

HOW RETAILERS HANDLE COMPLAINT MANAGEMENT

Torben Hansen, Copenhagen Business School

Ricky Wilke, Copenhagen Business School

Judith Lynne Zaichkowsky, Visiting Professor, Copenhagen Business School

ABSTRACT

This article fills a gap in the literature by providing insight about the handling of complaint management (CM) across a large cross section of retailers in the grocery, furniture, electronic and auto sectors. Determinants of retailers' CM handling are investigated and insight is gained as to the links between CM and redress of consumers' complaints. The results suggest that retailers who attach large negative consequences to consumer dissatisfaction are more likely than other retailers to develop a positive strategic view on customer complaining, but at the same time an increase in perceived negative consequences of customer dissatisfaction leads to a more negative view on interacting with complaining customers.

INTRODUCTION

Many authors have investigated the consumer complaint process (e.g., Homburg and Fürst, 2005; Saxby, Tat and Johansen, 2000; Singh, 1990; Stephens and Gwinner, 1998; Richins, 1981) and some have emphasized the importance of developing customer complaints handling (or complaint management, CM) systems (e.g., Lam and Dale, 1999; Johnston, 2001). Research suggests that a well-designed and well-implemented CM system may highly influence customer satisfaction (Berry and Parasuraman, 1991; Kelley and Davis, 1994). Also, CM has implications for internal company factors. For example, if the design of the CM system is easy to use by employees and if it also satisfies customers, this could result in employees feeling greater control

and experiencing less stress (Matteson and Ivancevich, 1982). Moreover, in an empirical study among 40 senior managers responsible for their customer service departments, Johnston (2001) found some support for the underlying hypothesis that a good complaint culture and good complaint processes may well lead to improved financial performance.

While many studies have investigated the complaint process from the consumer side, those from the side of business are few and far between. Kendall and Russ (1975) provided insight to the strategic management of complaints, through customer warranties, from a sample of 53 manufacturers. Bell, Menguc and Stefani (2004) gathered data on customer complaint handling from sales staff within a large retailer. The lack of large broad study from the business side may be due to the easier nature of collecting data from large groups of customers rather than large groups of retailers. Therefore, little is known about the complete picture or links between the company's perception of the level of dissatisfaction of their customers, their strategic view on how to handle complaints from these customers, their desire to interact with dissatisfied customers, and if or how to compensate complaining customers for their troubles. Such an investigation is important from a theoretical view to establish consistencies among what companies say they are doing in terms of strategy and what they are actually doing in terms of concrete retailer-customer complaint-based interaction.

It is the purpose of this article to investigate determinants (positive and negative) of retailers' CM handling. In order to meet this objective, four types of retailers (*grocery shops, furniture stores, electronic*

stores, and *car-dealers*) are used in an empirical study. A detailed discussion of the concept of CM is provided, with an argument that it should be treated from both a strategic and an operational view. Then the article develops a conceptual model for understanding CM handling and a total of eleven research hypotheses are proposed.

THE CONCEPT OF COMPLAINT MANAGEMENT

CM involves the receipt, investigation, settlement and prevention of customer complaints, and recovery of the customer (Johnston, 2001), and may include both external factors (e.g., complaints filed by customers) and internal factors (e.g., internal complaints). Research suggests that most consumers who believe that their complaints are taken seriously by the company will consider repeat buying (Whiteley, 1991; Walker, 1990). CM has traditionally been regarded as a 'defensive marketing strategy' (e.g., Fornell and Wernerfelt, 1987), whereas consumer satisfaction and loyalty programs often are referred to as 'offensive' strategies.

CM does not substitute for the creation of customer satisfaction and the development of loyalty programs. Instead, CM complements a company's action in the marketplace. For example, even loyal customers may experience a service failure and therefore it is of vital importance that such customers can easily, incurring no additional cost, voice their complaint to the company (Huppertz, Mower and Associates, 2003, Homburg and Fürst, 2005). The customer also needs to perceive that the complaint is handled effectively and seriously by a well-developed CM system. Therefore key elements for a company to have a good CM process are: 1) the company does perceive the possibility that customers may be dissatisfied; and 2) that they believe negative consequences could result to the company from consumer dissatisfaction.

The development of CM has been dealt with and conceptualized in different ways by various authors. Adamson (1993) suggests that CM should evolve through a four-stage process starting with an in-depth analysis and correct use of past complaints and results. Cook and Macaulay (1997) deal with the normative concept of 'empowered complaint management'. Important elements in this concept include the following: companies should have a positive and proactive (non-defensive) attitude towards complaints; there is a fast reply and simple solution to the problem; and that complaint handlers should be regarded as an important part of the company.

To accomplish these tasks, the starting point is to make clear to staff members what authority they have when dealing with complaints and to encourage them to use the given authority. Brennan and Douglas (2002) review the standard 'Complaint Management Systems – Guide to Design and Implementation' (BS 8600:1999), which has been issued by the British Standards Institution. This standard gives guidance on designing and implementing CM systems for the management of complaints from the stage of initial reporting to resolution of the problem. It is proposed that the CM system should be described and analysed from both a strategic view and an operational view, the latter including the sub-components of 'complaining accessibility', 'retailer-customer interaction', and 'compensation policy'.

Strategic View on CM

CM is a strategic management tool, which is not always easy to plan or set, but which is influenced by a number of internal as well as external company factors. The development of a CM system involves analyzing, planning, implementing, and controlling (Gilly and Hansen, 1992). In essence, the strategic planning of complaint-handling should therefore be treated as any

other kind of strategic planning process involving the formulation of goals, needs for resources, and the like. The successful development of CM demands at least the same level of commitment from top management as is normally given to other kinds of strategic developments within a company [e.g., the formulation of competition strategies, brand strategies, etc.] (Gilly and Hansen, 1992; Welsh, 1995).

However, this commitment may be mostly talk and little action: based on a case-study of consumer complaints and associated handling systems, Lam and Dale (1999) found “a poor level of commitment in the company to complaints handling” (p. 846) and also that “among lower level employees and some of those holding managerial positions, ignorance was evident with regards to the concepts and requirements of Total Quality Management” (CM is here regarded as part of total quality management, TQM) (p. 845). Empirical results also suggest that many companies have great difficulty calculating the profitability of their CM system (Stauss and Schoeler, 2004; Johnston, 2001).

Although the literature reveals an increased understanding that CM is of strategic relevance (e.g., Fornell and Wernerfeldt, 1987; Maxham, 2001; Stauss and Seidel, 2004; Johnston and Mehra, 2002), this is not always reflected by the attention and effort given to this topic by companies. Stauss and Schoeler (2004) even claim that CM departments are often considered as operational units, that only have to handle consumer dialogue, and are not involved in strategic planning processes.

Based on such considerations, this article defines the strategic view of CM as when the company seems to believe complaining customers have valuable input to the firm and have written policies and procedures to deal with dissatisfied customers.

Operational View on CM

The operational view on CM covers the process by which complaints are handled and customers are recovered (Johnston, 2001). The operational process highlights several factors which are important for the successful implementation of CM, including: speedy response; reliability and consistency of response; ease of access to the complaint process; keeping the complainant informed; and well-trained staff who understand the complaint process (e.g., Hart, Heskett and Sasser, 1990; Johnston, 2001, 1995; Barlow and Moller, 1996; Boshoff, 1997). An effective CM process can be an important quality improvement tool that allows organizations to obtain customer feedback. Such feedback may be very useful in making improvements that increase customer satisfaction, loyalty, and profit (Powers and Bendall-Lyon, 2002). Therefore we propose that the operational view of CM can be divided into three sub-components: (1) *complaining accessibility*; (2) *retailer-customer interaction*; and (3) *compensation policy*.

Complaining Accessibility

Retailers who receive few formal complaints may feel tempted to believe that their customers are generally satisfied and loyal. However, as emphasized by Johnston (2001) and Boshoff (1997), complaints are a natural consequence of any service activity because mistakes are an unavoidable feature of all human endeavour and thus also of service delivery. If a retailer receives only a few complaints the reason could be that dissatisfied consumers are just switching to a competitive retailer without voicing a complaint (Vorhees and Horowitz 2006; Goodmann, 1999; Stephens and Gwinner, 1998). Reasons for not filing a complaint usually have to do with the difficulty to which a customer perceives communication with the

source. A dissatisfied consumer may hesitate from complaining if s/he is uncertain on where/or how to deliver the complaint or, even worse, if s/he doubts the retailers' interest in receiving the complaint. It is therefore highly important that the retailer convince its customers that complaints are welcome and that they will be handled seriously (Huppertz, Mower and Associates, 2003). Therefore, complaint accessibility is defined as the ease to which the retailer facilitates the receiving of complaints from customers (Fornell and Wernerfelt, 1988; Tax and Brown, 1998).

The Retailer-Customer Interaction Process

Studies show that consumers are likely to separate the complaint process itself from the outcome of the complaint process (Singh and Widing, 1990). Also, consumers are generally preoccupied with obtaining 'procedural justice' (Saxby et al., 2000; Davidow, 2003), which can be conceptualized as 'the perceived fairness of a process that culminates in an event, decision, or action' (Sheppard, Lewicki and Minto, 1992). Furthermore, research suggests that consumers may be even more concerned with obtaining a fair and serious procedural treatment than with obtaining a specific result of the complaint process (Lind and Tyler, 1988; Greenberg, 1990). This indicates that a complaint process, in which the customer feels exposed to a poor retailer-customer interaction, may not necessarily be overcome by a favorable result of the process.

Dissatisfied consumers report the process of complaining as stressful. Negative feelings and emotions sometimes prohibit the process (Davidow and Dacin, 1997; Stephens and Gwinner 1998). Just as consumers feel stress in the process, it is likely that retailers feel the same stress in dealing with dissatisfied customers. After all, complaining is a negative behavior and it takes "two to tango"...one to give and one to receive. Therefore, the retailer-customer interaction

process is defined as exploring this perceptual relationship between customer and retailer. It is essential that retailers' keep an open mind towards complaining customers and that they do not regard such customers as costly, difficult and/or as a psychological strain. If they personalize the negative process, they are likely to try to avoid complaining customers.

Compensation Policy

The primary reason that a consumer chooses to complain is that the consumer perceives some kind of loss (e.g., lower product quality than expected, a product malfunction, a service failure, etc.). In relation hereto, the company can compensate the complaining customer by offering price-reductions, repair or exchange of poor products, compensate extra expenses incurred by the consumer for the product failure, and the like. Compensation serves a double purpose (de Ruyter and Brack, 1993; Hui and Au, 2001). First, compensation should compensate for the real loss experienced by the consumer. Second, and equally important, compensation may serve to re-establish and compensate for the potential decrease in confidence that the consumer may attach to the retailer as a consequence of the perceived loss. Therefore compensation policy is defined as the feedback the retailer gives the customer which can be monetary or a simple thank-you acknowledgement for the complaint.

A CONCEPTUAL MODEL FOR UNDERSTANDING HOW RETAILERS HANDLE COMPLAINT MANAGEMENT

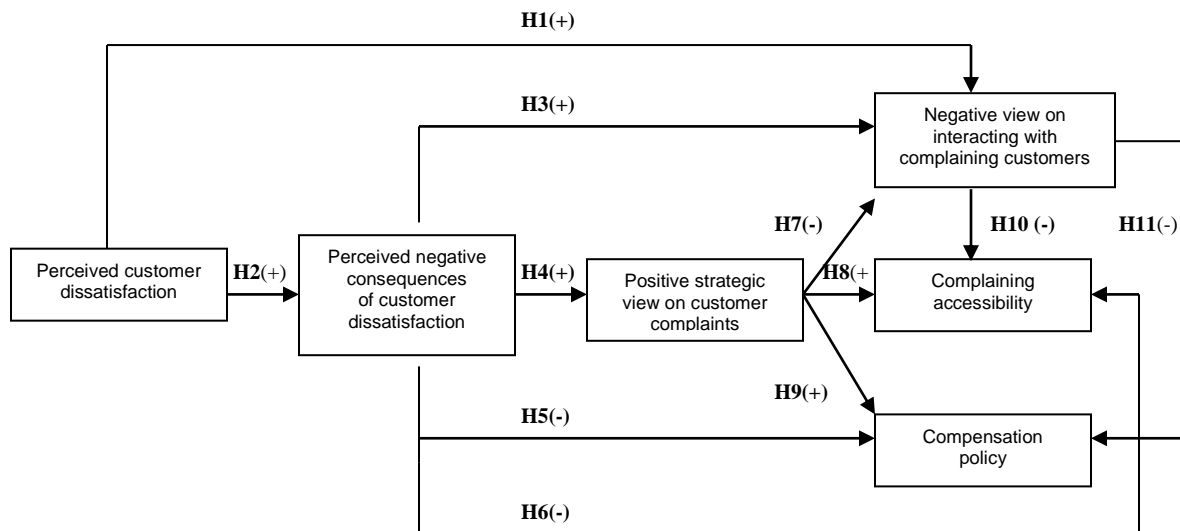
Using the considerations above as guidance, a framework for understanding how retailers handle CM is proposed in Figure One. The framework suggests eleven hypotheses, which are derived from both the strategic and the operational view on CM. By

combining the two views in one conceptual model it is stressed that an integration of the

two basic views on CM is essential.

FIGURE 1

A Framework for Understanding How Retailers Handle CM



This framework proposes possible links among the following constructs: perceived customer dissatisfaction; perceived negative consequences of customer satisfaction; positive strategic view on customer complaints; negative view on interacting with complaining customers; complaining accessibility; and compensation policy. The proposed constructs and hypothesized links are discussed as follows.

RESEARCH HYPOTHESES

The Role of Perceived Customer Dissatisfaction

Retail employees may feel offended and/or distressed when confronted with a dissatisfied customer. Employees who often are confronted with dissatisfied customers may find them detrimental to the (operational) working environment and may regard them as

a psychological strain (Bell, Menguc and Stefani, 2004). Therefore research hypothesis one states:

H1: Perceived customer dissatisfaction will lead to an increase in perceived negative view on employee interaction with complaining customers.

