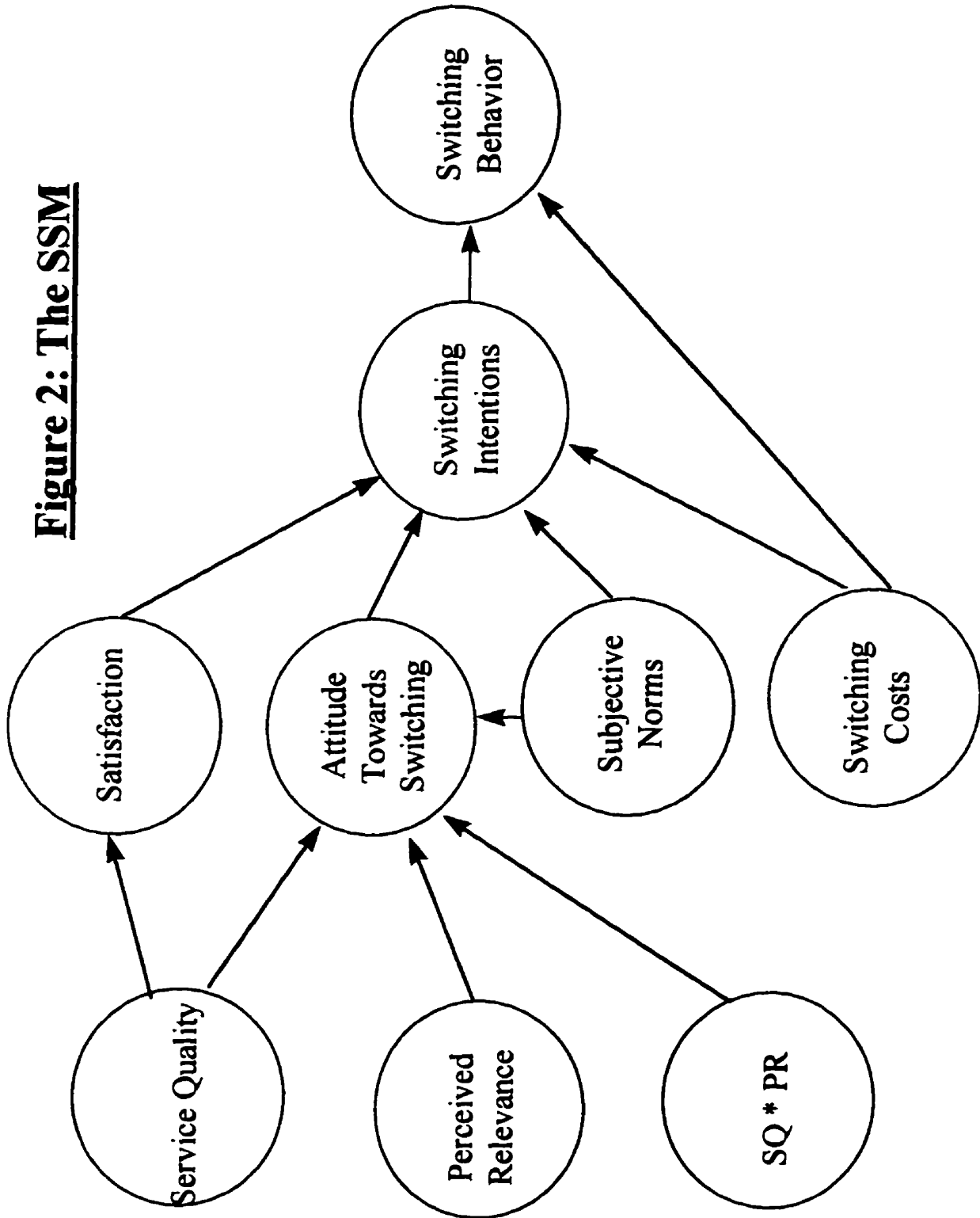


Figure 3: Past Behavior Variant

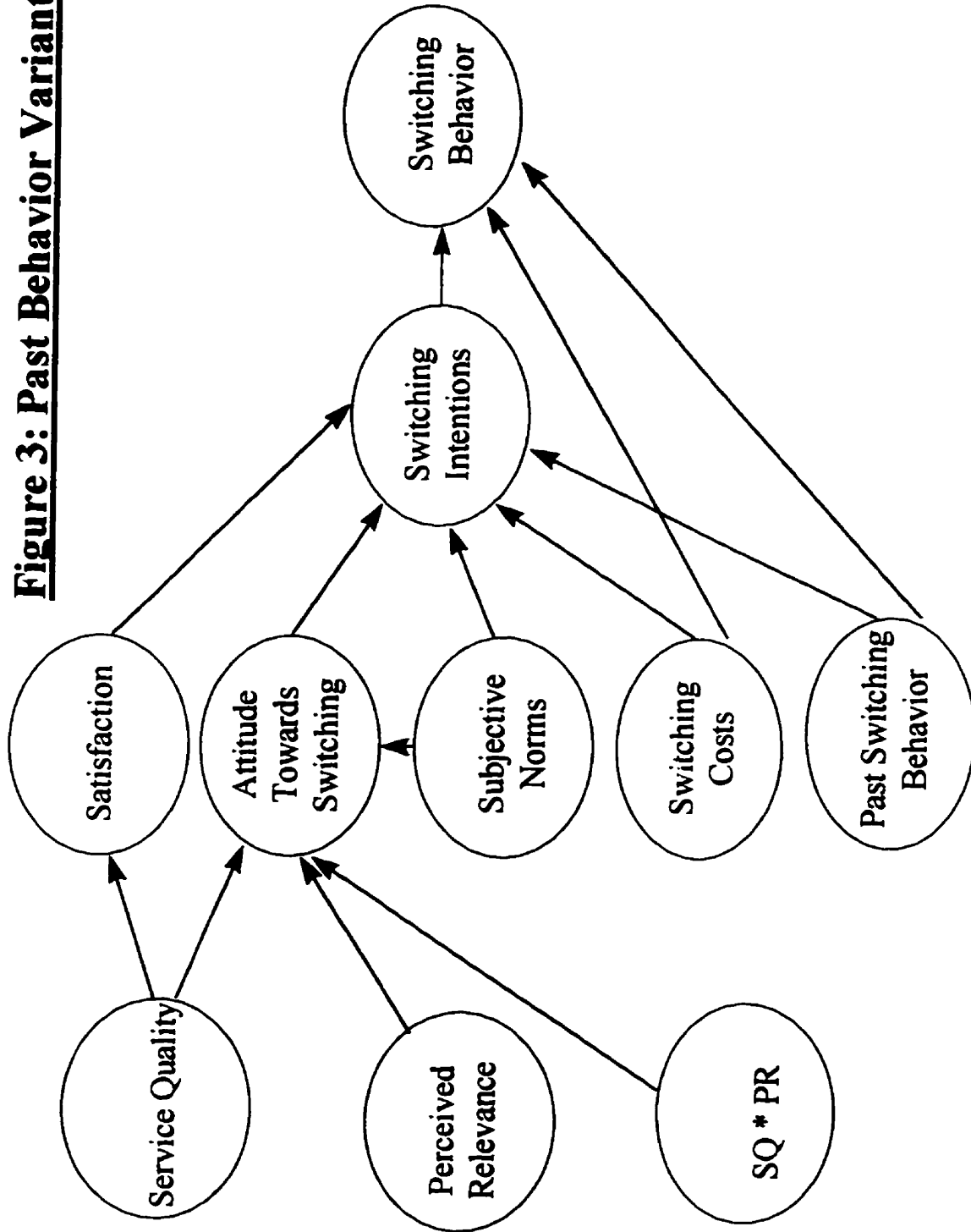


Figure 4: “External Variables” Variant