In research hypothesis one, a negative view on interacting with complaining customers is conceptualized as the retailer’s perception of the extent interaction with dissatisfied customers is demanding, difficult and/or psychologically exhausting.

Previous research indicates that (dis)satisfaction has impact on ROI (Anderson, Fornell and Lehmann, 1994), market-share (Homburg and Rudolph, 2001), and reputation (Singh, 1990). Therefore it can be assumed that retailers may regard customer dissatisfaction as having negative conse-

quences for their market share and reputation and research hypothesis two states:

H2: Perceived customer dissatisfaction will lead to an increase in perceived negative consequences of customer dissatisfaction.

Research hypothesis two suggests that customer dissatisfaction may lead to perceived negative consequences (e.g., loss of market share, poor reputation, and the like). These negative consequences may also impact how retailers regard dissatisfied customers. If dissatisfied customers are expected to cause trouble for the company this may result in retailers developing a negative view on interacting with complaining customers. Hence, research hypothesis three is as follows.

H3: Perceived negative consequences of customer dissatisfaction will lead to a more negative view on employee interactions with complaining customers.

If retailers perceive large negative consequences of customer dissatisfaction, this may cause them to believe that, in general, the information provided by complaining customers should be taken seriously and may also lead them to specify complaint-handling procedures (Kendall and Russ 1975). This is mainly because of the salience the retailers feel about the concept. The salient negative view may be felt to be important enough to try and have set procedures to deal such customers. When a retailer feels that their customers are satisfied, there is no perceived need to have any strategy or procedures as they are likely a waste of time because they will not be used.

We propose the concept of a positive strategic view on CM to account for such retailer actions. The strategic level differs from the operational level in the sense that the strategic level deals with the overall structure of the CM system, whereas the operational

level deals with how complaining customers actually are perceived and dealt with on a daily basis. It is hypothesized that:

H4: Perceived negative consequences of customer dissatisfaction will lead to a more positive strategic view on customer complaints.

If retailers relate negative consequences to dissatisfied customers they may regard such customers as costs (i.e., negative implications for market share, etc.) instead of possible gains (dissatisfied customers may provide valuable information to retailers on how to improve their business). Such retailers may be less inclined to compensate dissatisfied customers and may also be less inclined to improve complaining accessibility for such customers. Therefore the following are hypothesized:

H5: Perceived negative consequences of customer dissatisfaction will lead firms to be less inclined to compensate dissatisfied customers.

H6: Perceived negative consequences of customer dissatisfaction will lead firms to be less inclined to provide complaining accessibility to dissatisfied customers.

The Role of a Strategic View on Customer Complaints

In general, one might expect that companies that attach strategic importance to CM are more likely to develop a positive view toward complaining customers, are more likely to make it accessible for customers to complain, and are more likely to provide compensation to complaining customers (Kendall and Russ 1975). This leads us to suggest the following research hypotheses.

H7: Positive strategic views of customer complaint will lead to a decrease in negative views of interacting with complaining customers.

H8: Positive strategic views of customer complaints will lead to an increase in complaining accessibility.

H9: Positive strategic views of customer complaints will lead to an increase in compensation policy.

The Role of Negative View on Interacting with Complaining Customers

The operational part of CM covers the process by which complaints are handled. Previous studies (e.g., Hart et al., 1990; Johnston, 2001, 1995; Barlow and Moller, 1996; Boshoff, 1997) highlight several factors, which are important for the successful implementation of CM including complaining accessibility and compensation policy. However, such results may not be obtained if complaining customers are regarded as difficult and as psychological strains (i.e., a negative view on interacting with complaining customers). Therefore, the following are hypothesized:

H10: A negative view of interacting with complaining customers will lead to a decrease in complaining accessibility.

H11: A negative view of interacting with complaining customers will lead to a decrease in compensation policy.

METHODOLOGY

The Sample

A total of 829 retailers in Sweden and Denmark were contacted and agreed to participate in the study. The retailers represented four types of stores: grocery

shops, furniture stores, electronic stores, and car-dealers. The stores chosen vary across several main aspects often used to characterize the retail-customer interface (Hansen and Solgaard, 2004): (a) durability of products (with grocery shops representing non-durables and the remaining three categories representing durables); (b) price of products (with grocery shops representing relatively low prices, electronic and furniture stores representing medium to high prices and car-dealers representing very high prices); and (c) product complexity (with grocery shops and furniture stores representing low to medium complexity and electronic stores and car-dealers representing medium to high complexity).

Systematic random sampling was utilized in order to draw a near-balanced proportion of stores. The respondents, who were first contacted by phone, were promised complete confidentiality and were instructed on how to access the web to complete the questionnaire. All respondents were screened to make sure that the person answering the questionnaire was responsible for handling complaints within the particular retail outlet.

Measurements

Multiple item five-point Likert scales (1=disagree totally; 5=agree totally) were developed for all the theoretical constructs used in this study. The items used to measure the constructs in the survey are shown in Table 1. It was critical that the theoretical concepts used in this study (i.e., perceived customer dissatisfaction, perceived negative consequences of customer dissatisfaction, positive strategic view on customer complaints, complaining accessibility, negative view on interacting with complaining customers, and compensation policy) and their operationalization was in agreement. It was also of great importance that these operationalizations were perceived by the respondents as deliberate.

The following procedures were used in order to ensure this (Bagozzi, 1994): (1) Based on an extensive literature review (e.g., Johnston, 2001; Lam and Dale, 1999; Gilly and Hansen, 1992; Terentis, Sander, Madden, Stone and Cox, 2002) a preliminary first draft was prepared; (2) the draft was subsequently assessed by five researchers competent in CM. Three non-experts also assessed the draft. This step resulted in a number of adjustments; (3) Following these adjustments, the questions were shown to two more experts and three non-experts. This step resulted in minor corrections only; and (4) Finally, a small pre-test (n=4) was carried out on a few local retailers. This test did not result in further adjustments of the measurements used.

RESULTS

A total of 260 retailers completely filled out the survey: 128 Danish and 132 Swedish retailers for an effective 31 percent response rate. Specifically, 25.4% (n=66) was drawn from grocery shops, 24.6% (n=64) were furniture stores, 26.5% (n=69) were electronic stores, and the remaining 23.5% (n=61) were car-dealers. Of these stores 75 (29%) did under one million Euros in business per year; 40 (15%) did between one and two million Euros per year; and 145 (56%) did over two million Euros of business in the past year. Company size ranged from 97 (37%) companies having five or less employees; 75 (29%) retailers employed six to 15 people and the remaining 88 (34%) retailers employed more than 15 people. Checks against unit non-response bias were carried out by comparing respondent characteristics (number of employees and sales per year) to those of the original set of respondents who agreed to participate in the survey (Bosnjak and Tuten, 2001). These analyses revealed no noticeable differences between the two groups.

Descriptive Statistics

Table 1 displays the means of all measurement items across the four store types and the two countries included in this study. The statistical differences among means are reported and several inter-store differences can be found. Some illustrative examples include that complaining accessibility is higher in Danish furniture stores than in other kinds of Danish stores, whereas complaining accessibility is lower in Swedish furniture stores than in other Swedish stores. Danish furniture stores also tended to have a higher share of customers that have been dissatisfied with the company's information, or have been dissatisfied for other reasons. No such effect is found among Swedish stores. In both Denmark and Sweden, car-dealers tend to have a more positive strategic view of complaint management than do other stores. While these scores do not imply anything about the possible existence of significant relations among constructs, they do, however, suggest that complaint management may differ across store type and country.

For the purpose of addressing research hypotheses 1-11, the conceptual model in Figure One was translated into a LISREL model consisting of a measurement part (confirmatory factor analysis) and a structural equation part (simultaneous linear regression). The relationships between the variables were established by maximum likelihood estimation. The framework was tested using a 2-stage analysis (refer to Anderson and Gerbing, 1988). First, the measurement model is developed by conducting confirmatory factor analysis on the multi-item scales. Next, the measurement model and the structural equation paths are estimated simultaneously to test the proposed model (overall model). By applying this 2-stage method we want to ensure that the measures of the constructs are reliable and valid before attempting to draw conclusions about relations between constructs.

TABLE 1
Means of Measurement Items across Countries and Retailers

Country	Denmark					Sweden				
	Furni- tures A	Grocery stores B	Elec- tronic C	Car- dealers D	Mean com- parison ^a	Furni- tures A	Grocery stores B	Elec- tronic C	Car- dealers D	Mean com- parison ^a
PERCEIVED CUSTOMER DISSATISFACTION										
<i>Share of customers that have been</i>										
X1 Satisfied with the company's products/services*	2.00	1.52	1.48	2.00	Ns.	2.03	2.03	1.75	2.10	Ns.
X2 Dissatisfied with the comp's information and/or advice	1.85	1.16	1.24	1.47	A>B,C	2.00	1.77	1.86	1.81	Ns.
X3 Dissatisfied with the company for other reasons	1.65	1.39	1.21	1.50	A>C	1.60	1.94	1.56	1.55	Ns.
PERC NEG CONSEQUENCES OF CUST DISSATISFACTION										
X4 We lose market share	2.85	3.32	3.39	3.80	A<D	2.60	2.71	3.03	2.87	Ns.
X5 We need to allocate resources to complaint management	2.76	2.06	2.45	2.67	A>B	2.37	2.03	2.36	2.90	B<D
X6 We will get a bad reputation	3.44	2.97	3.42	3.97	B<D	3.10	3.26	3.06	3.45	Ns.
POSITIVE STRATEGIC VIEW OF COMPLAINT MNGMNT										
X7 Info from complaint handling contributes to our strategic development	2.06	1.26	1.94	2.10	B<A,C,D	2.27	2.46	2.22	3.16	A,C<D
X8 Co. complaint mngmt is based on written policies, specifying procedures etc. for company's complaint management	1.50	1.03	1.24	1.83	B,C<D	1.87	1.57	1.86	2.58	A,B,C<D
NEG VIEW OF INTERACTING w COMPLAINING CUSTOMERS										
X9 Complaining customers are difficult customers	1.97	1.87	1.70	1.97	Ns.	2.00	1.60	1.94	1.94	Ns.
X10 Interacting with complaining customers is a financial cost	2.12	1.65	1.97	2.43	B<D	2.37	1.46	2.14	2.42	A,C,D>B
X11 Complaining customers are detrimental to the working environ.	1.82	1.55	1.76	1.60	Ns.	1.87	1.54	1.81	1.87	Ns.
X12 Complaining customers are a psychological strain	2.18	1.97	2.27	1.87	Ns.	1.87	1.57	1.97	1.87	Ns.
COMPLAINING ACCESSIBILITY										
X13 Offers of participation in lotteries	3.47	2.00	2.79	2.43	A>B	2.83	4.06	3.92	4.23	A<D
X14 Hanging of physical complaint mail boxes	3.79	2.10	2.73	2.60	A>B,D	2.83	4.23	3.97	4.61	A<B,C,D
X15 Advertising /information about filing of complaints in brochures etc.	3.35	2.10	2.33	2.73	A>B	2.73	3.71	3.50	4.00	A<D
X16 Free call # for filing complaints	3.85	2.10	2.70	2.67	A>B,C,D	3.17	4.17	3.72	4.39	A<D
COMPENSATION POLICY										
X17 The customer receives a gift or the like for the inconvenience	2.85	4.74	3.03	3.97	B>A,C	3.00	3.29	3.50	2.68	Ns.
X18 We compensate the customer for the inconvenience of having to transport her/himself	2.35	3.77	3.09	3.43	A>B,D	3.67	3.14	2.86	3.26	A>C
X19 We compensate the customer for the psychological strain involved in complaining	2.44	3.77	3.21	4.03	A>B,D	3.27	3.49	3.00	2.42	B>D
X20 We 'overcompensate' the customer to bring attention to the fact that we appreciate that the customer voices dissatisfaction	2.74	3.65	3.12	3.83	Ns.	2.77	3.69	2.78	3.19	B>A,C

* Inverted item; ^aMean comparisons are conducted by Fisher's Least Significant Difference ($\alpha = 0.05$)

Measurement Model

The results of the measurement model, including the standardized factor loadings,

SE, *t*-values, construct reliabilities, and proportion of extracted variance are displayed in Table 2.

TABLE 2
Confirmatory Factor Analysis Results

Construct/indicator	Standardized factor loading ^a	SE	<i>t</i> -value	Construct reliability ^b	Extracted variance ^c
ξ1 Perceived customer dissatisfaction				0.82	0.60
X1	0.71				
X2	0.77	0.09	10.46		
X3	0.84	0.09	10.58		
η1 Perceived negative consequences of customer dissatisfaction				0.80	0.58
X4	0.85				
X5	0.56	0.07	8.57		
X6	0.83	0.09	10.85		
η2 Positive strategic view on customer complaints				0.75	0.60
X7	0.63				
X8	0.90	0.30	4.00		
η3 Negative view on interacting with complaining customers				0.75	0.43
X9	0.54				
X10	0.62	0.19	6.83		
X11	0.74	0.19	7.36		
X12	0.71	0.20	7.26		
η4 Complaining access				0.93	0.78
X13	0.89				
X14	0.90	0.03	33.14		
X15	0.88	0.04	24.38		
X16	0.86	0.03	29.30		
η5 Compensation policy				0.84	0.58
X17	0.72				
X18	0.61	0.07	9.22		
X19	0.91	0.10	12.68		
X20	0.78	0.08	11.69		

a The first item for each construct was set to 1.

b Calculated as $\frac{\sum(\text{Std. Loadings})^2}{\sum(\text{Std. Loadings})^2 + \sum\xi_i}$

c Calculated as $\frac{\sum\text{Std. Loadings}^2}{\sum\text{Std. Loadings}^2 + \sum\xi_i}$

All factor loadings were significant ($p < 0.01$), which demonstrates that the questions for each latent variable reflect a single underlying construct; indicating that convergent validity is obtained. The reliabil-

ities and variance extracted for each variable indicate that the model was reliable and valid. All composite reliabilities exceed 0.70 and all variance-extracted estimates were above 0.40 and most were above 0.50. The reliabilities

and variance were computed using indicator standardized loadings and measurement errors (Hair, Tatham and Black, 1998; Shim, Eastlick, Lotz and Warrington, 2001).