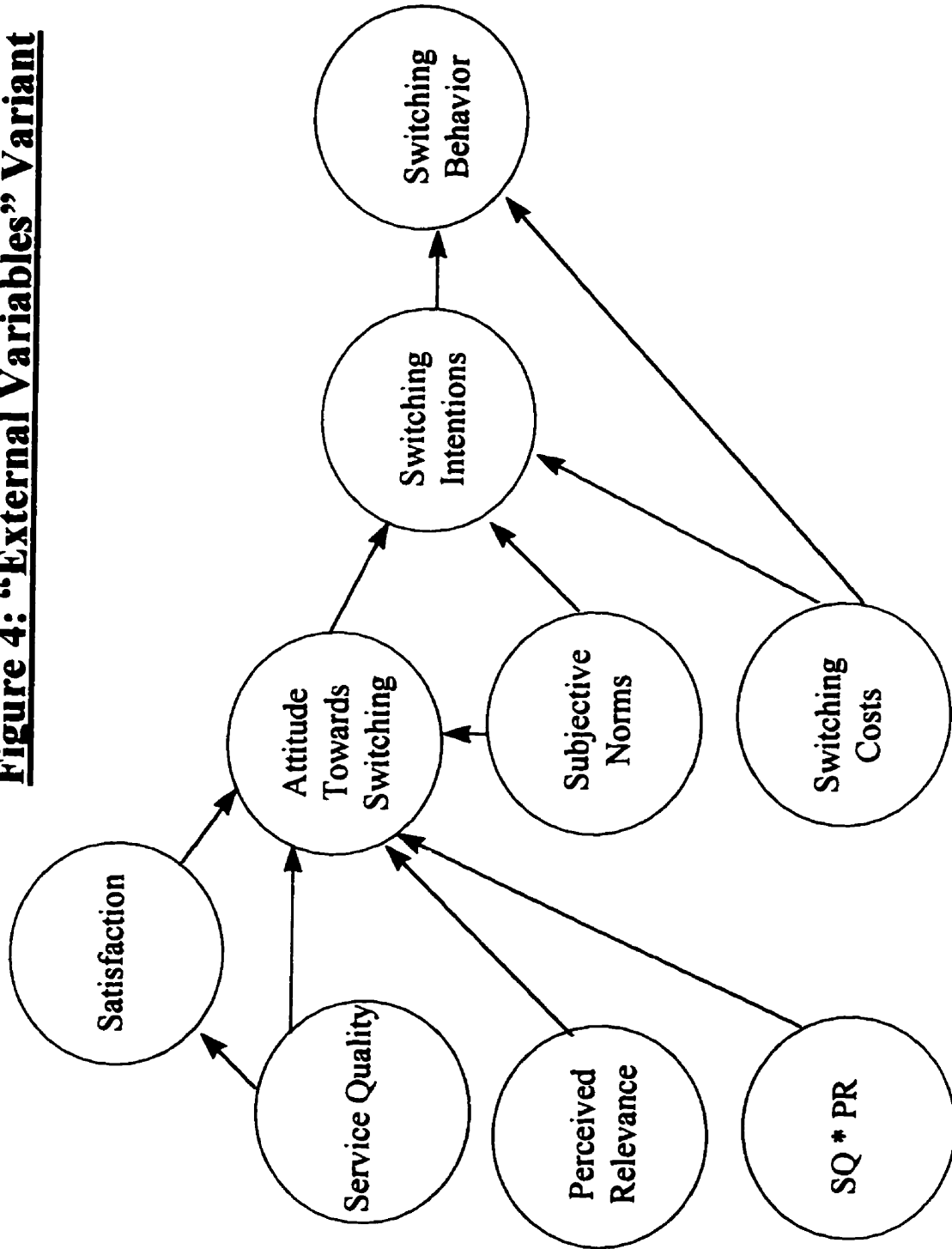
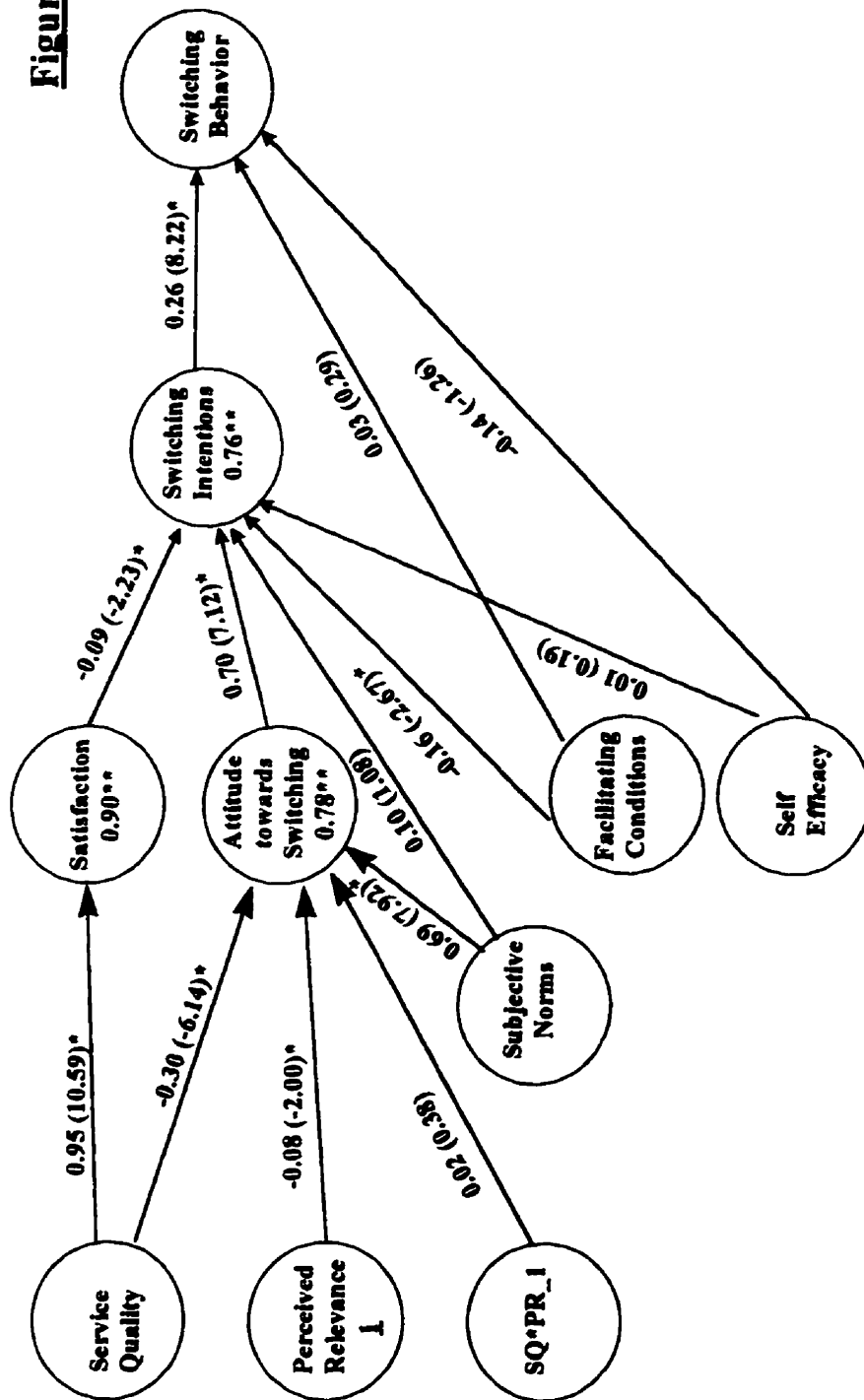


Figure 5a

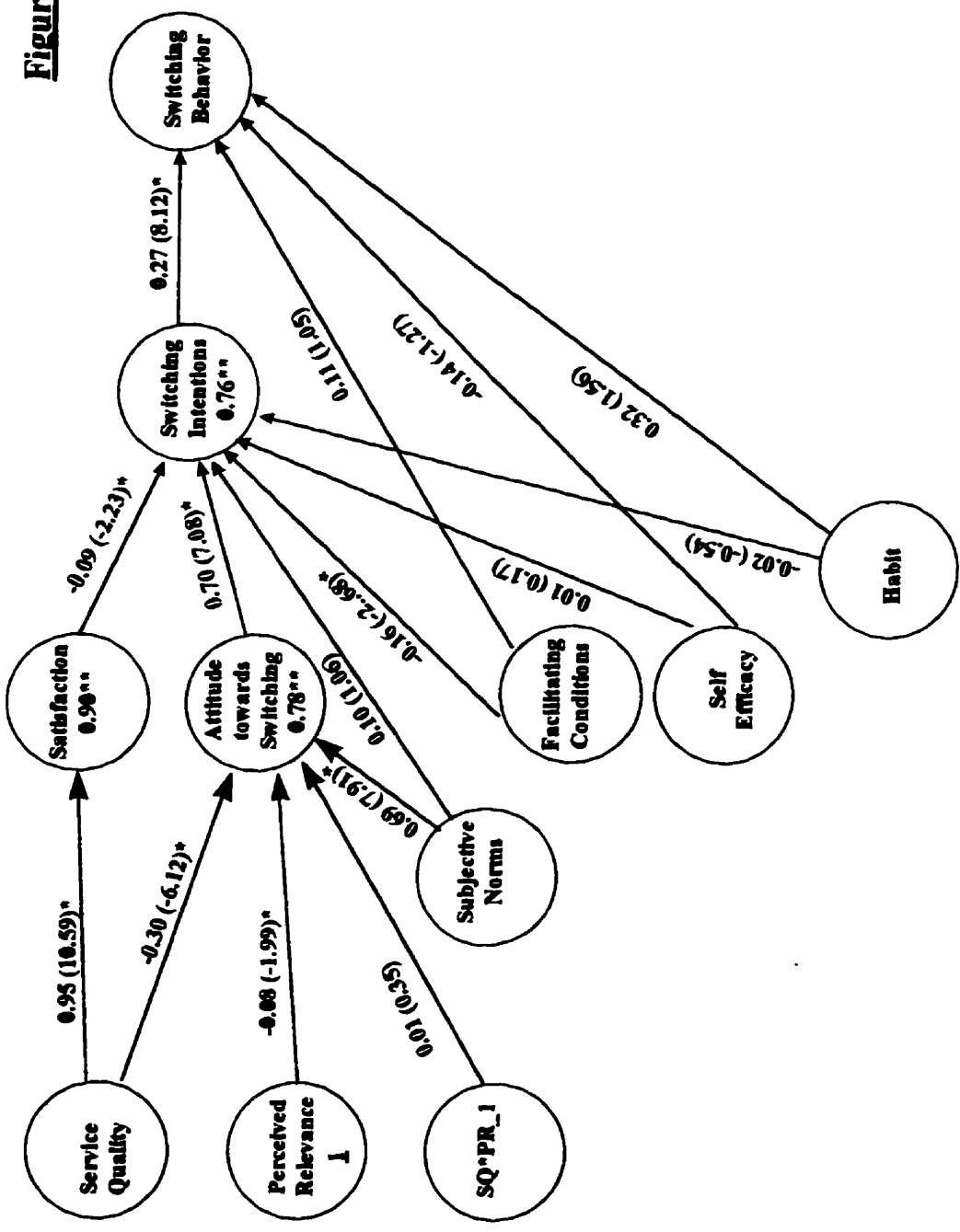


Path Coefficients for the SSM (T-ratios)