The measurement model fits well to the data. The values of the goodness of fit index (GFI=0.90) and the comparative fit index (CFI=0.95) equal or are above the recommended threshold of 0.90 for a satisfactory goodness of fit (Bentler, 1992). Also, the point estimates of RMSEA shows a

value of 0.06, which is below the recommended level of 0.08. Thus, we can conclude that the unidimensionality criterion is satisfied (Frambach, Prabhu and Verhallen, 2003). Discriminant validity of the applied constructs was tested applying the approach proposed by Fornell and Larcker (1981). In Table 3 the diagonals represent for each construct the variance extracted as reported in Table 2.

TABLE 3
Discriminant Validity of Constructs

Construct	1	2	3	4	5	6
1. Perceived customer dissatisfaction	.60					
2. Perceived negative consequences of customer dissatisfaction	<.01	.58				
3. Positive strategic view on customer complaints	.05	.04	.60			
4. Negative view on interacting with complaining customers	.07	.11	.07	.43		
5. Complaining accessibility	<.01	.02	.03	<.01	.78	
6. Compensation policy	.06	<.01	.07	.02	.02	.58

Notes: Diagonals represent average amount of extracted variance for each construct.
Non-diagonals represent the shared variance between constructs
(calculated as the squares of correlations between constructs).

The other entries represent the squares of correlations among constructs. An examination of the matrix displayed in Table 3 shows that the non-diagonal entries do not exceed the diagonals of the specific constructs and thus no single violation of the conditions for discriminant validity can be detected. These considerations indicate that the constructs do exist and that they are tapped by the measures used.

Overall model fit

The chi square statistic was 327.7 (df.=159, p<0.001). The p-value is below 0.05 indicating that the model fails to fit in an

absolute sense. However, since the χ^2 -test is very powerful when n is large, even a good fitting model (i.e., a model with just small discrepancies between observed and predicted covariances) could be rejected. Thus, several writers (e.g., Hair et al., 1998) recommend that the chi-square should be complemented with other goodness-of-fit measures. The value of the goodness of fit index (GFI) showed 0.89 indicating an acceptable model fit. The value of the comparative fit index (CFI) was 0.94, the Tucker-Lewis (1973) index amounts to 0.93, and the Bentler and Bonett (1980) normed fit index (NFI) showed a value 0.91. All these values exceed, or are virtually at, the suggested 0.9 threshold,

which indicates that the improvement of fit over the null model is substantial (Dröge, 1989). The point estimate of RMSEA was 0.06 (<0.08). Thus, sufficient support is provided for the overall model.

Hypothesis Testing (H1-H11)

The standardized beta-coefficients from the estimated structural model are reported in Table 4.

TABLE 4
Structural Model Estimation Results

Path from/to	Standardized coefficient	t-value	Test result
Perceived customer dissatisfaction → negative view on interacting with complaining customers (H1)	0.22	2.83 ^a	Accepted
Perceived customer dissatisfaction → perceived negative consequences of customer dissatisfaction (H2)	0.08	1.08	Rejected
Perceived negative consequences of customer dissatisfaction → negative view on interacting with complaining customers (H3)	0.29	3.48 ^a	Accepted
Perceived negative consequences of customer dissatisfaction → positive strategic view on customer complaints (H4)	0.24	2.97 ^a	Accepted
Perceived negative consequences of customer dissatisfaction → compensation policy (H5)	-0.05	-0.58	Rejected
Perceived negative consequences of customer dissatisfaction → complaining accessibility (H6)	-0.15	-1.98 ^b	Accepted
Positive strategic view on customer complaints → negative view on interacting with complaining customers (H7)	-0.13	-1.52	Rejected
Positive strategic view on customer complaints → complaining accessibility (H8)	0.19	2.30 ^b	Accepted
Positive strategic view on customer complaints → compensation policy (H9)	0.01	0.15	Rejected
Negative view on interacting with complaining customers → complaining accessibility (H10)	0.05	0.62	Rejected
Negative view on interacting with complaining customers → compensation policy (H11)	-0.15	-2.08 ^b	Accepted

^a: Significant on 1% level

^b: Significant on 5% level

Perceived Dissatisfaction of Customers

It was proposed that the more a retailer perceived their customers to be dissatisfied, the more negative would be the view on interacting with complaining customers (H1). This proposition is confirmed (standardized coefficient, $\beta=0.22$, $p<0.01$). H2 is not supported in the study, as perceived customer dissatisfaction did not significantly affect perceived negative consequences of customer dissatisfaction ($\beta=0.08$, n.s.). That is, there was no direct link between believing customers were dissatisfied and believing that those dissatisfied customers would harm the retailer’s performance.

Perceived Negative Consequences of Dissatisfied Customers

From H3 we expected that those who perceived negative consequences of customer dissatisfaction would have a more negative view of interacting with complaining customers. This expectation is supported ($\beta=0.29$, $p<0.01$). H4 is also supported, as perceived negative consequences of customer dissatisfaction was also positively related to having a strategic view on customer complaints ($\beta=0.24$, $p<0.01$). H5 did not receive support, as perceived negative consequences

of customer dissatisfaction was not related to compensation policy ($\beta= -0.05$, n.s.). H6 is confirmed with perceived negative consequences of customer dissatisfaction negatively related to complaining accessibility ($\beta= -0.15$, $p<0.05$).

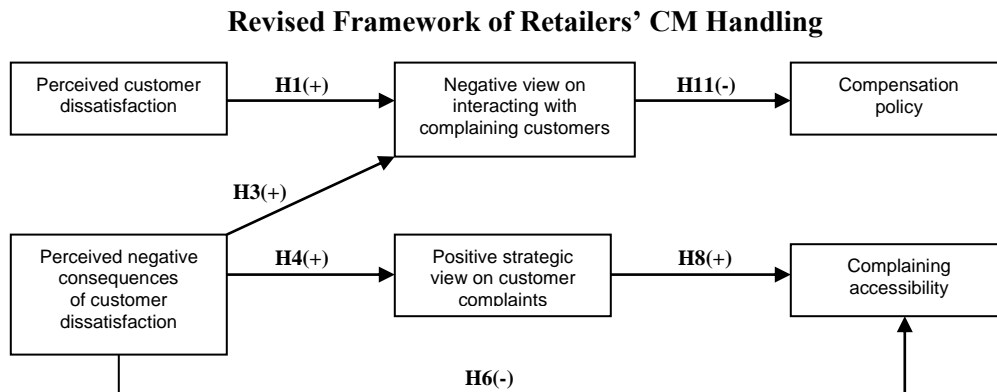
Positive Strategic View of Complaint Management

H7 predicted that a positive strategic view on customer complaints would lead to a decrease in negative view on interacting with complaining customers. This prediction was not confirmed in the study ($\beta= -0.13$, n.s.). H8 was supported, as a positive strategic view on customer complaints did positively affect complaining accessibility ($\beta=0.19$, $p<0.05$). A positive strategic view on customer complaints did not positively affect compensation policy ($\beta=0.01$, n.s.) and thus H9 is not confirmed.

Negative View on Interacting with Complaining Customers

H10 was not supported in the study, as a negative view on interacting with complaining customers did not negatively affect complaining accessibility ($\beta=0.05$, n.s.).

FIGURE 2



From H11 we expected that negative view on interacting with complaining customers would negatively affect compensation policy. This expectation was supported ($\beta = -0.15$, $p < 0.05$). The new model with the found links in the system is shown in **Figure Two**.

Testing for Moderator Effects

Another important question was whether the relations between constructs vary across retailer characteristics. To investigate this moderating effect, country, size of retailer (measured as number of employees), and retail category were analysed. For the moderating variable 'size' the sample was split into two subgroups (<10 employees, $n=131$; ≥ 10 employees, $n=129$). To test if the measurement models were the same across groups, twelve separate two-group model-analyses were conducted. Six models were unconstrained and six models were estimated with the constraint that the loadings for the indicator variables on their respective latent variables are the same across subsamples. The conducted χ^2 -tests did not show significant differences between the unconstrained and the constrained models.

Thus, the individual paths could then be separately examined across subsamples. For the purpose of testing the equality of the structural paths, constrained and unconstrained models were estimated using the multi-group procedure suggested by Jöreskog and Sörbom (1993), and recently used by Verhoef and Langerak (2001). Following this procedure individual paths are separately examined across subsamples. Using a chi-square difference test we tested whether the estimated unstandardized path coefficients are equal. **Table 5** displays the results of the unconstrained models.

The results show that perceived negative consequences of customer dissatisfaction has a significant negative effect on complaining accessibility for Danish retailers (unstandardized coefficient, $b = -0.47$,

$p < 0.05$), but not for Swedish retailers. While for Swedish retailers, the strategic view on customer complaints ($b = -0.16$, $p < 0.05$) had a significant negative effect on the negative view on interacting with complaining customers. No such effect was detected for the Danish retailers. Additionally, the strategic view on customer complaints was found to positively affect complaining accessibility ($b = 0.72$, $p < 0.05$) for Danish retailers, but not for Swedish retailers.

An effect of perceived negative consequences of customer dissatisfaction on the positive strategic view on customer complaints was detected for larger retailers ($b = 0.50$, $p < 0.01$) but not for smaller retailers. The findings also revealed that the paths between perceived negative consequences of customer dissatisfaction and the negative view on interacting with complaining customers are different for grocery ($b = 0.27$, $p < 0.01$) and other stores.

The findings also show that perceived negative consequences of customer dissatisfaction is positively related to a positive strategic view on customer complaints for other stores (furniture and electronic stores, and car-dealers) ($b = 0.26$, $p < 0.01$) but not for grocery stores. For grocery stores, electronic stores, and car dealers (when taken as a whole), perceived negative consequences of customer dissatisfaction had a significant negative effect on complaining accessibility ($b = -0.31$, $p < 0.05$). No such effect was detected for the furniture stores.

A negative view on interacting with complaining customers was found to negatively affect complaining accessibility for other stores (grocery and furniture stores and car-dealers) ($b = -0.52$, $p < 0.05$), but not for electronic stores (coefficient non-significant). Additionally, the findings revealed that the paths between perceived negative consequences of customer dissatisfaction and complaining accessibility are different for car-dealers ($b = -1.20$, $p < 0.01$) and other stores (coefficient non-significant).

TABLE 5
Multi-Group Analyses: Results for Unconstrained Models

Relation	Country		No. of employees		Grocery stores	Other stores	Furniture stores	Other stores	Electronic stores	Other stores	Car-dealers	Other stores
	Denmark	Sweden	<10	≥10								
Perceived customer dissatisfaction → negative view on interacting with complaining customers (H1)	0.12	0.26 ^b	0.14	0.17 ^b	0.27 ^b	0.17 ^b	0.17	0.12	0.26	0.17 a	0.01	0.20 a
Perceived customer dissatisfaction → perceived negative consequences of customer dissatisfaction (H2)	0.21	0.16	0.29	0.03	0.17	0.20	0.07	0.14	0.42	0.09	0.19	0.08
Perceived negative consequences of customer dissatisfaction → negative view on interacting with complaining customers (H3)	0.14 ^b	0.10	0.12 ^a	0.18 ^b	0.27 a	0.10	0.15 b	0.14 a	0.06	0.18 a	0.10	0.15 a
Perceived negative consequences of customer dissatisfaction → strategic view on customer complaints (H4)	0.26 a	0.13	0.12	0.50^a	0.01	0.26^a	0.25	0.19 b	0.13	0.22 b	0.35	0.19 b
Perceived neg consequences of customer dissatisfaction → compensation policy (H5)	0.12	0.25 b	0.15	0.02	-0.06	-0.02	-0.01	-0.10	-0.21	-0.15	-0.04	-0.14
Perceived neg consequences of customer dissatisfaction → complaining accessibility (H6)	-0.47^b	-0.11	-0.31 ^b	-0.31	-0.40	-0.22	-0.08	-0.31 b	-0.03	-0.49 a	-1.20 a	-0.09
Positive strategic view on customer complaints → negative view on interacting with complaining customers (H7)	0.05	0.16^b	0.04	0.04	-0.06	-0.08	0.14	0.06	-0.09	-0.08	-0.08	0.03
Positive strategic view on customer complaints → complaining accessibility (H8)	0.72^b	0.03	0.45	0.44 ^b	0.35	0.18	0.46	0.54 a	0.25	0.39	0.50	0.31
Positive strategic view on customer complaints → compensation policy (H9)	0.22	0.25	0.60	0.22	0.01	0.05	0.48	0.05	0.19	0.22	0.56 b	-0.16
Negative view on interacting w complaining customers → complaining accessibility (H10)	0.47	0.62	0.48	0.60	0.51	0.06	0.37	0.41	0.21	0.20	0.39	0.18
Neg view on interacting with complaining customers → compensation policy (H11)	-0.39	-0.57 ^b	-0.44	-0.40	-0.47	-0.46	-1.03	-0.24	0.05	-0.52 b	-0.06	-0.44

DISCUSSION AND CONCLUSIONS

This article investigated the handling of CM among Nordic (Danish and Swedish) retailers by proposing and testing a conceptual framework and associated research hypotheses. Although the majority (six out of eleven) of the hypothesized relations were supported, the results also indicate the complexity associated with seeking to understand the CM among today's retailers. CM was approached from both a strategic and operational view with the operational view further encompassing the sub-components complaining accessibility, retailer-customer interaction, and compensation policy.

In conclusion, we wish to reiterate the importance of complaint management to the profitability of the firm (Reichheld 1996), as effective complaint management allows retailers to satisfy and retain customers (Hart, Heskett and Sasser, 1990). The results reveal that retailers who attach large negative consequences to consumer dissatisfaction will be more likely than other retailers to develop a positive strategic view on customer complaints. This also suggests that retailers to some extent may be forced (by the anticipated negative consequences) to regard complaining customers as having strategic importance and thereby also stress that CM may be developed on a reactive basis. At the same time, however, an increase in perceived negative consequences of customer dissatisfaction also leads to a more negative view on interacting with complaining customers.

It is therefore important that retail managers holding a positive CM view share this view with retail employees and urge them to realize that complaining customers should be regarded as an asset to the company. Making this statement even more significant is that perceived customer dissatisfaction may result in a negative view on interacting with customers. As expected, a positive strategic view on customer complaints leads to improved complaining accessibility. This improvement is, however, vulnerable if

customer dissatisfaction at the same time is perceived as leading to negative consequences, as this can lead retailers to reduce their complaining accessibility.

In investigating CM among retailers, our results suggest that a number of moderating factors, including size of retailer (measured by number of employees), country (in our analysis Denmark vs. Sweden), and type of store (in our analysis grocery stores, furniture stores, electronic stores vs. car-dealers), should be taken into account. For example, if perceived negative consequences are attached to customer dissatisfaction, Danish retailers are likely to react by making it less accessible for their customers to complain. No such effect was detected for Swedish retailers. Also, large – but not small - retailers are likely to react to perceived negative consequences of customer dissatisfaction by developing a more positive strategic view on customer complaints. As another example, grocery stores, furniture store and car-dealers showed a propensity to react to a negative view on interacting with complaining customers by reducing complaining accessibility, whereas no significant effect was found for electronic stores.

LIMITATIONS AND FUTURE RESEARCH

This research concentrated on analyzing four retail categories situated in two countries. This could mean that the results may suffer from a lack of generalizability when other retail categories/countries are considered. A larger cross-section of retail categories and/or countries ought to be studied to improve the generalizability of the results. As with much research, this study provides a snapshot of CM among retailers rather than a longitudinal study. Thus, when considering the findings obtained in this study one should be aware that the CM concept is still evolving and that CM research – as is the case with much other consumer research - needs to be continuously repeated and

modified. Some of the limitations to this research became apparent only after the data was collected and analyzed. With regard to the operationalization of complaining accessibility in our model, we did not ask about the timeliness of or speed to which complaints are handled. Timeliness has been found to be a significant factor in customer satisfaction with a firm's response to service failures in previous research (e.g., TARP Worldwide Inc., Service Industry data, 2007). This perhaps fits well into the accessibility component or it could be a separate construct.

The measure of perceived dissatisfaction does not have an intensity measure to it. It is up to the retailer to interpret what 'dissatisfied' means and how to measure it. Depending upon how retailers measure satisfaction/dissatisfaction, their percentages could vary quite a bit, so some bias may be introduced to the current measure. Also our measure of positive strategic view of complaint management is likely weak due to using only two indicators. Another measure such as the extent to which management uses complaints from customers as input to their executive decisions might be added to future studies using this construct (Kendall and Russ 1975).

As discussed, our results point to a number of aspects, which may improve our understanding of retailers' CM. However, when it all comes to an end, retailers must figure out how to achieve profitability. Which operating model is most conducive to short-term and long-term profitability? How should retail managers approach CM given current market conditions? Future research may wish to investigate how to balance the various aspects of the CM approach with a cost-effective operating system.

REFERENCES

Adamson, Colin (1993), "Evolving complaint procedures," *Managing Service Quality*, January, Vol. 3, Issue.2, pp. 439-444.

- Anderson, Eugene W., Claes Fornell, and Donald R. Lehmann (1994), "Customer Satisfaction, Marketshare, and Profitability: Findings from Sweden," *Journal of Marketing*, Vol. 58, No. 3, pp. 53-66.
- Anderson, James C. and David W. Gerbing (1988), "Structural equation modelling in practice: a review and recommended two-step approach," *Psychological Bulletin*, Vol. 103, No. 3, pp. 411-423.
- Bagozzi, Richard P. (1994), *Principles of Marketing Research*, Blackwell.
- Barlow, Janelle and Claus Moller (1996), *A Complaint is a Gift*, Berrett-Koehler, San Francisco, CA.
- Bell, Simon J., Bulent Menguc, and Sara L. Stefani (2004), "When Customers Disappoint: A Model of Relational Internal marketing and Customer Complaints," *Journal of the Academy of Marketing Science*, Vol. 32, No. 2, pp. 112-126.
- Bentler, Peter M. (1992), "On the fit of models to covariances and methodology to the Bulletin," *Psychological Bulletin*, 112, pp. 400-404.
- Bentler, P.M. and Bonnett, D.G. (1980), "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures," *Psychological Bulletin*, 88, pp. 588-606.
- Berry, Leonard L. and A. Parasuraman (1991), *Marketing Services: Competing Through Quality*, New York, NY The Free Press.
- Bolfing, Claire P. (1989), "How Do Customers Express Dissatisfaction and What Can Service Marketers Do About It?," *Journal of Services Marketing*, Vol. 3, No. 2, (Spring), pp. 5-23.
- Boshoff, Christian R. (1997), "An experimental study of service recovery options," *International Journal of Service Industry Management*, Vol. 8, No.2, pp. 110-30.
- Bosnjak, Michael and Tracy L. Tuten (2001), "Classifying response behaviors in Web-based Surveys," *Journal of Computer Mediated Communication*, 6(3), Available at: <http://jcmc.indiana.edu/vol6/issue3/boznejak.htm> (accessed February 2007).
- Brennan, Carol and Alex Douglas (2002), "Complaints procedures in local government -informing your customers," *The International Journal of Public Sector Management*, Vol. 15, No.3, pp. 219-236.

- Cook, Sarah and Steve Macaulay (1997), "Practical steps to empowered complaint management," *Managing Service Quality*, Vol. 7 No. 1, pp. 39-42.
- Davidow, Moshe and Peter A. Dacin (1997), "Understanding and Influencing Consumer Complaint Behavior: Improving Organizational Complaint Management," *Advances in Consumer Research*, Vol. 24, pp. 450-456.
- Davidow, Moshe (2003), "Have you heard the word? The effect of word of mouth on perceived justice, satisfaction and repurchase intentions following complaint handling," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 67-80.
- de Ruyter Ko and Antoni Brack (1993), "European legal developments in product safety and liability: The role of customer complaint management as a defensive marketing tool," *International Journal of Research in Marketing*, Vol. 10, No. 2, pp. 153-164.
- Dröge, Cornelia (1989), "Shaping the Route to Attitude Change: Central Versus Peripheral Processing Through Comparative Versus Noncomparative Advertising," *Journal of Marketing Research* 26, (May), pp. 193-204.
- Fornell, Claes and David F. Larcker (1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, 18, pp. 39-90.
- Fornell, Claes and Birger Wernerfelt (1987), "Defensive Marketing Strategy by Customer Complaint Management: A Theoretical Analysis," *Journal of Marketing Research*, 24 (November), pp. 337-346.
- Frambach, Ruud T., Jaideep Prabhu and Theo M. Verhallen (2003), "The influence of business strategy on new product activity: The role of market orientation," *International Journal of Research in Marketing*, 20(4), pp. 377-397.
- Gilly, Mary C. and Richard W. Hansen (1992), "Consumer complaint handling as a strategic marketing tool," *Journal of Product and Brand Management*, Vol. 1 No. 3, pp. 5-16.
- Goodmann, John (1999), "Basic Facts on Customer Complaint Behavior and the Impact of Service on the Bottom Line," *Competitive Advantage*, June, 1-5.
- Greenberg, Jerald (1990), "Organizational Justice: Yesterday, Today, and Tomorrow," *Journal of Management*, 16(2), pp. 399-432.
- Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham and William C. Black, (1998), *Multivariate Data Analysis*, Fifth ed., New Jersey: Prentice-Hall
- Hansen, Torben and Hans S. Solgaard (2004), *New Perspectives on Retailing and Store Patronage Behavior: A Study Of The Interface Between Retailers And Consumers*, Kluwer Academic Publishers, Boston, MA.
- Hart, Christopher W.L., James L. Heskett and W. Earl Sasser, Jr. (1990), "The profitable art of service recovery," *Harvard Business Review*, July-August, pp. 148-156.
- Homburg, Christian and Bettina Rudolph (2001), "Customer Satisfaction in Industrial Markets: Dimensional and Multiple Role Issues," *Journal of Business Research*, 52, pp. 15-33.
- Homburg, Christian and Andreas Fürst (2005), "How Organizational Complaint Handling Drives Customer Loyalty: An Analysis of the Mechanistic and the Organic Approach," *Journal of Marketing*, Vol. 69, Issue 3, (July), pp. 95-114.
- Huppertz, John W., Eric Mower and Associates (2003). "An Effort Model of First-Stage Complaining Behavior," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, ABO/INFORM Global, pp. 132-144.
- Hui Michael K. and Kevin Y. Au (2001), "Justice perceptions of complaint-handling: A cross-cultural comparison between PRC and Canadian customers," *Journal of Business Research*, Vol. 52, No. 2, pp. 161-173.
- Johnston, Robert (1995), "Service failure and recovery: impact, attributes and process," In *Advances in Services Marketing and Management: Research and Practice*, 4, pp. 211 - 228.
- Johnston, Robert (2001), "Linking complaint management to profit," *International Journal of Service Industry Management*, Vol.12, No. 1, pp. 60-66.

- Johnston, Robert and Sandy Mehra (2002), "Best-practice complaint management", *Academy of Management Executive*, Vol. 16, No. 4, pp.145-154.
- Kelley, Scott W. and Mark A. Davis (1994), "Antecedents to Customer Expectations for Service Recovery," *Journal of the Academy of Marketing Science*, 22 (1), pp. 52-61.
- Kendall, C.L. and Frederick A. Russ (1975), "Warranty and Complaint Policies: An Opportunity for Marketing management", *Journal of Marketing*, Vol.39, (April), pp. 36-43.
- Lam, N.W.W. and Dale, B.G. (1999), "Customer complaints handling system: key issues and concerns," *Total Quality Management*, Vol.10, No. 6, pp. 843-851.
- Lind, Allan E. and Tom R. Tyler (1988), *The Social Psychology of Procedural Justice*, New York: Plenum Press.
- Matteson, Michael T. and John M. Ivancevich (1982), *Managing Job Stress and Health*, The Free Press, New York, NY.
- Maxham, James G. III (2001), "Service recovery's influence on consumer satisfaction after service failure and recovery," *Journal of Service Research*, Vol. 3, No. 2, pp. 121-137.
- Powers, Thomas L. and Dawn Bendall-Lyon (2002), "Using complaint behavior to improve quality through the structure and process of service delivery," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 15, pp. 13-21.
- Reichheld, F.F. (1996), *The Loyalty Effect: the Hidden Face Behind Growth, Profits, and Lasting Value*, Harvard Business School Press, Cambridge, MA.
- Richins, Marsha L. (1981), "An Investigation of Consumers Attitudes Toward Complaining," *Advances in Consumer Research*, K. Monroe (Ed.), 8, 502-506.
- Saxby, Carl L., Peter K. Tat and Jane T. Johansen (2000), "Measuring Consumer Perceptions of Procedural Justice in a Complaint Context," *Journal of Consumer Affairs*, 34(2), pp. 204-216.
- Sheppard, Blair H., Roy J. Lewicki and John W. Minton (1992), *Organizational Justice: The search for fairness in the workplace*, New York: Lexington Books.
- Shim, Soyeon, Mary A. Eastlick, Sherry L. Lotz and Patricia Warrington (2001), "An online pre-purchase intentions model: The role of intention to search," *Journal of Retailing*, 77, pp. 397-416.
- Singh, Jagdip (1990), "Voice, Exit, and Negative Word-of-Mouth Behaviors: An Investigation Across Three Service Categories," *Journal of the Academy of Marketing Science*, 18(1), pp. 1-15.
- Singh, Jagdip. and Robert E. Widing (1990), "What Occurs Once Consumers Complain? A Theoretical Model for Understanding Satisfaction/Dissatisfaction Outcomes of Complaint Responses," *European Journal of Marketing*, Vol.25, No.5, pp. 30-46.
- Stauss, Bernd and Andreas Schoeler (2004), "Complaint management profitability: what do complaint managers know?," *Managing Service Quality*, Vol. 14, No.(2/3), pp. 147-156.
- Stauss, Bernd and Wolfgang Seidel (2004), *Complaint Management – The Heart of CRM*, Thomson Publishing, Mason, OH.
- Stephens, Nancy and Kevin P. Gwinner (1998), "Why Don't Some people Complain? A Cognitive-Emotive Process Model of Consumer Complaint Behavior," *Journal of the Academy of Marketing Science*, Vol. 26, No. 3, pp.172-189.
- Terentis, Joy, Fabian Sander, Maureen Madden, Merlin Stone and David Cox (2002), "Customer service, complaints management and regulatory compliance," *Journal of Financial Regulation and Compliance*, Vol. 10, No. 1, pp. 37-54.
- Tucker, Ledyard R. And Charles Lewis (1973), "A Reliability Coefficient for Maximum Likelihood factor Analysis," *Psychometrika*, Vol. 38. No. 1 (March), pp. 1-10.
- Verhoef, Peter C. and Fred Langerak (2001), "Possible determinants of consumers' adoption of electronic grocery shopping in the Netherlands," *Journal of Retailing and Consumer Services*, 8, No. 5, pp. 275-285.
- Walker, Denis (1990), *Customer First: A Strategy for Quality Service*, Aldershot, England: Gower.
- Welsh, J. (1995), "Complaining to schools," *Consumer Policy Review*, 5, pp. 14-20.