* p < .05

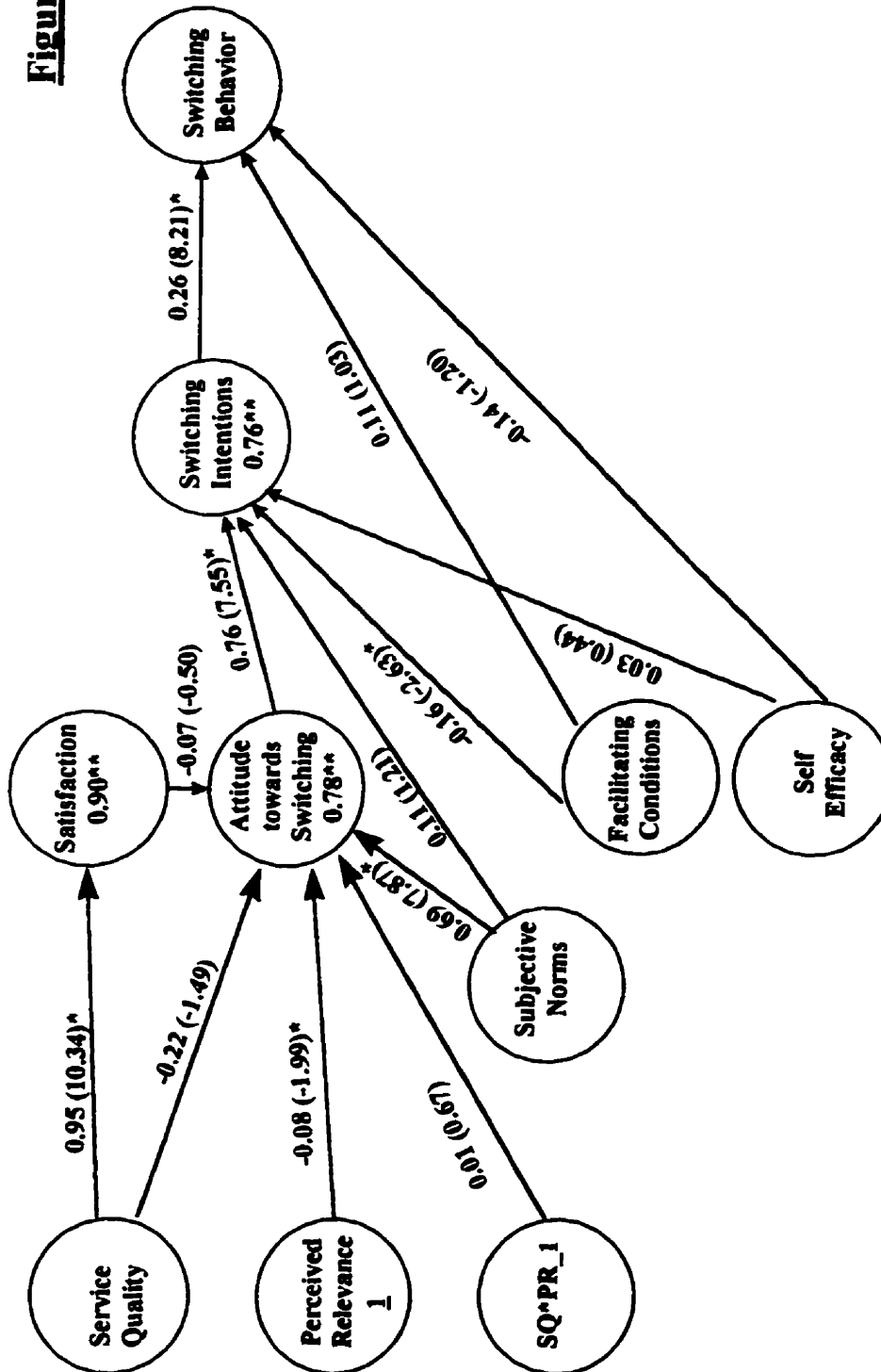
** R²

Figure 5b



Path Coefficients for Variant 1 (T-ratios)
 * p < .05
 ** p < .01

Figure 5c

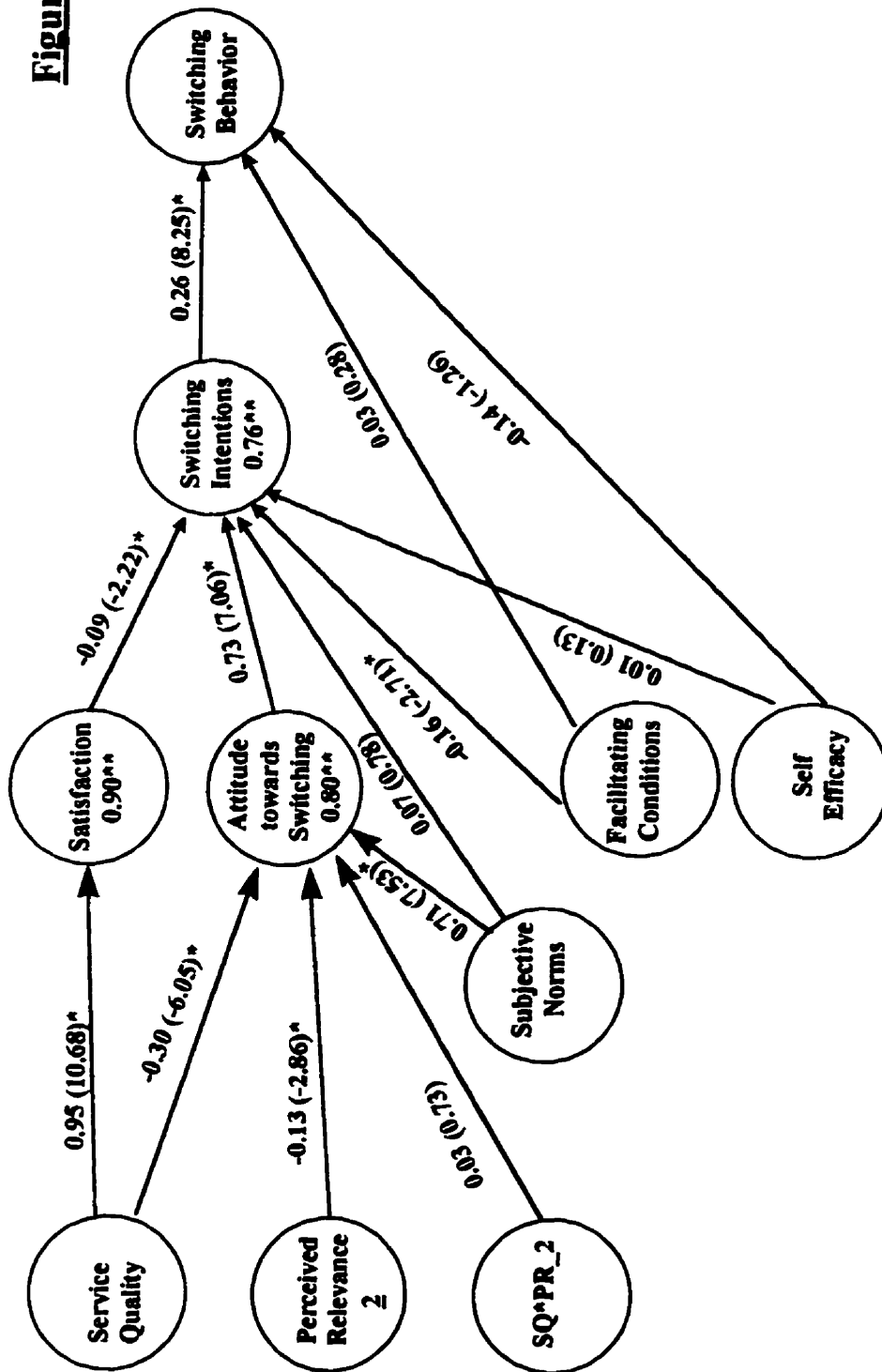


Path Coefficients for the Variant 2 (T-ratios)