Whiteley, Richard C. (1991), *The Customer Driven Company: Moving From Talk to Action*, Reading, MA: Addison-Wesley.

This research was supported by a research grant from the Nordic Council of Ministers. The research grant was obtained in collaboration with the Danish National Consumer Agency.

Send Correspondence Regarding This Article to:

Torben Hansen, Ph.D
Professor of Marketing
Department of Marketing
Copenhagen Business School
Solbjerg Plads 3, 2000 Frederiksberg
DENMARK
Tel +4538152100 – Fax +4538152101 –
E-mail: th.marktg@cbs.dk

LOYALTY AND ITS INFLUENCE ON COMPLAINING BEHAVIOR AND SERVICE RECOVERY SATISFACTION

Christy Ashley, East Carolina University
Sajeev Varki, University of South Florida

ABSTRACT

Considerable research in the customer complaining behavior (CCB) literature has been focused on the effect of a successful recovery on customer loyalty and retention. However, comparatively less is known about how loyalty, as an antecedent, moderates customer responses to both a service failure and subsequent service recovery. Based on two studies conducted with non-student samples, we find that loyal customers are more likely to air their complaint directly to the firm and less likely to engage in negative word-of-mouth in response to a service failure. Also, loyal customers express greater satisfaction with service recovery efforts compared to less loyal customers when redress is offered. These results indicate that customers who complain may be among a firm's most loyal customers and such customers are potentially more responsive to service recovery efforts. However, not attending to their complaints could result in the loss of one's loyal (and best) customers. Hence, managers need to seriously consider complementing their existing loyalty programs with formal complaint management systems.

INTRODUCTION AND LITERATURE REVIEW

Complaint management systems have been advanced as the best line of defense in retaining existing customers (Fornell and Wernerfelt 1987). The justification for investments in complaint management programs rests on findings that proper complaint management can result in improved

customer retention and loyalty, with consequent beneficial effect on the bottom line. While Reichheld and Sasser (1990) provide an economic rationale in terms of the disproportionate impact to the bottom line of increased retention rates, experimental research in the consumer complaint behavior (CCB) literature has suggested that service recoveries can sometimes result in the complainants becoming more loyal adherents of the firm than previously, as a consequence of their satisfaction with the complaint handling process (Smith and Bolton 1998). In a cross-sectional study of actual complaints across 110 firms in the service and manufacturing sectors, Homburg and Fürst (2007a) find strong evidence of complaint satisfaction driving customer loyalty. Other papers that explore the link between satisfaction with service recovery and increased patronage include Andreassen (1999), DeWitt, Nguyen, and Marshall (2008), Mattila (2001), Smith, Bolton, and Wagner (1998) and Maxham and Netemeyer (2002).

In contrast to the above, relatively fewer papers have examined how loyalty influences consumer responses to a firm's service recovery efforts, though researchers such as Tax, Brown, and Chandrasekharan (1998) and Hess, Ganesan, and Klein (2003) have examined how customers with prior experience view service recovery efforts. Tax, Brown, and Chandrasekharan (1998), for example, find that prior experience mitigates the effect of an improperly managed complaint on commitment but not on trust. Similarly, Hess, Ganesan and Klein (2003) find that the number of past encounters and quality of past service performances moderate customer satisfaction with service recovery.

While prior experience can lead to customer loyalty, it is not necessary that a person with prior experience with the firm is loyal to the firm. Hence, a direct measure of loyalty is preferable, and in this manner, our paper extends the work done by Tax et al. (1998) and Hess et al. (2003). It is important to distinguish our use of the word loyalty from the manner in which the CCB literature has discussed loyalty within the Hirschman's Exit-Voice-Loyalty framework, namely, a state of doing nothing in the hope that things will improve on their own accord (Maute and Forrester 1993; Singh 1988, 1990). In our paper, when we refer to loyalty, we refer to attitudinal loyalty, which DeWitt et al. (2008, p. 271) paraphrase as, "a higher order commitment of a customer to the organization that cannot be inferred by simply measuring repeat purchase intention." Second, while Tax et al. (1998) and Hess et al. (2003) focus on how prior experience influences satisfaction with service *recovery* efforts, we expand the scope of our research to also examine how loyalty influences both the complaint response to the service failure and the service recovery effort.

We focus on the effect of loyalty on the propensity to voice complaints directly to the firm and engage in negative word of mouth, two of the five possible complaint responses of Hirschman's framework, the others being doing nothing, switching, and complaining to a third party. We focus on these two options for managerial reasons, besides the fact that these are the two most frequent complaint responses. By encouraging loyal customers to complain directly to the firm, the firm has the possibility of preventing the loss of the loyal customer through proper service recovery. At the same time, an understanding of the potential for negative word of mouth by loyal customers should help in awakening senior management to the importance of proper complaint management systems. As Homburg and Fürst (2007b) report, complaints still tend to be viewed as a "disappointing" indicator of performance for

frontline employees (Bell, Menguc and Stefani 2004), as opposed to valuable feedback that should be encouraged (Voorhees and Brady 2005).

However, if senior managers were to appreciate the fact that a firm's loyal (and best) customers are the ones who take the time and effort to complain and could engage in negative word of mouth, it could possibly engage their attention. Currently there is strong management support for loyalty programs on the one hand (Liu 2007), but lukewarm support for complaint management systems (Homburg and Fürst 2007b). If managers were to realize that more loyal customers could be among the complainants, it would help sharpen their focus on complaint management as an integral part of any effective loyalty program.

Accordingly, the rest of our paper is structured as follows: First, we develop our hypotheses about the effect of loyalty on consumer complaint behaviors. Next, we test these hypotheses in Study 1 in the context of movie rentals. We then retest these hypotheses in Study 2 using a different sample of respondents and a different service context, namely, auto repair. Finally, the theoretical and managerial implications of our findings are discussed.

DEVELOPMENT OF HYPOTHESES

Attitudinal Loyalty and Voicing Complaints to the Firm

In the marketing literature, loyalty is posited as either an attitudinal state of positive commitment towards the brand or service (Oliver 1999) or a behavioral state of repeat purchase (Kahn, Kalwani, and Morrison 1986; Jacoby and Chestnut 1978). The former is often referred to as attitudinal loyalty and the latter as behavioral loyalty (McMullan 2005). In this paper, we focus on attitudinal loyalty since we want to exclude instances of spurious loyalty where a customer is behaviorally loyal because of extrinsic con-

straints such as contracts, lack of alternatives, etc., rather than because of intrinsic motivations (see Dick and Basu 1994 for further details).

We anticipate that attitudinal loyalty would influence a consumer's response to a service failure and consequent service recovery. Ping (1997) observes that voice is often used as a substitute for switching when the cost of exiting is high, which Hess, Ganesan, and Klein (2003) refer to as the "risk of switching." Accordingly, one could make the argument that attitudinal loyalty acts as an exit barrier since it involves giving up on a service that one has a positive attitude towards.

However, as Voorhees and Brady (2005) note, voicing a complaint to the company is effortful. In this context, social exchange theory provides a rationale for why loyal customers could undertake the effort to complain to the firm. Social exchange theory posits that individuals undertake the effort involved in a social exchange provided the rewards involved are commensurate with the effort (Homans 1961; Thibaut and Kelly 1959). Accordingly, it would appear that attitudinally loyal customers would be inclined to complain to the firm only if the rewards were to justify the effort. In the context of an attitudinally loyal customer, the rewards are potentially both economic and psychological. The economic benefit is the prospect of continuing with a service that one has liked in the past without necessarily investing time and effort in the search for a new service. The psychological benefit would be the feeling of having fulfilled one's obligation to the firm one is loyal to. Hirschman (1970) also notes that a customer will often seek ways to make themselves heard, in the interest of making a difference, if they feel an "irrational" attachment to an organization (p. 80).

Thus, more attitudinally loyal customers could be expected to complain directly to the firm to resolve the issue that might hinder them from continuing to

patronize the firm. By contrast, less attitudinally loyal customers may place a lower value on helping the firm improve because the firm's improvement is less likely to benefit them. This is possibly because they see less overall value in outcomes gained by complaining directly to the firm (Best and Andreasen 1977; Goodwin 1986). Accordingly, we offer the following research hypothesis:

H1: Attitudinal loyalty increases the relative likelihood of complaining to the company as a response to a service failure.

Attitudinal Loyalty and Negative Word of Mouth

Negative word-of-mouth can be conceptualized as an alternate complaint response; a private complaint response to friends and family relative to a public complaint to the firm. Negative word of mouth presents a formidable challenge for companies because people trust information from friends and family more than information from advertising messages, particularly when they do not have prior experience with the service provider (Brown and Reingen 1987; Tax, Chandrashekar and Christiansen 1993). Negative word-of-mouth can be particularly detrimental in service industries, where the intangibility of the service makes it difficult to evaluate the service in advance and people rely more on the opinions of others (Clark, Kaminski, and Rink 1992).

We propose that loyalty will decrease negative word-of-mouth as a response to a service failure (cf. Maxham and Netemeyer 2002). This is because attitudinal loyalty entails a commitment to the service provider. The research literature on commitment shows that people who are committed to an object bear higher psychic costs in the disavowal of such an object (Nyer and Gopinath 2005). By contrast, less loyal customers with no stake in

the company would not bear these costs to the same extent and hence would be more willing to engage in negative word of mouth. Accordingly, the following research hypothesis is tendered:

- H2:** Attitudinal loyalty decreases the relative likelihood of negative word-of-mouth in response to a service failure.

Attitudinal Loyalty and Satisfaction with Service Recovery

Just as loyalty influences responses to service failures, loyalty can be expected to influence how consumers respond to service recovery efforts following a service failure. We posit that a loyal customer would be more responsive to service recovery efforts following a service failure. Ringberg, Odekerken-Schröder, and Christensen (2007) have shown that many of the reactions of consumers to service failures can be better understood by accounting for the ‘cultural frame’ of the consumer to problem solving. Ringberg et al. (2007) refer to the cultural frame as the mental disposition or orientation of consumer to problems and identify two dominant cultural frames among consumers, e.g., relational cultural frame and oppositional cultural frame. In the relational cultural frame, consumers are more participative in problem resolution and open to accommodation. By contrast, individuals in the oppositional cultural frame tend to view the firm with suspicion and see the service failure as an ‘adversarial move’ and are accordingly less forgiving (Ringberg et al. 2007, p. 205).

Ringberg et al. (2007) note also that consumers with a vested interest in seeing their relationship with the service provider continue tend to adopt a relational cultural frame of mind. Since attitudinally loyal consumers are predisposed favorably to the service provider, we expect that attitudinally loyal to adopt a more accommodating stance more often than not when responding to the

service recovery efforts of the service provider.

Hess, Ganesan and Klein (2003) provide some additional support for the proposition that more loyal customers will respond favorably to a service recovery. In Hess et al. (2003), the authors found that contrary to their predictions, customers interested in relationship continuity (namely, a desire to see a relationship continue) tend to lower their service recovery expectations and are thus more satisfied with an adequate service recovery than are consumers with less interest in relationship continuity. Assuming that attitudinally loyal consumers would be more inclined to see their relationship with the firm continue, Hess et al.’s (2003) results would also suggest that more loyal consumers would be extremely responsive to an adequate service recovery. Accordingly, we hypothesize that:

- H3:** Attitudinal loyalty moderates the relationship between redress and customer satisfaction following service recovery, with loyal customers being more satisfied than less loyal customers when the firm offers redress.

STUDY 1: DOES ATTITUDINAL LOYALTY AFFECT RESPONSES TO A SERVICE FAILURE?

To examine hypotheses 1-2, namely, whether loyalty (a) increases the relative likelihood of voice and (b) decreases the relative likelihood of negative word-of-mouth, an approach similar to that of Smith, Bolton, and Wagner (1999) was employed, given the difficulty of manipulating loyalty levels in a lab setting. Respondents were surveyed and their loyalty levels towards a particular service provider measured, after which they were presented with a failed service scenario to which they were asked to indicate their responses.

The context of movie rentals was chosen because it was expected to be a common service experience. Contact with the survey respondents was initiated by students of a marketing class at a large northeastern U.S. school. Each student had the responsibility of administering the survey to a minimum of four adult friends and family members, and each of the respondents was asked to respond to a hypothetical scenario involving a failed movie experience. Students participated in exchange for extra course credit, and received detailed instructions on how to administer the survey. Students were also instructed to record contact information for the respondents. 10% of the respondents were contacted by one of the authors to verify their responses. All of the respondents who were contacted were found to have participated in the study and validated their responses to selected questions.

Contacted respondents were asked about their usage and loyalty to the video rental store they selected. The questions about usage included how often they rented movies per month, how many movies they rented per month, whether they had other options, and how long they had been a customer of the movie rental service they selected. We measured loyalty using the items shown in Appendix A, which were adapted from Hozier and Stem (1985) so the wording and items fit the current service provider context.

Next, the scenario with the service failure was presented and the respondents' reactions were sought. The scenario used is reproduced in Appendix B and describes a situation where they rented a movie and the movie did not work. Scenarios have the advantage that they allow one to standardize the service failure and recovery situations across all respondents (DeWitt and Brady 2003) and avoid retrospective accounts that could confound the effects of service recovery efforts along with the effects of the service failure (Hess, Ganesan, and Klein 2003).

The respondents recorded on a 7-point item anchored by 'Extremely Satisfied (7)'

and 'Extremely Dissatisfied (1)' what their level of dissatisfaction would be if the service failure occurred. They then recorded how they would respond to the service failure in the scenario by allocating 100 points across five options: voice their complaint to the firm, tell friends and family members about the negative experience (NWOM), switch service providers, do nothing, or voice their complaint to a third party. The instruction read as follows: "Please allocate 100 points across the following five responses according to how likely you are to engage in each response to this scenario. The more likely you are to engage in the response, the more points you should allocate to the response. Please ensure that the points add up to 100."

The advantage of capturing multiple complaint responses using a constant sum allocation is that it indicates the relative likelihood with which the customer would engage in each action. However, as our hypotheses deal only with the propensity to complain directly to the firm and engage in negative word of mouth, our analysis in this article will be restricted to these two options.

Next, the respondents also completed measures regarding their attitude toward complaining and perceived likelihood of success. These covariates have been shown to influence complaint responses in the past and the measures for these covariates were adapted from Singh and Wilkes (1996), Voorhees and Brady (2005) and Singh (1990) by changing the wording to make it appropriate for the study context. Finally, the respondents were asked to identify their age, gender, ethnicity, and household income bracket.

Results

A total of 303 people responded to the questionnaire. Of the respondents, 50.5% were male, 71.6% were over 25 years old, 86.8% were white (non-Hispanic), and 36% had household incomes of \$75,000 or higher. The loyalty scale was found to be uni-

dimensional and reliable ($\alpha = .80$), so the loyalty items were averaged to give each respondent a loyalty score. The 'attitude toward complaining' ($\alpha = .70$) and 'perceived likelihood of success' ($\alpha = .69$) measures were also found to be uni-dimensional and reliable using confirmatory factor analysis. Hence, the items were averaged to give each respondent an attitude toward complaining score and a perceived likelihood of success score.

Attitudinal Loyalty's Effect on Complaining Directly to the Firm and Negative Word of Mouth

Hypothesis 1 proposes that loyalty increases the relative likelihood that

customers will complain directly to the firm in response to a service failure. Hypothesis 2 proposes that loyalty decreases the relative likelihood that customers will engage in negative word of mouth in response to a service failure. To address these hypotheses, we regressed the points allocated to complain to the firm and engage in negative word of mouth on the continuous attitudinal loyalty individual scores and the covariates of level of dissatisfaction, attitude towards complaining, and perceived likelihood of success in separate regressions. Complete details of the effects of the covariates and the main effect of attitudinal loyalty on the dependent variables are shown in Table 1.

TABLE 1

Study 1 Regression Results

<i>Dependent Variables</i>	Complain to Firm		Negative Word of Mouth	
<i>Independent Variable</i>	β	t	β	t
Attitudinal Loyalty	.17	2.79**	-.20	-3.24***
<i>Covariates</i>				
Dissatisfaction	-.10	-1.75	.003	.05
Attitude toward Complaining	.15	2.62**	-.07	-1.23
Perceived Likelihood of Success	.23	3.91***	-.13	-2.10*
R^2	.13		.08	

*** $p < .001$

** $p < .01$

* $p < .05$

As expected, attitudinal loyalty significantly increases the relative likelihood of complaining to the firm ($\beta = .17$, $t=2.79$, $p < .01$) and significantly decreases the relative likelihood of engaging in negative word of mouth ($\beta = -.20$, $t=-3.24$, $p < .001$). Consistent with hypothesis 1, the more attitudinally loyal group was significantly more likely to complain directly to the firm following the

service failure than the less attitudinally loyal group. Consistent with hypothesis 2, the more attitudinally loyal group was significantly less likely to engage in negative word of mouth following the service failure than the less attitudinally loyal group. Among the covariates, perceived likelihood of success had a positive, significant effect on the relative likelihood of complaining to the firm

($p < .001$) and engaging in negative word of mouth ($p < .05$), while attitude toward complaining ($p < .01$) had a significant, positive effect on complaining to the firm.

STUDY 2: DOES ATTITUDINAL LOYALTY AFFECT RESPONSES TO SERVICE RECOVERY?

Study 2 replicates Study 1 in a different context, namely, auto repair and using a different sample (non-student sample recruited by mall intercept). Study 2 also extends Study 1 by including an assessment of how customers of varying loyalty assess service recovery efforts in the event of a service failure. Just as complaint responses to the service failure were expected to vary by loyalty, their responses to service recovery efforts are expected to vary by loyalty. Thus, in addition to testing Hypotheses 1-2 with a different service industry and a different sample, we use Study 2 to address hypothesis 3, which posits that loyalty moderates the satisfaction with service recovery efforts.

The participants for Study 2 were recruited at a Department of Motor Vehicle (DMV) location inside a mall as they waited to renew their driver's licenses and vehicle registration. The reason the DMV was chosen as a place for contacting respondents is because individuals from all walks of life come to renew/change/transfer their vehicle registration, and thus, one has access to a wide cross-section of the population. We anticipated that people who were waiting to renew their licenses and vehicle registrations were likely to have experience with auto repair providers. Permission to conduct our survey was granted by the mall.

Study 2 respondents were asked the same questions as in Study 1 about their loyalty to the auto repair provider they used. Next, they were presented with a scenario in which they were asked to imagine a service failure by the auto repair provider they used. The service failure described in the scenario involved the respondent's car not being ready

when it was supposed to be (see Appendix C). The respondents were asked to record their level of dissatisfaction on a 7-point scale anchored by Extremely Satisfied (1) and Extremely Dissatisfied (7) with the service failure. As in Study 1, respondents recorded how they would respond to the service failure in the scenario by allocating 100 points across five options: voice their complaint to the firm, tell friends and family members about the negative experience (NWOM), voice their complaint to a third party, switch auto repair providers, or do nothing. Respondents also completed the measures used in Study 1 regarding their attitude toward complaining and perceived likelihood of success.

After completing the measures, respondents were presented a follow up service recovery scenario to the service failure. Half the respondents were presented with a situation where they voiced their complaint to the firm and the firm had redressed their complaint and the other half were presented with a situation where they voiced their complaint to the firm and the firm had not redressed their complaint (see Appendix C). The scenarios were alternated (odd – no redress; even – redress) by one author who collected the data at the mall. The respondents were asked to record their level of satisfaction with the service recovery on a 7-point scale anchored by Extremely Dissatisfied (1) and Extremely Satisfied (7) with the service recovery response. The scenario manipulated redress (redress, no redress) by describing the presence of a polite, supportive manager who listens and provides financial compensation and a rental car to use until the car is fixed for the redress manipulation. In the no redress manipulation, the manager listens but does not apologize or provide any compensation for the service failure. This redress/no redress manipulation is similar to that used by Mattila (2001). The manipulation check included items about whether the response was fair, whether the company should have done more (reverse coded), whether the company listened and

understood, and whether the company did not care (reverse coded). These items were adapted from Yim, Gu, Chan and Tse (2003). Finally, as in Study 1, the respondents were asked to identify their age, gender, ethnicity, and household income bracket.

Results

223 people responded to the questionnaire. Of the respondents, 40% were male, 72% were over 25 years old, 83.4% were white (non-Hispanic), and 36% had household incomes of \$75,000 or higher. To check whether the manipulation of redress/no redress was successful, a manipulation check was done and the manipulation was found to be successful. Respondents in the redress situation felt that the response was more fair (4.7 vs. 2.5), disagreed more with the statement that the company could have done

more (4.3 vs. 1.9), felt the company had listened and understood their situation (4.5 vs. 2.8), and disagreed more with the statement that the company did not care (4.5 vs. 2.7).

As in Study 1, the loyalty items were found to be uni-dimensional and reliable ($\alpha = .88$). Hence, the loyalty items were averaged to give each respondent a loyalty score. The attitude toward complaining scale was found to be uni-dimensional and reliable ($\alpha = .72$), as was the perceived likelihood of success scale ($\alpha = .69$). While the reliability of the perceived likelihood of success is slightly less than the conventional norm of 0.7 (Nunnally 1978), we felt it was acceptable given that it was not the main design factor. Hence, we averaged the perceived likelihood of success items and attitude to complaining items to give each respondent a perceived likelihood of success score and an attitude to complaining score.

TABLE 2

Study 2 Regression Results

<i>Dependent Variables</i>	Complain to Firm		Negative Word of Mouth	
<i>Independent Variable</i>	β	t	β	t
Attitudinal Loyalty	.18	2.56*	-.29	-4.04***
<i>Covariates</i>				
Dissatisfaction	-.11	-1.77	-.12	-1.91
Attitude toward Complaining	.30	4.52***	-.14	-2.16*
Perceived Likelihood of Success	.03	0.33	-.10	-1.38
	R ²	.15		.16

*** $p < .001$

** $p < .01$

* $p < .05$

Hypothesis 1 proposes that loyalty increases the relative likelihood that customers will complain directly to the firm in response to a service failure. Hypothesis 2 proposes that loyalty decreases the relative likelihood a customer will engage in negative

word-of-mouth in response to a service failure. To address these hypotheses using Study 2 data, we regressed the points allocated to complain to the firm and engage in negative word of mouth on the continuous attitudinal loyalty score of the individuals and

the covariates of level of dissatisfaction, attitude towards complaining, and perceived likelihood of success in separate regressions. Complete details of the effects of the covariates and the main effect of attitudinal loyalty on the dependent variables are shown in Table 2.

As in Study 1, attitudinal loyalty significantly increases the relative likelihood of complaining to the firm ($\beta = .18, t=2.56, p < .05$) and significantly decreases the relative likelihood of engaging in negative word of mouth ($\beta = -.29, t=-4.04, p < .001$).

Loyalty’s Effect on Satisfaction Following Redress

Hypothesis 3 proposes that loyalty moderates respondents’ satisfaction with

service recovery. That is, more loyal customers will experience greater satisfaction than less loyal customers when redress is offered,. The dependent variable of satisfaction with recovery following the complaint response was regressed against the continuous attitudinal loyalty score, a dummy (deviation coding) variable for the presence or absence of redress, and the interaction term between the two independent variables. The regression results are reported in Table 3. As the regression results indicate, only the interaction term is significant ($\beta = .43, p = .036$). This significant interaction supports our hypothesis (H3) that more loyal customers experience greater satisfaction with service recovery relative to less loyal customers when redress is offered.

TABLE 3

Study 2 Regression Results with Service-Recovery Satisfaction as the Dependent Variable

	Standardized β	t
Attitudinal Loyalty	-.53	-1.60
Redress (Yes/No)	.60	1.65
Loyalty x Redress	.43	2.10*
R^2	.33	

*** p < .001
 ** p < .01
 * p < .05

DISCUSSION OF STUDY 2 RESULTS

Study 2 replicates the findings of Study 1, namely, loyalty increases the relative likelihood a customer will voice their complaint directly to the firm (hypothesis 1) and decreases the relative likelihood of negative word-of-mouth following a service failure (hypothesis 2). In addition Study 2 also shows that loyalty moderates the

relationship between redress and level of satisfaction following service recovery.

Compared to less loyal customers, more loyal customers are more satisfied when offered redress following a service failure complaint, but more dissatisfied when no redress is offered. This indicates that managers need to be particularly sensitive to how loyal customers’ complaints are handled.

OVERALL DISCUSSION AND CONCLUSIONS

This article examines the effect of loyalty as an antecedent variable on customer responses to both a service failure and consequent service recovery. We find support for the argument that more loyal customers would be more interested in voicing their concerns directly to the firm when confronted with the service failure. Further, such customers are also less likely to engage in negative word of mouth as a response. With respect to service recovery, we find that more loyal customers express greater satisfaction with the service recovery than less loyal customers offered the same redress. This could be because loyal customers feel that they deserve appropriate service recovery because of their closeness to the firm, and thus they respond favorably when they feel that the firm recognizes this in the form of an appropriate service recovery.¹ Such an explanation is consistent with the tenets of equity theory (e.g., Huppertz, Arenson, Evans, 1978).

It is hoped that these twin findings, i.e., loyal customers have a greater propensity to voice to the firm and to be more satisfied if their complaints are redressed, will engage the attention of senior management who may not yet fully appreciate the strategic value of a properly organized complaint system. Clearly, firms need to pay more attention to customers who go to great lengths to let the firm know about the problem, since such customers may be among the firm's most loyal customers. This is all the more important given recent work by Homburg and Fürst (2007b, p. 524) who found evidence of 'defensive organizational behavior' such as "avoid[ing] contact with dissatisfied customers, dissemination of complaint-related information within the organization, and responsiveness to complaints." By demonstrating the link between loyalty and complaining behavior, it is hoped that senior managers realize that organized complaint management systems

cannot be divorced from serious loyalty programs.

Research in the area of complaints has shown that merely enabling dissatisfied customers the opportunity to voice by enabling and facilitating voice can confer considerable advantages. Voice has been shown to improve the satisfaction felt by the complainant (Sparks and McColl-Kennedy 2001) and perception of fairness of the complaint process (Goodwin and Ross 1992). Such attention would benefit firms, since our research shows that loyal customers are more responsive to service recovery efforts. Since loyal customers are more likely to advocate on behalf of the firm than other customers (Zeithaml, Parasuraman and Berry 1996), firms could design their complaint management systems to provide loyal customers with a good story to tell. By contrast, if the complaints of loyal customers are not redressed properly, it could result in the loss of the loyal customer and the loss of a key advocate for the firm. A sober statistic in this regard is provided by Hart, Heskett, and Sasser (1990) who note that nearly half of all customers involved in a service failure are dissatisfied with the service recovery process.

Clearly, complaint management systems can be improved (Tax, Brown, and Chandrashekar 1998). Homburg and Fürst (2007b), Maxham and Netemeyer (2002) and Ringberg et al. (2007) collectively provide several ideas as to how firms could improve their complaint management processes (e.g., instituting a culture change where complaints are construed not as criticisms but as feedback). In addition, firms could conceivably provide incentives for customers to provide voice feedback when things don't go as well as the customers expected. For example, firms could invite their customers to not only voice their dissatisfaction but also accompany that voice with suggested improvements. This could be formalized in an arrangement where each "winning" suggestion that makes the management list of feasible improvements or innovative ideas

would get rewarded appropriately in cash or in kind. As Voorhees and Brady (2005) note, successful firms are not threatened by complaints and actively seek out voice feedback from their customers. Also, senior managers may consider regularly auditing the firm on its performance with respect to complaint generation and resolution.