* p < .05

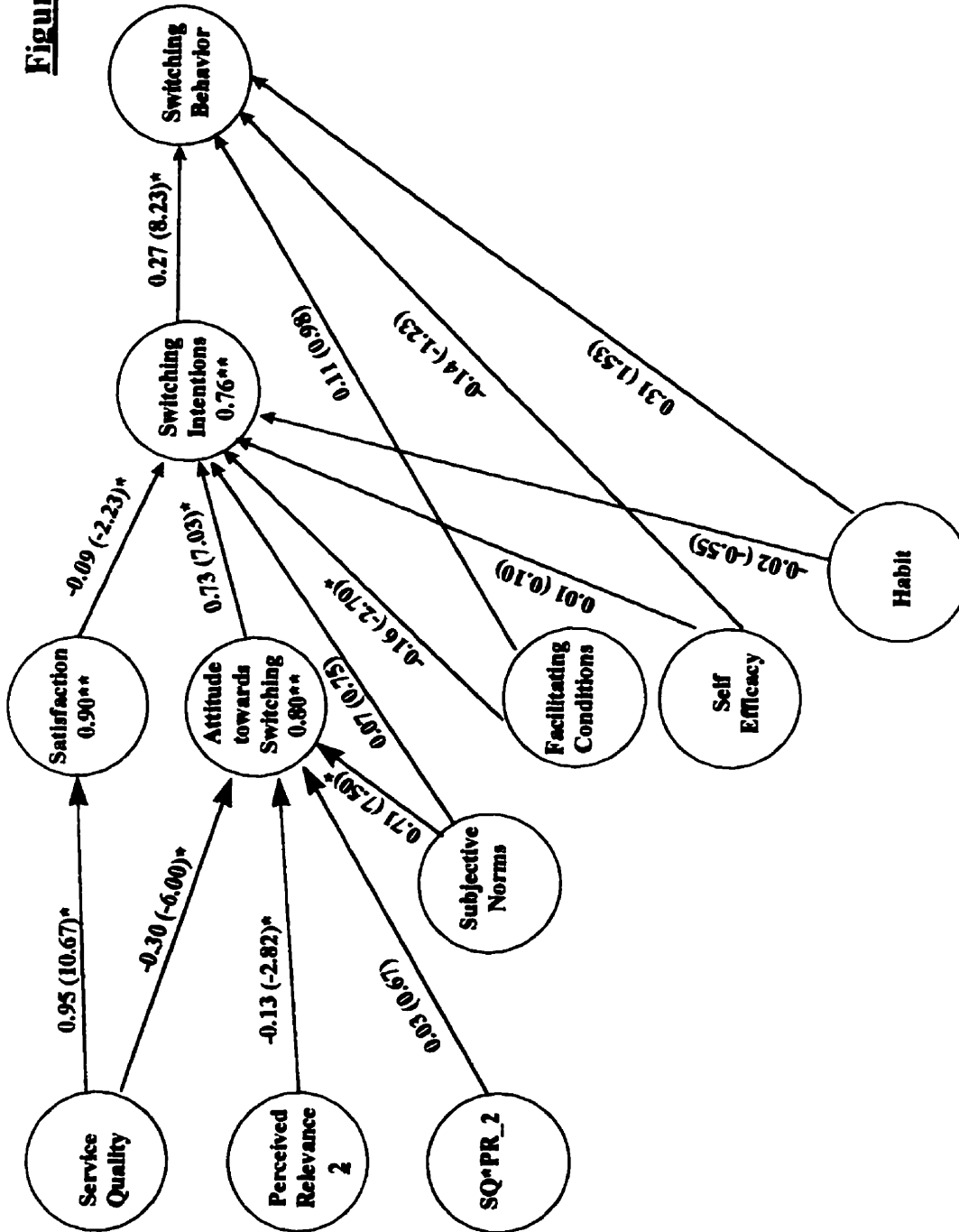
**p < .01

Figure 6a



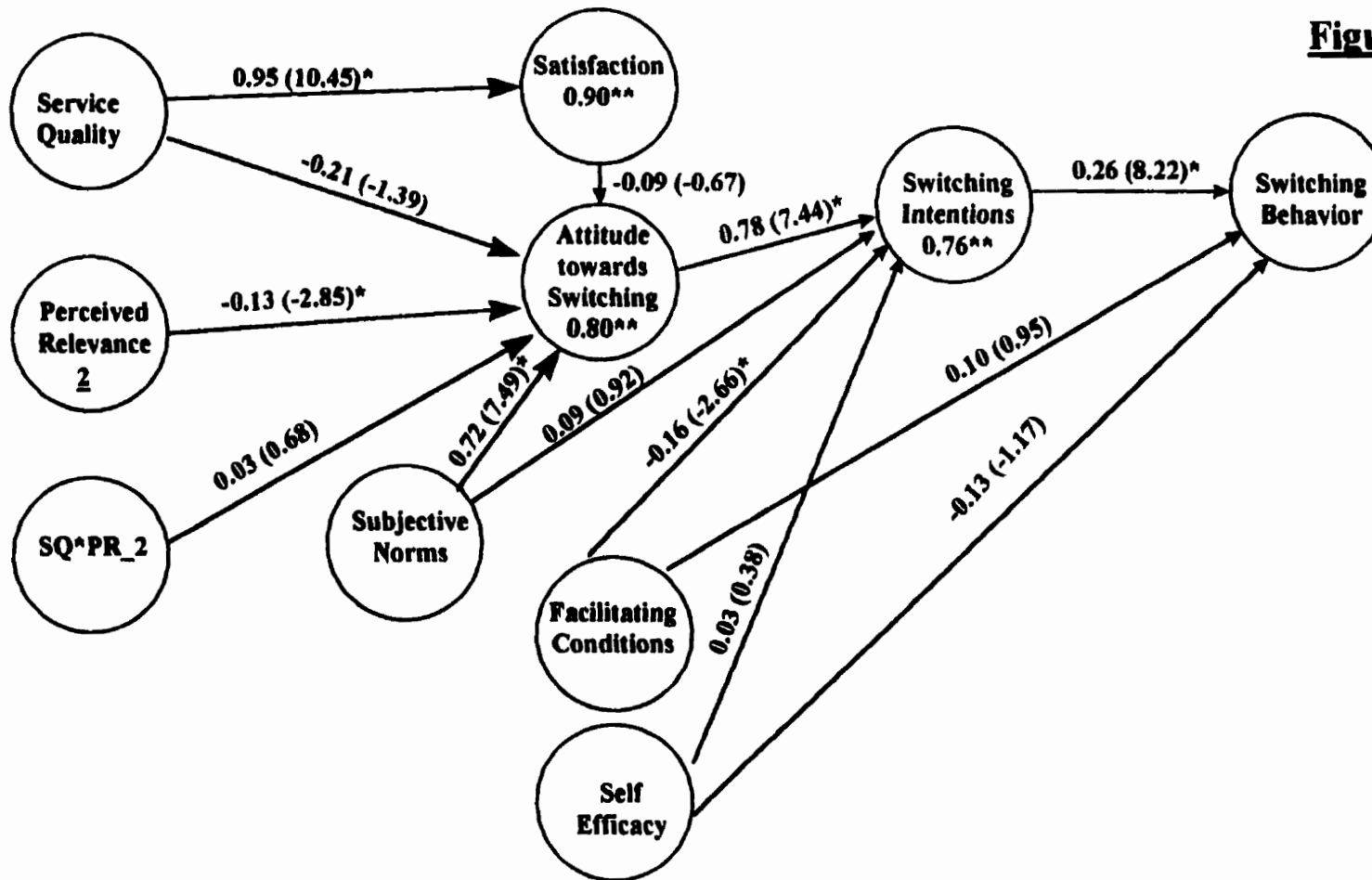
Path Coefficients for the SSM (T-ratios)
 * p < .05
 **R²

Figure 6b



Path Coefficients for Variant 1 (T-ratios)
 * p < .05
 **p < .01

Figure 6c



Path Coefficients for Variant 2 (T-ratios)

^{*} p < .05

^{**} R²

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Appendix 1

February 6, 1996

I am a Ph.D. candidate in the School of Business at Queen's University. I am proposing a marketing thesis in service switching behavior. My supervisor is Prof. S. Taylor in the School of Business.

I am requesting your participation in a study of service switching behavior. This is a pretest to establish reliable scales to be used in measuring different constructs associated with a theoretical model. For the purposes of my thesis I need to test this model by using a valid survey instrument. This is a pretest version of my survey. It is likely that the final survey will consist of fewer questions than the pretest because the pretest should filter out unreliable measures.

Of course, your replies are confidential and anonymous. Please take the time to fill in this pretest and return it to me through campus mail by February 13, 1996. My mail box is in room Dunning 111. If need be, I can also arrange for a personal pick up from your office. Just call me at 545-2377. The number of surveys that have been distributed is limited. Therefore although your participation is completely voluntary it is also essential to the process of developing my Ph.D. dissertation. The survey should not take more than 15 minutes of your time to complete. Since this is a pretest, comments and/or suggestions on any aspect of the questionnaire are welcome. A separate sheet marked "Comments and Suggestions" is provided at the end of the questionnaire for this purpose.

I thank you very much for your willingness to participate in the pretest. If you have any concerns, questions or are arranging for a personal pick up, I can be reached at:

Phone: 545-2377
E-mail: 3hb6@qlink.queensu.ca
bansalh@qucdn.queensu.ca

My supervisor can also be reached at:

Phone: 545-2369

Harvir S. Bansal
Ph.D. Candidate
School of Business

Switching Behavior Study

In the enclosed questionnaire, we would like you to think about your experiences as a patron of a bank that you are currently using.

Which Bank are you thinking of? _____ (Choose only one)

Note 1: For the purpose of this survey, we call this bank “My Bank”

In addition, pick one of the services that you currently use at “My Bank” and answer all questions with that service in mind. Examples of such services are mortgages, chequing accounts, loans, GICs, term deposits, etc.

What Service have you picked? _____

Please turn the page to begin the survey.

Section A

In this section we would like you to relate your answers specifically to experiences with the service that you have already identified.

First we would like to know some of your perceptions about "My Bank". For each statement please circle the number that best describes your response to the statement. There are no wrong or right answers - All we are interested in is a number that best shows your perceptions about "My Bank".

A1. "My Bank" has up-to-date equipment.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A2. "My Bank's" physical facilities are visually appealing.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A3. "My Bank's" employees are well dressed and appear neat.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A4. The appearance of the physical facilities of "My Bank" is in keeping with the type of service provided .

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A5. When "My Bank" promises to do something by a certain time, it does so.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A6. When I have problems, "My Bank" is sympathetic and reassuring.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A7. "My Bank" is dependable.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A16. "My Bank" has employees who give me personal attention.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A17. Employees of "My Bank" are polite.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A18. Employees of "My Bank" are too busy to respond to customer requests promptly.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A19. Employees get adequate support from "My Bank" to do their jobs well.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A20. "My Bank" gives me individual attention.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A21. Employees of "My Bank" understand what my specific needs are.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A22. "My Bank" has my best interests at heart.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A23. "My Bank" has operating hours convenient to all it's customers.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

A24. I believe that the general quality of "My Bank's" service is low

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

Section B

In this section we would like you to relate your answers specifically to experiences with the service that you have already identified.

For each statement, please circle the number that best reflects your feelings. There are no wrong or right answers - All we are interested in is a number that best shows your feelings about the service provided by "My Bank".

B1 Overall , how do you feel about the service provided to you by "My Bank".

- | | | | | | | | |
|-------------|---------------|---|---|---|---|---|---------------|
| B1a. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Displeased | | | | | | Pleased |
| B1b. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Disgusted | | | | | | Contented |
| B1c. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Dissatisfied | | | | | | Satisfied |
| B1d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Do a poor Job | | | | | | Do a good Job |
| B1e. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Unhappy | | | | | | Happy |

For each of the following two statements, please circle a number that best indicates your response to the statement.. There are no wrong or right answers - All we are interested in is a number that best reflects your perceptions .