LIMITATIONS AND FUTURE RESEARCH

In our research, we focused on the effect of attitudinal loyalty on consumer response to service failure and consequent recovery efforts. While attitudinal loyalty can be expected to be correlated with behavioral loyalty, it is recommended that future research directly investigate the effect of behavioral loyalty on consumers' responses to service failure and service recovery and complement our current work.² Also, our findings are limited to the instance of a single service failure. It remains to be seen how well the effects we have found would hold up in the instance of repeated service failures (cf. Maxham and Netemeyer 2002). Another consideration could be the type of redress. In our experiment we were interested only in whether a proper service recovery was initiated or not, and did not specifically control for specific kinds of justice. It would be interesting to see if loyalty differentially influences responses to service recovery procedures that emphasize different kinds of justice, e.g., distributive justice, procedural justice, and interactional justice. Also, future studies should consider controlling for involvement when studying the effect of loyalty on consumer responses to service failures and service recovery.³ In our study, while we did not explicitly control for involvement, the movie rental scenario was arguably low involvement and the auto repair scenario high involvement.

Finally, from a managerial perspective, there is a need to quantify the value of a complaint, possibly using the customer

equity approach of Rust, Lemon, and Zeithaml (2004). For example, the losses that are prevented by a successful complaint management (e.g. prevention of switching, negative word of mouth, etc.) and the gains realized (increased customer equity, lifetime value) could be compared to the cost of implementing and maintaining a complaint management system. This would help managers justify their investments in complaint management and answer the question of "what's a complaint worth?" In addition, such a system would allow managers to run fine analyses of the impact of various service recovery strategies on firm profitability.

SUMMARY

We explore the link between loyalty and customer complaining behavior. We show that loyal customers are more likely to voice their complaints directly to the firm and less likely to engage in negative word-of-mouth than less loyal customers. We also find that loyal customers are much more satisfied with an adequate recovery compared to less loyal customers. Given the link between loyalty and complaining behavior, complaint management systems should be designed to complement effective loyalty programs.

REFERENCES

- Andreassen, Tor Wallin (1999), "What Drives Customer Loyalty With Complaint Resolution?," *Journal of Service Research*, 1 (4), 324-332.
- Bell, Simon J., Bulent Menguc, and Sara L. Stefani (2004), "When Customers Disappoint: A Model of Relational Internal Marketing and Customer Complaints," *Journal of the Academy of Marketing Science*, 32 (2), 112-26.
- Best, Arthur and Alan R. Andreasen (1977), "Consumer Response to Unsatisfactory Purchases: A Survey of Perceiving Defects, Voicing Complaints, and Obtaining Redress," *Law and Society Review*, 11(Spring), 701-742.

- Brown, Jacqueline Johnson and Peter H. Reingen (1987), "Social Ties and Word of Mouth Referral Behavior," *Journal of Consumer Research*, 14 (3), 350-360.
- Clark, Gary L., Peter F. Kaminski and David R. Rink (1992), "Consumer Complaints: Advice on How Companies Should Respond Based on an Empirical Study," *Journal of Services Marketing*, 6(1), 41-50.
- DeWitt, Tom and Michael K. Brady (2003), "Rethinking Service Recovery Strategies," *Journal of Service Research*, 6(2), 193-207.
- DeWitt, Tom, Doan T. Nguyen, and Roger Marshall (2008), "Exploring Customer Loyalty Following Service Recovery," *Journal of Service Research*, 10, 3, 269-281.
- Dick, Alan S. and Kunal Basu (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Fornell, Claes and Birger Wernerfelt (1987), "Defensive Marketing Strategy by Customer Complaint Management: A Theoretical Analysis," *Journal of Marketing Research*, 24(November), 337-346.
- Goodwin, Cathy (1986), *Using Role Relationship Dimensions to Predict Forms of Complaint Behavior of Service Customers*, Business Administration. Berkeley, California, University of California, Berkeley: 197.
- Goodwin, Cathy and Ivan Ross (1992), "Consumer Responses to Service Failures: Influence of Procedural and Interactional Fairness Perceptions," *Journal of Business Research*, 25, 149-163.
- Gregoire, Yany and Robert J. Fisher (2008), "Customer Betrayal and Retaliation: When Your Best Customers Become Your Worst Enemies," *Journal of the Academy of Marketing Science*, 36, 247-261.
- Hart, Christopher, James L. Heskett, and Earl W. Sasser, Jr. (1990), "The Profitable Art of Service Recovery," *Harvard Business Review*, 68, July/August, 148-156.
- Hess, Ronald L. Jr., Shankar Ganesan, and Noreen M. Klein (2003), "Service Failure and Recovery: The Impact of Relationship Factors on Customer Satisfaction," *Journal of the Academy of Marketing Science*, 31(2), 127-145.
- Hirschman, Albert O. (1970), *Exit, Voice, Loyalty: Responses to Decline in Firms, Organizations and States*, Cambridge, Harvard University Press.
- Homans, George C. (1961), *Social Behavior: Its Elementary Forms*, New York: Harcourt, Brace, and World.
- Homburg, Christian and Andreas Fürst (2007a), "How Organizational Complaint Handling Drives Customer Loyalty: An Analysis of the Mechanistic and Organic Approach," *Journal of Marketing*, 69 (July), 95-114.
- Homburg, Christian and Andreas Fürst (2007b), "See No Evil, Hear No Evil, Speak No Evil: A Study of Defensive Organizational Behavior towards Customer Complaints," *Journal of the Academy of Marketing Science*, 35, 523-536.
- Hozier, George C. Jr. and Donald E. Stem Jr. (1985), "General Retail Patronage Loyalty as a Determinant of Consumer Outshopping Behavior," *Journal of the Academy of Marketing Science*, 13(1), 32-46.
- Huppertz, John W., Sidney J. Arenson, and Richard H. Evans (1978), "An Application of Equity Theory to Buyer-Seller Exchange Situations," *Journal of Marketing Research*, Vol. 15 (2): 250-60.
- Jacoby, Jacob and Robert W. Chestnut (1978), *Brand Loyalty Measurement and Management*, New York; John Wiley and Sons.
- Kahn, Barbara E., Manohar U. Kalwani, and Donald G. Morrison (1986), "Measuring Variety Seeking and Reinforcement Behaviors Using Panel Data," *Journal of Marketing Research*, 23 (2), 89-100.
- Liu, Yuping (2007), "The Long-Term Impact of Loyalty Programs on Consumer Purchase Behavior and Loyalty," *Journal of Marketing*, Vol. 71 (4), 19-35.
- Mattila, Anna S. (2001), "The Impact of Relationship Type on Customer Loyalty in the Context of Service Failures," *Journal of Service Research*, 4 (2), 91-101.
- Maute, Manfred F. and William R. Forrester Jr. (1993), "The Structure and Determinants of Consumer Complaint Intentions and Behavior," *Journal of Economic Psychology*, 14, 219-247.

- Maxham III, James G. and Richard G. Netemeyer (2002), "A Longitudinal Study of Complaining Customers' Evaluations of Multiple Service Failures and Recovery Efforts," *Journal of Marketing*, 66, October, 57-71.
- McMullan, Rosalind (2005), "A Multiple Item Scale for Measuring Customer Loyalty Development," *Journal of Services Marketing*, 19 (7), 470-481.
- Nunnally, Jum (1978), *Psychometric Theory*, McGraw Hill.
- Oliver, Richard L. (1999), "Whence Customer Loyalty?," *Journal of Marketing*, 63 (special issue), 33-44.
- Ping, Robert A., Jr. (1997), "Voice in Business-to-Business Relationships: Cost of Exit and Demographic Antecedents," *Journal of Retailing*, 73 (2), 261-281.
- Reichheld, F. and Sasser, W. (1990), "Zero defects: quality comes to services," *Harvard Business Review*, Sept-Oct, 1990, pp 105-111.
- Ringberg, Torsten, Gaby Odekerken-Schröder and Glenn L. Christensen (2007), "A Cultural Models Approach to Service Recovery," *Journal of Marketing*, 71(July), 194-214.
- Rust, Roland T., Katherine N. Lemon and Valarie A. Zeithaml (2004), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, 68(January), 109-127.
- Singh, Jagdip (1985), *Modeling Consumer Responses to Negative Disconfirmation of Expectations*, Business Administration. Lubbock, Texas, Texas Tech University: 270.
- Singh, Jagdip (1988), "Consumer Complaint Intentions and Behavior: Definitional and Theoretical Issues," *Journal of Marketing*, 52(January), 93-117.
- Singh, Jagdip (1990), "Voice, Exit, and Negative Word of Mouth Behaviors: An Investigation Across Three Service Categories," *Journal of the Academy of Marketing Science*, 18, 1, 1-15.
- Singh, Jagdip and Robert E. Wilkes (1996), "When Consumers Complain: A Path Analysis of the Key Antecedents of Consumer Complaint Response Estimates," *Journal of the Academy of Marketing Science*, 24(4), 350-365.
- Smith, Amy K. and Ruth N. Bolton (1998), "An Experimental Investigation of Customer Reactions to Service Failure and Recovery Intentions: Paradox or Peril," *Journal of Service Research*, 1, 1, 65-81.
- Smith, Amy K., Ruth N. Bolton, and Janet Wagner (1999), "A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery," *Journal of Marketing Research*, 36, 3, 356-372.
- Smith, Amy K. and Ruth N. Bolton (2002), "The Effect of Customers' Emotional Responses to Service Failures on Their Recovery Effort Evaluations and Satisfaction Judgments," *Journal of the Academy of Marketing Science*, 30, 1, 5-23.
- Sparks, Beverley A. and Janet McColl-Kennedy (2001), "Justice Strategy Options for Increased Customer Satisfaction in a Service Recovery Setting," *Journal of Business Research*, 54, 3, 209-218.
- Thibaut, John W. and Harold H. Kelley (1959), *The Social Psychology of Groups*, New York: John Wiley and Sons.
- Tax, Stephen S., Murali Chandrashekar, and T. Christiansen (1993), "Word-of-Mouth in Consumer Decision-Making: An Agenda for Research," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 6, 74-80
- Tax, Stephen S., Stephen W. Brown and Murali Chandrashekar (1998), "Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing," *Journal of Marketing*, 62(April), 60-76.
- Voorhees, Clay M. and Michael K. Brady (2005), "A Service Perspective on the Drivers of Complaint Intentions," *Journal of Service Research*, 8, 2, 192-204.
- Yim, Chi Kin, Flora Fang Gu, Kimmy Wa Chan, and David K. Tse (2003), "Justice-Based Service Recovery Expectations: Measurement and Antecedents," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 36-52.
- Zeithaml, Valarie, A. Parasuraman and Leonard L. Berry (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60(2), 31-46.

Notes:

¹ The authors thank an anonymous reviewer for this alternative explanation.

² The authors thank an anonymous reviewer for this recommendation.

³ The authors thank an anonymous reviewer for this suggestion

The authors also thank their colleagues Jim Curran, Brent Baker, and Nazgol Moshtagi for their helpful comments on an earlier version of the paper.

Send Correspondence Regarding This Article to:

Christy Ashley
Assistant Professor of Marketing
Department of Marketing and Supply Chain Management
East Carolina University
3206D Bate Building
Mail Stop 503
Greenville, North Carolina 27858-4353
Tel: 252-328-6099
email: ashlevc@ecu.edu

APPENDIX A

Scale Items

	Cronbach's α	Factor Loadings Study One		
<i>Attitudinal Loyalty Items</i> (Hozier and Stem 1985)	.80			
I would like to continue to use my existing [movie rental provider] (auto repair provider) in the upcoming year.		.61		
I feel a strong bond to my [movie rental provider] (auto repair provider).		.86		
I feel a strong sense of loyalty to my [movie rental provider] (auto repair provider).		.69		
I will continue to use my [movie rental provider] (auto repair provider), even if a competitor offers lower fees.		.82		
<i>Attitude Toward Complaining Items</i> (Singh and Wilkes 1996)	.70			
I am not comfortable complaining (reverse coded)			.80	
People who complain are impolite (reverse coded)			.87	
Complaining helps the company improve			.61	
<i>Perceived Likelihood of Success</i> (Voorhees and Brady 2005; Singh 1990)	.69			
The company encourages feedback				.61
I do not think the company cares (reverse coded)				.80
The company is not responsive (reverse coded)				.81

APPENDIX B**Scenario used in Study 1****Study 1 Service Failure**

Video Rental: You have friends over to watch a movie you rented from your preferred movie rental provider. When you and your friends get to the middle of the movie, the movie stops playing. You can not get the movie to work again. You try another movie in your video player, and it works, so you conclude the problem is with the movie.

APPENDIX C**Service Failure Scenario**

Imagine you bring your car in for a repair that is necessary for you to continue to operate your vehicle safely. When you drop off your car at your auto repair provider, the mechanic advises you that your car will be ready at 5:00PM. However, when you arrive, you learn from the mechanic that the car will not be ready until 4PM tomorrow. You were counting on your car for transportation the following day.

Service Recovery Scenario (No Redress)

You decide to complain to the mechanic about the service failure and explain that you need the car. The mechanic does not appear interested in listening. He calls the manager, who comes out immediately. The manager indicates that there is nothing that can be done at this time.

Service Recovery Scenario (Redress)

You decide to complain to the mechanic about the service failure and explain that you need the car. The mechanic listens patiently and says, "I'm very sorry for this serious inconvenience." He calls the manager, who comes out immediately. The manager apologizes for the delay. The manager offers you a complimentary rental car that you can use until your repairs are complete and a 10% discount on your repair bill.