B2. The quality of "My Bank's" service is generally

- | | | | | | | | |
|--|-----------|---|---|---|---|---|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Very Poor | | | | | | Excellent |

B3. In my decision to purchase the services of "My Bank", I think I made a

- | | | | | | | | |
|--|-------------|---|---|---|---|---|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Poor Choice | | | | | | Wise Choice |

Section C

Now we would like to know how you think you would feel and view switching the identified service from “My Bank” to a “New Bank”. Please circle the number that best describes your response to the statement.. There are no wrong or right answers - All we are interested in is a number that best shows your perceptions about different aspects of switching from “My Bank”.

C1. For me, switching from the “My Bank” to a “New Bank” would be

C1a.	1	2	3	4	5	6	7
	A Bad Idea						A Good Idea

C1b.	1	2	3	4	5	6	7
	Useless						Useful

C1c.	1	2	3	4	5	6	7
	Harmful						Beneficial

C1d.	1	2	3	4	5	6	7
	Foolish						Wise

C1e.	1	2	3	4	5	6	7
	Unpleasant						Pleasant

C1f.	1	2	3	4	5	6	7
	Undesirable						Desirable

C2. People who influence my behavior would approve of my switching from “My Bank” to a “New Bank”

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

C3. For me switching from “My Bank” to a “New Bank” would be

1	2	3	4	5	6	7
Very Difficult						Very Easy

C4. If I wanted to, I could easily switch from “My Bank” to a “New Bank”

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

C5. How much control do you have over switching from “My Bank” to a “New Bank”?

1	2	3	4	5	6	7
Absolutely No Control						Complete Control

C6. Most people who are important in my life would approve of my switching from “My Bank” to a “New Bank”

1 2 3 4 5 6 7
Extremely Unlikely Extremly Likely

C7. The number of events outside my control which would prevent me from switching from “My Bank” to a “New Bank” are

1 2 3 4 5 6 7
Numerous Very Few

C8. I believe that I have the resources and the ability to switch from “My Bank” to a “New Bank”.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

C9. I believe that switching from “My Bank” to a “New Bank” would take a lot of time and effort.

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

C10. All things considered, switching from “My Bank” to a “New Bank” is not a difficult proposition for me

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

C11. For me, switching from the “My Bank” to a “New Bank” is an idea that I

1 2 3 4 5 6 7
Dislike Like

C12. I face very high barriers in switching from “My Bank” to a “New Bank”

1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

Section D

Now we would like to tell us about your intentions to switch the identified service from “My Bank” to a “New Bank”. Please circle the number that best describes your answer to the statement.. There are no wrong or right answers - All we are interested in is a number that best reflects your intent.

D1. Rate the probability that you would switch from “My Bank” to a “New Bank” if you needed similar services again.

D1a.	1	2	3	4	5	6	7
	Unlikely						Likely

D1b.	1	2	3	4	5	6	7
	Improbable						Probable

D1c.	1	2	3	4	5	6	7
	Impossible						Possible

D1d.	1	2	3	4	5	6	7
	No Chance						Certain

D2. In the next few years , I intend to do less business with “My Bank”

	1	2	3	4	5	6	7
	Extremely Unlikely						Extremely Likely

Section E

Now we would like to ask you about the actions you take or might take in communicating your perceptions of the quality of the identified service provided by the relevant bank. Please circle a number that best describes your response to the statement. There are no wrong or right answers - All we are interested in is a number that best reflects your response.

E1. I take every opportunity to communicate my opinions about the quality of service of "My Bank" to employees of "My Bank".

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

E2. I take every opportunity to communicate my opinions about the quality of service of "My Bank" to people who are important to me.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

E3. If I switched from "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "My Bank" to the employees of "My Bank".

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

E4. If I switched from "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "My Bank" to people important to me.

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

E5. If I switched from the "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "My Bank" to the employees of "New Bank".

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

E6. If I switched from the "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "New Bank" to the employees of "New Bank".

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

E7. If I switched from "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by the "New Bank" to people important to me.

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

Comments and Suggestions

Appendix 2

Service Quality

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
A8	10.8462	4.1327	.7261	.5857	.6617
A24	10.4615	4.3710	.5628	.3182	.8464
B2	10.5769	4.7587	.7034	.5626	.7021

Reliability Coefficients 3 items

Alpha = .8079 Standardized item alpha = .8156

Factor Matrix:

	Factor 1
A8	.89910
B2	.88402
A24	.77990

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
A8	.80838	1	2.19812	73.3	73.3
A24	.60824				
B2	.78150				

Satisfaction

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
B1A	26.0400	30.9371	.9138	.8691	.9360
B1B	25.9600	34.0392	.8115	.7732	.9484
B1C	26.0000	31.1124	.9184	.8920	.9353
B1D	26.0200	32.6731	.7911	.8387	.9500
B1E	26.2400	29.9412	.8719	.8710	.9419
B3	25.7400	33.3800	.8262	.8184	.9465

Reliability Coefficients 6 items

Alpha = .9523 Standardized item alpha = .9532

Factor Matrix:

	Factor 1
B1A	.94340
B1B	.87199
B1C	.94805
B1D	.84366
B1E	.90935
B3	.88457

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
B1A	.89000	1	4.87032	81.2	81.2
B1B	.76036				
B1C	.89881				
B1D	.71177				
B1E	.82693				
B3	.78246				

Switching Costs

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
C3	35.7200	71.3486	.7525	.8273	.8363
C4	35.4800	68.6220	.7274	.8337	.8401
C5	33.8200	87.6608	.5284	.5330	.8644
C7	34.4800	81.0302	.4551	.4553	.8708
C8	33.6400	90.4800	.4680	.4400	.8697
C9	36.3600	72.1943	.6535	.5546	.8495
C10	35.4400	69.8841	.7871	.6998	.8317
C12	34.9200	76.5649	.6912	.5397	.8449

Reliability Coefficients 8 items

Alpha = .8683 Standardized item alpha = .8727

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
C9	.58561	1	4.28382	53.5	53.5
C1	.63679	2	1.50450	18.8	72.4
C1	.75831				
C3	.83817				
C4	.79350				
C5	.76090				
C7	.71292				
C8	.70213				

Rotated Factor Matrix:

	Factor 1	Factor 2
C3	.91138	.08686
C4	.88331	.11512
C10	.82245	.28615
C12	.76278	.23441
C9	.71771	.26551
C5	.21959	.84420
C7	.18223	.82445
C8	.16218	.82209

Subjective Norms

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
C2	3.6000	3.1020	.7338	.5385	.
C6	3.3200	2.2220	.7338	.5385	.

Reliability Coefficients 2 items

Alpha = .8397 Standardized item alpha = .8465

Factor Matrix:

	Factor 1
C2	.93107
C6	.93107

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
C2	.86690	1	1.73380	86.7	86.7
C6	.86690				

Attitude Towards Switching

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
C1A	20.3958	48.8825	.8205	.7344	.9172
C1B	20.5208	48.4676	.8201	.7300	.9175
C1C	19.7917	55.5727	.7426	.6068	.9262
C1D	20.0208	53.5102	.7848	.6832	.9217
C1E	20.6250	55.2606	.6786	.5561	.9302
C1F	20.4167	47.7376	.8667	.7984	.9124
C1I	20.4792	48.4676	.7974	.6512	.9202

Reliability Coefficients 7 items

Alpha = .9316 Standardized item alpha = .9335

Factor Matrix:

	Factor 1
C1A	.87629
C1B	.87071
C1C	.81120
C1D	.84496
C1E	.75276
C1F	.90810
C1I	.85356

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
C1A	.76788	1	5.01785	71.7	71.7
C1B	.75813				
C1C	.65805				
C1D	.71395				
C1E	.56665				
C1F	.82464				
C1I	.72856				

Switching Intentions

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
D1A	14.4255	26.9889	.8589	.9598	.7648
D1B	14.4255	27.6846	.8705	.9612	.7644
D1C	12.4681	34.0805	.4741	.4736	.8667
D1D	13.6596	29.1425	.8125	.7689	.7828
D2	13.5319	34.4283	.3752	.2292	.8973

Reliability Coefficients 5 items

Alpha = .8514 Standardized item alpha = .8551

Factor Matrix:

	Factor 1
D1A	.93585
D1B	.93622
D1C	.68625
D1D	.93245

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
D1A	.87582	1	3.09271	77.3	77.3
D1B	.87651				
D1C	.47094				
D1D	.86945				

Perceived Relevance

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
E1	25.7600	47.4922	.4718	.5223	.8174
E2	24.7400	49.1351	.4500	.3698	.8195
E3	25.2000	41.2245	.6767	.7167	.7817
E4	24.1600	45.1576	.6836	.8767	.7838
E5	24.9800	47.0404	.4522	.2371	.8222
E6	25.1200	43.7404	.7135	.6338	.7773
E7	24.1600	48.2188	.5727	.8539	.8021

Reliability Coefficients 7 items

Alpha = .8248 Standardized item alpha = .8281

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
E1	.78754	1	3.50305	50.0	50.0
E2	.41550	2	1.41696	20.2	70.3
E3	.81568				
E4	.88928				
E5	.36217				
E6	.76725				
E7	.88260				

Rotated Factor Matrix:

	Factor 1	Factor 2
E7	.93868	.03844
E4	.92491	.18393
E2	.61031	.20741
E5	.51973	.30340
E1	.00313	.88743
E3	.29046	.85516
E6	.36743	.79513

Exploratory Factor Analysis on all Pretest Data

Final Statistics:

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
A8	.82418	1	12.43317	33.6	33.6
A24	.74820	2	5.87958	15.9	49.5
B1A	.92094	3	3.63833	9.8	59.3
B1B	.82778	4	2.58895	7.0	66.3
B1C	.91658	5	1.92795	5.2	71.5
B1D	.76751	6	1.54646	4.2	75.7
B1E	.83471	7	1.19076	3.2	78.9
B2	.82931				
B3	.87568				
C10	.79554				
C11	.81023				
C12	.67829				
C9	.72136				
E7	.88570				
E6	.73398				
E5	.71413				
E4	.90426				
E3	.78508				
E2	.78912				
E1	.72780				
C1A	.80172				
C1B	.77425				
C1C	.79031				
C1D	.72978				
C1E	.80255				
C1F	.82352				
C2	.67419				
C3	.84327				
C4	.80450				
C5	.72650				
C6	.64729				
C7	.73220				
C8	.68156				
D1A	.85955				
D1B	.85656				
D1C	.73050				
D1D	.83655				

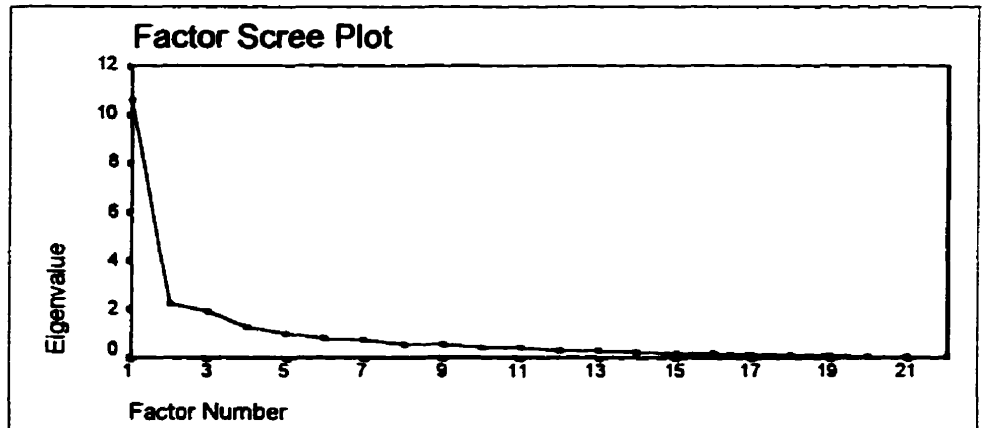
Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
D1A	.88781	-.24091	.05119	-.02964	.08593	.04907	-.00216
D1B	.86557	-.27764	.12149	-.06148	.04168	.08690	.04930
C1A	.83181	-.31441	.06644	.06857	-.03181	.02759	.00812
C1I	.82231	-.30535	-.09510	-.10667	.14057	-.00730	-.02362
D1D	.81255	-.28364	.08647	.05194	-.05950	.16793	.23096
C1F	.79955	-.34272	-.19348	-.02270	.05613	-.14786	-.06176
C1B	.79048	-.21113	-.22628	-.13173	.06295	.04582	.17378
C1C	.75291	-.27407	-.04544	.34121	-.00205	.13370	.10936
C1E	.75132	-.19976	.32516	-.18419	-.07180	.07341	-.21899
C1D	.74694	-.19669	-.27920	.10845	.20566	-.03410	-.00037
D1C	.58009	-.00128	-.05577	.32903	-.03971	.03154	.52920
B1A	-.28739	.89927	.16085	.01442	-.03201	-.03714	.03438
B1C	-.40412	.85167	.13649	.08477	-.00280	-.02987	.03480
A8	-.25782	.84519	-.02067	.07190	.04895	.07649	-.17179
B2	-.31379	.83900	-.01765	-.04182	.06240	.10384	.10097
B1E	-.25904	.79816	.24435	-.02516	-.07403	-.22970	-.10938
B1B	-.29418	.79299	.15526	.03494	.09732	-.00909	.27844
B1D	-.13956	.76703	.24087	.03216	.04471	-.21967	-.22448
B3	-.53998	.72782	.11966	.08812	.08895	-.02374	.15433
C3	-.00367	.17093	.86458	.04338	.13164	.16027	-.14712
C10	-.03924	.04279	.85043	.20516	-.01268	.05763	.15288
C4	.07275	.11008	.84251	.12138	.00853	.13098	-.21287
C12	-.09337	.17801	.78465	.12911	.00044	-.07418	.00592
C9	.01678	.15034	.73002	.18120	-.23638	-.11985	.24993
C7	-.21103	-.00479	.30219	.72557	-.21340	.14108	-.06654
C8	-.12440	.13006	.22906	.71318	.29355	.02397	-.03653
C5	-.12754	.15072	.45874	.68013	.11682	.02182	.01919
C2	.43369	-.07488	.02258	.66647	.08121	.10322	.13621
C6	.51000	-.02275	.05677	.56419	.06327	.18391	.16523
E2	.08705	-.02294	-.03016	-.15292	.85767	.09507	-.10997
E4	.07136	.08405	.06110	.30393	.80460	.25829	.28619
E7	.08671	.14282	-.06020	.29245	.79644	.14875	.33494
E1	.02742	-.07332	.01747	.08408	.04379	.84248	-.05117
E3	.13194	-.04635	.22521	.25621	.20149	.75483	.19698
E6	.15908	-.10662	-.05757	.02467	-.33632	.73415	.20321
A24	-.42381	.43915	.08926	-.08098	-.20997	.45223	-.33558
E5	.05464	.00778	.02156	-.01907	.34621	.21993	.73623

Appendix 3

SERVPERF SCALE

Variable	Communality	Factor	Eigenvalue	Pct of Var.	Cum Pct
A1	.60969	1	10.61501	48.3	48.3
A10	.50644	2	2.24268	10.2	58.4
A11	.69029	3	1.93099	8.8	67.2
A12	.83996	4	1.23903	5.6	72.9
A13	.88410				
A14	.73141				
A17	.75201				
A16	.78844				
A19	.63712				
A2	.84714				
A20	.75797				
A21	.65081				
A22	.67435				
A23	.66031				
A3	.77789				
A4	.82774				
A5	.76652				
A6	.89300				
A7	.84582				
A9	.58201				
A18	.67297				



Factor Matrix For SERVPERF

	Factor 1	Factor 2	Factor 3	Factor 4
A6	.95940	-.01108	.05748	-.15060
A5	.93129	-.11631	-.15279	.07707
A7	.81570	-.03602	.16703	.12089
A11	.65880	.36717	-.03942	-.05191
A9	.58047	.01822	.13004	.25101
A21	.53949	.38561	.15642	-.09224
A20	.46855	.17843	.43391	.10725
A4	.04110	.86932	.05794	.02314
A3	-.09539	.86515	-.13887	.16027
A2	.05765	.82829	.12249	.07401
A18	.04544	-.18256	.83686	-.22784
A12	.09301	.20275	.74220	.15222
A13	.25493	.22384	.73763	-.04568
A23	-.16892	-.16717	.69481	.43660
A17	-.04891	.36633	.68043	.11149
A16	.46968	.23068	.51851	-.11099
A1	-.00880	.26182	-.15342	.67892
A19	.02156	.18997	.11927	.65993
A22	.50497	-.11177	.05767	.54614
A15	.23962	.18216	.20302	.48852
A10	.43721	.02976	-.01764	.44120
A14	.17086	.34723	.25995	.43786

Appendix 4

Date: dd/mm/1996
School of Business
Queen's University
Phone (613) 545 6000 Ext. 5185
Fax# (613) 545 2325

Respondent's Name
Respondent's Address

Dear Respondent:

I am requesting your participation in a study of consumer attitudes and perceptions of the service provided to you by your bank with respect to your mortgage. Your name was drawn from a list provided to me by Canada Mortgage and Housing Corporation (CMHC).

I am a Ph.D. student in the School of Business at Queen's University. This research is essential for fulfilling requirements of my Ph.D. program; thus your participation would be greatly appreciated.

You will be asked to read some brief instructions in various sections and to complete a number of questions. It is expected that you will require no more than 15 minutes to complete the survey. Participation in this study is completely voluntary. If you agree to help me with the project, please return the completed survey through mail using the pre-paid return envelope provided to you. It will be necessary for me to contact you after the date of renewal of your mortgage and ascertain if you have switched to another bank. Thus I ask for your name and phone number at the end of the survey.

Please complete this survey **prior to renewing your mortgage**. Once I have received your completed survey, I will enter your name in a draw to win a **cash prize of \$250**. The draw will take place on October 1, 1996 and the winner will be contacted by mail.

Your responses will be strictly confidential. No one else will have access to your individual responses. Your identity will not be disclosed in any published or unpublished findings of the study.

I hope that you appreciate how important it is to me that you participate. If you require additional information, you may contact me via phone or fax.

Yours Truly

H. S. Bansal
Ph.D. Student
School of Business

- B3.** "My Bank's" employees are well dressed and appear neat.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B4.** The appearance of the physical facilities of "My Bank" is in keeping with the type of service provided
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B5.** When "My Bank" promises to do something by a certain time, it does so.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B6.** When I have problems, "My Bank" is sympathetic and reassuring.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B7.** "My Bank" is dependable.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B8.** Overall, I consider "My Bank's" service to be excellent.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B9.** "My Bank" provides its services at the time it promises to do so.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B10.** "My Bank" keeps it's records accurately.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |

- B20.** "My Bank" gives me individual attention.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B21.** Employees of "My Bank" understand what my specific needs are.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B22.** "My Bank" has my best interests at heart.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B23.** "My Bank" has operating hours convenient to me.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |
- B24.** I believe that the general quality of "My Bank's" service is low.
- | | | | | | | | |
|--|----------------------|---|---|---|---|---|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Strongly
Disagree | | | | | | Strongly
Agree |

Section C

In this section, please relate your answers specifically to experiences with respect to the mortgage that you have with "My Bank".

For each statement, please circle the number that best reflects your feelings. There are no wrong or right answers. All I am interested in is a number that best shows your feelings about the service provided by "My Bank".

- C1** Overall, how do you feel about the service provided to you by "My Bank" with respect to your mortgage. (Please answer all below)
- | | | | | | | | |
|-------------|------------|---|---|---|---|---|---------|
| C1a. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Displeased | | | | | | Pleased |
- | | | | | | | | |
|-------------|-----------|---|---|---|---|---|-----------|
| C1b. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Disgusted | | | | | | Contented |
- | | | | | | | | |
|-------------|--------------|---|---|---|---|---|-----------|
| C1c. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Dissatisfied | | | | | | Satisfied |

D2. People who influence my behavior would approve of my switching my mortgage from “My Bank” to a “New Bank”.

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

D3. For me switching my mortgage from “My Bank” to a “New Bank” would be

1	2	3	4	5	6	7
Very Difficult						Very Easy

D4. If I wanted to, I could easily switch my mortgage from “My Bank” to a “New Bank”.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

D5. How much control do you have over switching your mortgage from “My Bank” to a “New Bank”?

1	2	3	4	5	6	7
Absolutely No Control						Complete Control

D6. Most people who are important in my life would approve of switching my mortgage from “My Bank” to a “New Bank”.

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

D7. The number of events outside my control which would prevent me from switching my mortgage from “My Bank” to a “New Bank” are

1	2	3	4	5	6	7
Very Few						Numerous

D8. I believe that I have the resources and the ability to switch my mortgage from “My Bank” to a “New Bank”.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

D9. In the past, I have rarely switched banks from my mortgages

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

D10. I believe that switching my mortgage from “My Bank” to a “New Bank” would take a lot of time and effort.

	1	2	3	4	5	6	7
	Strongly Disagree						Strongly Agree

D11. All things considered, switching my mortgage from “My Bank” to a “New Bank” is not a difficult proposition for me.

	1	2	3	4	5	6	7
	Strongly Disagree						Strongly Agree

D12. For me, switching my mortgage from “My Bank” to a “New Bank” is an idea that I

	1	2	3	4	5	6	7
	Dislike						Like

D13. I have a lot of experience in switching banks for my mortgages.

	1	2	3	4	5	6	7
	Strongly Disagree						Strongly Agree

D14. I face very high barriers in switching my mortgage from “My Bank” to a “New Bank”.

	1	2	3	4	5	6	7
	Strongly Disagree						Strongly Agree

Section E

Now, please tell me about your intentions to switch your mortgage from “My Bank” to a “New Bank” at your renewal date. Please circle the number that best describes your answer to the statement. There are no wrong or right answers. All I am interested in is a number that best reflects your intent.

E1. Rate the probability that you would switch your mortgage from “My Bank” to a “New Bank” at your renewal date. (Please answer all below)

E1a.	1	2	3	4	5	6	7
	Unlikely						Likely

E1b.	1	2	3	4	5	6	7
	Improbable						Probable

E1c.	1	2	3	4	5	6	7
	Impossible						Possible

E1d.	1	2	3	4	5	6	7
	No Chance						Certain

Section F

Now, please tell me about the actions you take or might take in communicating your perceptions of the quality of service provided by the relevant bank with respect to your mortgage. Please circle a number that best describes your response to the statement. There are no wrong or right answers. All I am interested in is a number that best reflects your response.

- F1. I have communicated my opinions about the quality of service of "My Bank" to employees (either staff or management) of "My Bank".

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

- F2. I have communicated my opinions about the quality of service of "My Bank" to people who are important to me.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

- F3. If I switched my mortgage from "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "My Bank" to the employees (either staff or management) of "My Bank".

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

- F4. If I switched my mortgage from "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "My Bank" to people important to me.

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

- F5. If I switched my mortgage from the "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "My Bank" to the employees (either staff or management) of "New Bank".

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

- F6. If I switched my mortgage from the "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by "New Bank" to the employees (either staff or management) of "New Bank".

1	2	3	4	5	6	7
Extremely Unlikely						Extremely Likely

F7. If I switched my mortgage from "My Bank" to a "New Bank", I would take the opportunity to communicate my opinion on the quality of service provided by the "New Bank" to people important to me.

1 2 3 4 5 6 7
Extremely Extremely
Unlikely Likely

Section G

Finally, I would like to ask a few questions about you for statistical purposes only.

G1. Your sex? M F (Please Circle)

G2. Your age? _____ years.

G3. What is the highest level of education that you have completed? (Please Circle)

1. did not complete high school
2. high school graduate
3. technical or community college graduate
4. undergraduate university degree
5. post-graduate university degree

G4. Which of the following personal income brackets do you fall in? (Please Circle)

1. Less than \$20,000
2. \$20,000 - \$39,999
3. \$40,000 - \$59,999
4. \$60,000 - \$80,000
5. Above \$80,000

G5. Which of the following household income brackets do you fall in? (Please Circle)

1. Less than \$20,000
2. \$20,000 - \$39,999
3. \$40,000 - \$59,999
4. \$60,000 - \$80,000
5. \$80,000 - \$99,999
6. Above \$100,000

G6. Your Name _____

G7. Your Phone number (with area code please) _____

Thank you very much for your participation. Please turn the page for any additional comments and/or suggestions you have regarding this survey.

Important

Please return the completed survey by mail using the pre-paid return envelope that has been provided.

Comments and Suggestions

Appendix 5

Telephone Interview Protocol

Hello, my name is Harvir Bansal, - I am a Ph.D. candidate at Queen's University in Kingston.

I sent you a survey about Mortgage switching a couple months ago.

Thank you for filling in the survey

You gave me your telephone number and I am phoning to confirm with you whether you have switched banks for your mortgage?

Could you give me an overriding reason for switching/not-switching?

My last question is which bank now holds your mortgage?¹⁴

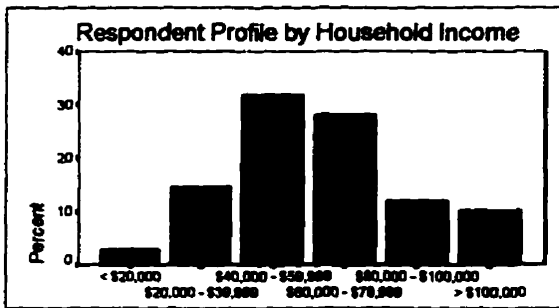
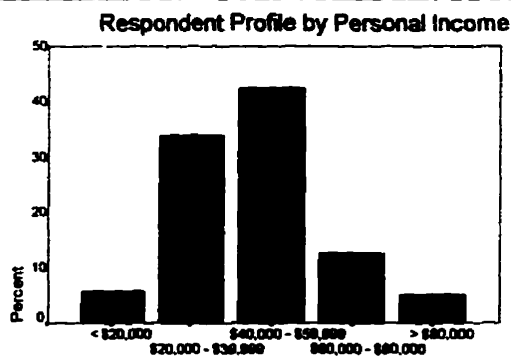
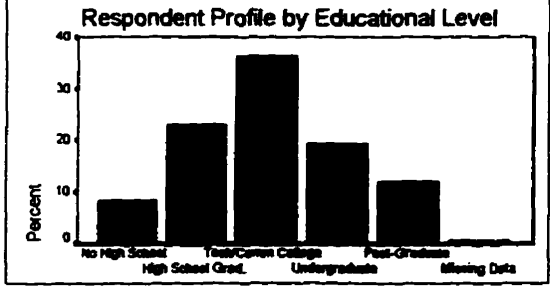
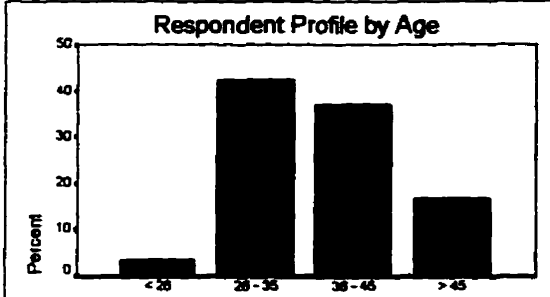
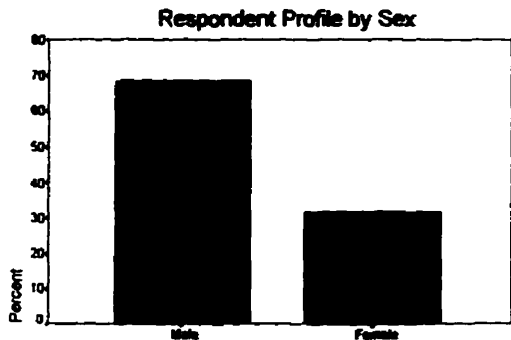
Thank you very much for your cooperation. I will not be contacting you again.

Is there anything you'd like to ask me about this research?

Thanks again and good-bye.

¹⁴ This question was only asked from respondents who had switched banks for their mortgage.

Appendix 6 Demographic Profile Charts



Appendix 7

Service Quality

Factor Matrix:

Indicators	Factor 1
B8	.92670
C2	.89045
B24	.86724

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
B24	.75210	1	2.40378	80.1	80.1
B8	.85878				
C2	.79290				

Scale Summary

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
B8	10.3622	8.2220	.8193	.7657
B24	10.0540	8.6391	.7139	.8657
C2	10.2053	9.3050	.7488	.8332

Reliability Coefficient 3 items

Alpha = .8744

Satisfaction

Factor Matrix:

Indicators	Factor 1
C1A	.95309
C1B	.95263
C1C	.96663
C1D	.93755
C1E	.96520
C3	.85492

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
C1A	.90839	1	5.29176	88.2	88.2
C1B	.90751				
C1C	.93437				
C1D	.87899				
C1E	.93161				
C3	.73088				

Scale Summary

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
C1A	25.5749	55.8121	.9310	.9644
C1B	25.4917	58.3061	.9289	.9652
C1C	25.5784	55.1711	.9486	.9626
C1D	25.4447	58.7880	.9080	.9672
C1E	25.6368	55.4177	.9474	.9627
C3	25.5321	58.4331	.8010	.9779

Reliability Coefficient 6 items

Alpha = .9721

Switching Costs

Rotated Factor Matrix:

Indicators	Factor 1	Factor 2
D3	.82131	.20075
D11	.77957	.22519
D10	.74307	.17771
D4	.70510	.43541
D5	.21960	.84859
D8	.20068	.76671
D7	.22514	.75622
D14	.44915	.52391

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
D3	.71485	1	4.09823	51.2	51.2
D4	.68675	2	1.04075	13.0	64.2
D5	.76833				
D7	.62256				
D8	.62812				
D10	.58373				
D11	.65844				
D14	.47621				

Scale Summary

(PSWC 1)

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
D5	7.2727	15.8205	.6996	.6722
D7	6.8473	15.4285	.5918	.7116
D8	6.8309	14.6580	.5579	.7305
D14	6.4687	14.7685	.5009	.7666

Reliability Coefficient 4 items

Alpha = .7736

(PSWC 2)

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
D3	9.7316	22.7976	.6899	.7587
D4	10.2718	23.1077	.6800	.7636
D10	9.3887	23.3696	.5814	.8103
D11	10.0663	23.4860	.6456	.7790

Reliability Coefficient 4 items

Alpha = .8238

Subjective Norms

Factor Matrix:

Indicators	
D2	.89612
D6	.89612

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
D2	.80303	1	1.60607	80.3	80.3
D6	.80303				

Scale Summary

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
D2	4.5038	4.0628	.6061	.
D6	3.8204	3.4922	.6061	.

Reliability Coefficient 2 items

Alpha = .7534

Attitude Towards Switching

Factor Matrix:

Indicators	Factor 1
D1A	.93812
D1B	.93252
D1C	.92964
D1D	.94430
D1E	.89012
D1F	.94237
D12	.85689

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
D1A	.88007	1	5.92024	84.6	84.6
D1B	.86960				
D1C	.86423				
D1D	.89171				
D1E	.79231				
D1F	.88806				
D12	.73425				

Scale Summary

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
D1A	24.5117	100.9966	.9146	.9609
D1B	24.3873	103.1323	.9036	.9617
D1C	24.0416	107.5787	.8987	.9626
D1D	24.2183	105.5919	.9194	.9609
D1E	24.5811	106.9988	.8516	.9655
D1F	24.4766	101.8390	.9202	.9604
D12	24.4921	103.3854	.8120	.9694

Reliability Coefficient 7 items

Alpha = .9682

Switching Intentions

Factor Matrix:

Indicators	Factor 1
E1A	.94682
E1B	.95725
E1C	.80371
E1D	.94884

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
E1A	.89647	1	3.35904	84.0	84.0
E1B	.91632				
E1C	.64595				
E1D	.90030				

Scale Summary

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
E1A	11.8518	29.6355	.8979	.8987
E1B	11.6458	30.2378	.9187	.8905
E1C	10.2401	37.4219	.6853	.9623
E1D	11.3145	33.1115	.9035	.8986

Reliability Coefficient 4 items

Alpha = .9349

Habit

Factor Matrix:

Indicators	
D9	.82141
D13	.82141

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
D9	.67471	1	1.34943	67.5	67.5
D13	.67471				

Scale Summary

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
D9	1.8213	1.8059	.3494	.
D13	2.3270	3.1138	.3494	.

Reliability Coefficient 2 items

Alpha = .5040

Perceived Relevance

Rotated Factor Matrix:

Indicators	Factor 1	Factor 2
F3	.81474	.11735
F5	.79098	.22123
F6	.78457	.25475
F2	-.02968	.93839
F4	.51695	.65949
F7	.48636	.60112
F1	.33387	.45545

Final Statistics:

Indicators	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
F1	.31891	1	3.52060	50.3	50.3
F2	.88145	2	1.01243	14.5	64.8
F3	.67757				
F4	.70217				
F5	.67459				
F6	.68045				
F7	.59789				

Scale Summary

(PREL 1)

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
F3	9.4070	10.5339	.5721	.7451
F5	452873	10.5403	.6203	.6858
F6	9.2857	11.6911	.6518	.6629

Reliability Coefficient 3 items

Alpha = .7750

(PREL 2)

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
F1	16.1709	15.6566	.3517	.7715
F2	14.9634	14.9707	.5897	.6050
F4	14.8251	14.9505	.6152	.5911
F7	14.6020	17.2523	.5271	.6522

Reliability Coefficient 4 items

Alpha = .7179

Appendix 8

Descriptive Statistics for Various Summated Scales		
Construct	Means	Standard Deviations
Switching Intentions	3.41	2.04
Attitude Towards Switching	4.08	1.68
Service Quality	5.10	1.43
Customer Satisfaction	5.11	1.53
Subjective Norms	4.16	1.74
Habit/Past Behavior	1.82	1.34
PSWC 1	2.28	1.25
PSWC 2	3.29	1.56
PREL 1	4.69	1.57
PREL 2	5.47	1.40

Appendix 9

Covariance Matrix Used for Estimating the Structural Models

	SQPR	B24	B8	CIA	CIB	CIC	CID	CIE	C2	D10	D11	D12	D14	D1A	D1B	D1C	D1D
SQPR	48.76																
B24	1.011	1															
B8	1.29	0.714	1														
CIA	1.425	0.573	0.74	1													
CIB	1.644	0.587	0.709	0.884	1												
CIC	1.34	0.585	0.726	0.91	0.927	1											
CID	1.603	0.58	0.725	0.863	0.887	0.888	1										
CIE	1.348	0.617	0.758	0.918	0.904	0.941	0.887	1									
C2	1.459	0.624	0.765	0.885	0.841	0.862	0.852	0.875	1								
D10	-0.1	0.094	0.058	0.087	0.107	0.134	0.105	0.147	0.16	1							
D11	-0.19	0.068	0.065	0.075	0.123	0.123	0.085	0.116	0.129	0.521	1						
D12	-0.85	-0.51	-0.59	-0.54	-0.57	-0.58	-0.58	-0.61	-0.6	-0.27	-0.33	1					
D14	-0.32	-0.07	-0.06	-0.07	0.011	-0.01	-0.04	-0.01	-0.03	0.358	0.419	-0.07	1				
D1A	-1.16	-0.51	-0.58	-0.59	-0.6	-0.62	-0.59	-0.65	-0.63	-0.21	-0.28	0.804	-0.11	1			
D1B	-1.22	-0.46	-0.51	-0.54	-0.51	-0.55	-0.52	-0.58	-0.57	-0.25	-0.28	0.723	-0.15	0.887	1		
D1C	-1.04	-0.43	-0.52	-0.52	-0.5	-0.53	-0.51	-0.55	-0.55	-0.22	-0.29	0.703	-0.18	0.843	0.878	1	
D1D	-1.3	-0.47	-0.57	-0.58	-0.56	-0.6	-0.57	-0.61	-0.61	-0.2	-0.27	0.753	-0.13	0.869	0.865	0.914	1
D1E	-1.24	-0.44	-0.49	-0.47	-0.49	-0.51	-0.48	-0.52	-0.5	-0.34	-0.34	0.745	-0.2	0.774	0.789	0.797	0.793
D1F	-1.13	-0.5	-0.59	-0.55	-0.54	-0.57	-0.56	-0.59	-0.6	-0.26	-0.31	0.807	-0.13	0.855	0.85	0.838	0.874
D3	0.288	0.157	0.125	0.138	0.187	0.171	0.148	0.194	0.177	0.469	0.571	-0.4	0.427	-0.41	-0.42	-0.41	-0.41
D4	-0.39	0.031	-0.04	-0.02	-0	0.002	4E-04	0.022	0.016	0.495	0.523	-0.18	0.474	-0.14	-0.19	-0.2	-0.19
D5	-0.14	-0.11	-0.09	-0.08	-0.09	-0.09	-0.05	-0.06	-0.05	0.332	0.383	0.009	0.476	-0	-0.04	-0.03	-0
D7	0.496	-0.11	-0.07	-0.07	-0.06	-0.08	-0.06	-0.07	-0.07	0.344	0.328	4E-04	0.445	-0.04	-0.05	-0.08	-0.03
D8	-0.5	-0.03	-0.02	0.029	-0	0.01	0.049	0.029	0.042	0.31	0.381	-0.08	0.344	-0.1	-0.12	-0.14	-0.11
E1A	-1.24	-0.47	-0.54	-0.53	-0.53	-0.56	-0.54	-0.59	-0.58	-0.28	-0.3	0.75	-0.14	0.806	0.766	0.735	0.758
E1B	-1.09	-0.46	-0.51	-0.5	-0.5	-0.52	-0.52	-0.56	-0.57	-0.29	-0.32	0.725	-0.15	0.776	0.764	0.748	0.759
E1D	-1.23	-0.44	-0.51	-0.47	-0.48	-0.49	-0.49	-0.53	-0.54	-0.27	-0.34	0.726	-0.2	0.765	0.746	0.719	0.735
F3	0.361	0.019	0.036	-0.01	0.024	0.036	3E-04	0.041	-0	0.034	0.023	-0.07	0.131	-0.11	-0.11	-0.11	-0.13
F4	0.423	-0.09	-0.09	-0.13	-0.13	-0.13	-0.15	-0.15	-0.14	-0.08	-0.09	0.053	-0.01	0.043	0.08	0.034	0.06
F5	0.744	-0.09	-0.11	-0.12	-0.12	-0.11	-0.12	-0.11	-0.13	0.061	0.024	0.059	0.074	0.009	0.017	-0.01	0.031
F6	0.419	-0.01	-0.01	-0.05	-0.04	-0.01	-0.06	-0.04	-0.06	-0.06	-0.01	0.061	-0.03	0.059	0.079	0.065	0.061
F7	0.438	-0.07	-0.06	-0.1	-0.09	-0.08	-0.08	-0.09	-0.12	-0.1	-0.11	0.126	-0.05	0.111	0.119	0.113	0.113
SQPR	23.12	0.941	1.15	1.15	1.091	1.041	1.317	1.094	1.282	0.094	0.064	-0.71	0.004	-0.95	-0.92	-0.99	-0.99