LOYALTY'S INFLUENCE ON THE CONSUMER SATISFACTION AND (RE) PURCHASE BEHAVIOR RELATIONSHIP

Thaweephan Leingpibul, Western Michigan University
Sunil Thomas, California State University, Fullerton
S. Allen Broyles, California State University, Fullerton
Robert H. Ross, Wichita State University

ABSTRACT

While consumer satisfaction has been a topic of significant scholarly interest in recent years, continued studies that further our understanding of satisfaction and its association with (re)purchase behavior are valuable because such knowledge will enhance theorists' and practitioners' ability to develop more effective marketing strategies. Interestingly, current literature indicates that consumer loyalty may have an association with satisfaction, (re)purchase behavior and the predictive relationships between these phenomena. To this end, we present here an empirical study which finds that consumer loyalty is two distinct constructs (*behavioral loyalty* and *attitudinal loyalty*) and that they mediate the predictive relationships between the *meets expectations* and *feeling state* satisfaction constructs and *(re)purchase behavior*. The study employed two well-known brands and Structural Equation Modeling methodology.

INTRODUCTION

Consumer satisfaction has been a topic of notable scholarly attention in recent decades, and continued studies that further enlighten our understanding of satisfaction are warranted because of its importance to consumers, theorists and practitioners (Oliver 1997, 1999). An insight into the satisfaction phenomenon that is indicated in literature, but one which has received limited empirical study is its potential linkage with consumer loyalty (Pritchard, Havitz and Howard 1999), and the likely predictive relationships

between these constructs and (re)purchase behavior (Jacoby and Kyner 1973).

In seeking to better understand the satisfaction, loyalty and (re)purchase behavior constructs and their potential relationships, an in-depth literature review was conducted. The review revealed that some (e.g. Tucker 1964) view loyalty as reflecting one's *behavioral loyalty* toward a product (purchase frequency of the product), and others (e.g. Berger and Mitchell 1989) suggest it refers to individuals' *attitudinal loyalty* (favor/disfavor toward a product). Some (e.g. Russell-Bennett, McColl-Kennedy and Coote 2007) view that *attitudinal loyalty* has a predictive path that leads to *behavioral loyalty*, and some (e.g. Dimitriadis 2006) believe that *attitudinal loyalty* and *behavioral loyalty* merge into an overarching macro construct. Regardless of one's view, however, literature appears to be consistent in suggesting that *loyalty* influences the predictive relationship between satisfaction and (re)purchase behavior (Pritchard, et al. 1999).

Based on the importance of loyalty (Bandyopadhyay, Gupta and Dube 2005), of satisfaction (Pritchard et al. 1999) and of one's (re)purchase behavior of a product (Reichheld 1994), we assert that additional research is needed to further our understanding of these constructs and their potential relationships. Such studies would likely yield new knowledge that scholars can disseminate to practitioners to help them develop more successful marketing strategies (Bennett and Rundle-Thiele 2004).

The empirical study discussed in this article builds upon an exploratory study

conducted by Ross, Broyles and Leingpibul (2008), which revealed that consumer satisfaction entails two distinct constructs that are linked only by a certain degree of covariance. Drawing from literature on the loyalty phenomenon in order to conduct a study that furthers our understanding of satisfaction, this article will address the following research questions: i) Is consumer loyalty two distinct constructs, and ii) Does consumer loyalty influence the predictive relationship between the two consumer satisfaction constructs and (re)purchase behavior?

The article begins with a discussion of consumer satisfaction and consumer loyalty, after which it presents hypotheses to examine the noted research questions. The article provides details of a study that tests the referenced hypotheses, using two well-known brands, after which the findings that loyalty is two distinct constructs is discussed, and that their association with consumer satisfaction -> (re)purchase behavior is one in which *attitudinal loyalty* and *behavioral loyalty* mediate this predictive relationship. We close by discussing the study's implications, and by offering ideas for future research.

CONCEPTUAL DEVELOPMENT

The Importance of Consumer Satisfaction

While scholars take disparate views, extant literature contains frequent discussion of consumer satisfaction as being an important phenomenon. We believe that furthering our understanding of satisfaction's significance, such as its predictive relationship with (re)purchase behavior, is important for one to fully comprehend the phenomenon. While scholarly studies in recent decades have greatly enhanced our understanding of satisfaction, we need continued research that further expands our knowledge of satisfaction and its influence on (re)purchase behavior. This belief is based on

awareness that there have been an inadequate number of studies which have studied the outcomes of satisfaction (Szymanski and Henard 2001; Pappu and Quester 2006). However, we would be remiss if we failed to recognize some consequences of satisfaction that are noted in current literature. For example,

i) If a firm has satisfied consumers, it will have an enhanced ability to extend its brand(s) to other products and product categories, which saves the firm money by reducing its cost of launching new products (Reast 2005; Thamaraiselvan and Raja 2008);

ii) Satisfied consumers exhibit positive word-of-mouth (Soderlund and Ohman 2003; Golicic, Broyles and Woodruff 2003; Lymeropoulos and Chaniotakis 2008), which "...is one of the most important factors in acquiring new customers" (Jones and Sasser 1995, p. 94);

iii) Satisfied consumers enable a firm to charge higher prices for its product(s) because consumers will typically tolerate higher prices (Reichheld 1996; Oliver 1997);

iv) Consumers' (re)purchase decision process is simplified if they are satisfied (Jacoby, Chestnut and Fisher 1978) ;

v) And, satisfied consumers have a greater likelihood of (re)purchasing a firm's product(s) in the future (Cardozo 1969; Oliver 1980, 1997; Vanhamme and Snelers 2001).

The overall significance of these outcomes of consumer satisfaction is captured by Oliver's (1997, 1999) discussion that they have predictive relationships with the level of a firm's sales, profitability, and market valuation.

What is Consumer Satisfaction?

Oliver (1999) captures the need for continued satisfaction studies by discussing that even if a firm's consumers are satisfied,

their defection rates with respect to (re)purchase behavior toward a firm's product(s) can be as high as 90%. The importance of (re)purchase behavior is captured by Reichheld (1994) noting it is a critical element in a firm achieving increased sales and profitability. He states "...a decrease in defection rates of five percentage points can increase profits by 25% - 100%" (p. 13).

While literature contains frequent discussion of satisfaction and its importance, it also includes an array of definitions of the phenomenon (e.g. Clerfeuille and Poubanne 2003). For example, Oliver (1980) discusses the expectancy disconfirmation satisfaction model in which he notes that satisfaction refers to the outcome of one's cognitive evaluation (disconfirmation) of whether a product usage experience (performance) meets their pre-usage expectations (*meets expectations*). As stated by Golicic, Broyles and Woodruff (2003), "If the perceived performance matches the comparison standard, confirmation occurs and satisfaction results" (p. 125).

Westbrook (1987) and Bei and Chiao (2001) take a somewhat divergent view of satisfaction by stating that it reflects one's affective feeling state (*feeling state*) toward a product. This view indicates that satisfaction is an internal frame of mind tied to one's mental (psychological) interpretations of a product's performance levels (Oliver 1997).

Others (e.g. Cadotte, Woodruff and Jenkins 1987) suggest that *meets expectations* has a predictive path leading to one's *affective feeling state*, while some (e.g. Jun, Hyun, Gentry and Song 2001) discuss that *meets expectations* and *affective feeling state* likely merge into an overarching macro satisfaction construct. Oliver (1997) captures this thought by discussing that satisfaction is a construct that contains both "...components of judgment (e.g. cognition) and affect (e.g. emotion)" (p. 20).

To help clarify the satisfaction phenomenon, Ross et al. (2008) examined

whether one's cognitive evaluation of a product's performance (*meets expectations*), and their affective *feeling state* toward a product are two distinct constructs related by a directional path, or whether they merge into a macro construct. They found the *meets expectations* and the *feeling state* perspectives of satisfaction are two distinct constructs that are related only by a certain degree of covariance.

Consumer Loyalty

Insight into loyalty is found in Oliver's (1997) discussion that the phenomenon entails cognitive, affective, conative and action aspects. He views cognitive loyalty as a reflection of a consumer feeling compelled to prefer "...one brand over another" (p. 392). Regarding the affective aspect, Oliver (1997) views this as attitudinal and a function of one experiencing disconfirmation of their product usage expectations. With respect to the conative facet of loyalty, he discusses that it is a "behavioral intention dimension of loyalty" (p. 393) (referring to one's intention or commitment to buy a brand). Lastly, Oliver (1997) notes that loyalty also entails an action aspect, in that it reflects one's purchase of a brand. Interestingly, Oliver (1997) views these four aspects as stages of loyalty with his discussion that after an individual experiences cognitive loyalty toward a brand, they become attitudinally loyal (affective) toward that brand, which leads to one becoming committed to buy a certain brand, after which they embark on the actual purchase of that brand.

Recent literature emboldens the consideration that loyalty entails more than one construct. For example, Day (1969), Jones and Sasser (1995), and East, Gendall, Hammond and Lomax (2005) indicate that brand loyalty includes one's repeat purchase of a brand (behavioral aspect), and their attitudes toward that brand (affective aspect). Oliver (1997, 1999), Bandyopadhyay, Gupta

and Dube (2005), and Powers and Valentine (2008) denote the behavioral aspect (*behavioral loyalty*) by suggesting that consumer loyalty refers to the frequency and regularity of one's (re)purchases of a firm's product(s) over time. The affective aspect is found in Jacoby and Chestnut (1978), Berger and Mitchell (1989), Oliver (1997), and Powers and Valentine (2008), who discuss that loyalty entails one's attitudes (*attitudinal loyalty*) toward and beliefs about a product (i.e. favor/disfavor toward a product). The importance of this attitudinal perspective is noted in Dick and Basu's (1994) paper, in which the authors state that "Customer loyalty is...the strength of the relationship between an individual's relative attitude and repeat patronage" (p. 99). Interesting insights into *behavioral loyalty* and *attitudinal loyalty* are found in Jacoby and Kyner 1973; Jacoby, Chestnut and Fisher 1978; and, Dimitriades 2006, who suggest they may merge into an overarching macro construct. East et al. (2005) appear to support this view by stating "...our findings should cause marketers to question whether loyalty should be seen as some combination of relative attitude and repeat patronage" (p. 21). With respect to the attitudinal and behavioral aspects of loyalty, East et al. (2005) further state that "...each component facilitates the other and one component on its own is insufficient" (p. 11).

Jacoby and Kyner (1973) address the reasoning as to why literature contains various views of consumer loyalty by discussing that this stems from a situation in which "...inconclusive, ambiguous, or contradictory findings are the rule rather than the exception...which makes it difficult and hazardous to compare, synthesize, and accumulate findings" (p. 1) of the loyalty phenomenon.

Similar to Bennett and Rundle-Thiele (2004), we assert that to obtain knowledge which can help theorists and practitioners better understand loyalty and enhance their ability to develop more effective marketing strategies, it is necessary to explore whether

loyalty entails two distinct aspects (attitudinal and behavioral) or if these aspects merge into a macro construct. On this basis, the following research hypothesis is put forth:

Hypothesis 1: *Attitudinal loyalty* and *behavioral loyalty* are two distinct constructs.

Another perspective regarding loyalty that is found in current literature is the belief that *behavioral loyalty* and *attitudinal loyalty* are connected with a predictive path, with one's *attitudinal loyalty* toward a product leading to their *behavioral loyalty* for the item (Liska 1984; Russell-Bennett et al. 2007). Further insight into this is found in East et al.'s (2005) notation that Day's (1969) work left open whether the behavioral and attitudinal facets of loyalty are interactive (i.e. a predictive relationship path between the two constructs). To examine whether there is a relationship between *attitudinal loyalty* and *behavioral loyalty*, the following research hypothesis is put forth:

Hypothesis 2: *Attitudinal loyalty* has a predictive path that leads to *behavioral loyalty*.

Potential Relationships between Satisfaction, Loyalty and (Re) purchase Behavior

Drawing from literature, it seems clear that consumer loyalty has an association with satisfaction (Pritchard et al. 1999), **and** with the predictive relationship paths between the *meets expectations* and *affective feeling state* satisfaction constructs and one's (re)purchase *behavior* of a product (Bennett and Rundle-Thiele 2004; Ross et al. 2008). For example, Oliver (1980) discusses that one's satisfaction with a product is associated with their future (re)purchase intention of that product, and indicates this relationship is likely to be mediated by one's loyalty toward the product. Oliver (1999) captures the importance of our

better understanding loyalty and its potential relationship with satisfaction and (re)purchase behavior by discussing that a loyal customer base positively impacts a firm's profits, and by stating that satisfaction and loyalty are inextricably linked. He states that satisfaction is "...an essential ingredient for the emergence of loyalty" (p. 42). Jones and Sasser (1995) lend support to this later view by noting that satisfied customers are more loyal to a firm and its products.

Based on these views, this study draws from scholars such as Oliver (1999) and Soderlund and Ohman (2005) to ask: 'Does loyalty have an association, such as mediation, with the relationship paths between the two consumer satisfaction constructs (*meets expectations* and *feeling state*) and (*re*)purchase behavior'? Before proceeding, the reader is asked to note that (*re*)purchase intent was employed in this study as a surrogate for (*re*)purchase behavior because of our belief that intent is a strong predictor of actual purchase behavior (Fishbein and Ajzen 1995; Jones and Sasser 1995; Keller 2003). Some might question employment of this surrogate. For example, in discussing findings of their consumer loyalty study, East et al. (2005) state "...the practice of using an intention measure as a proxy for retention seems unjustified" (p. 22). However, they also note that much literature contains various discussions of intent being a predictor of behavior. In discussing their own study, Chandon, Morwitz and Reinartz (2004) indicate that there is a degree of evidence that one's (*re*)purchase intentions of a product has some level of association with their (*re*)purchase behavior of that product.

Potential explanation for the mixed views as to whether intent reflects behavior is captured in Fishbein and Ajzen's (1975) and East et al.'s (2005) discussion that there has been inadequate study of predictive relationships that lead to one's purchase behavior. In recognizing that empirical studies of the association between (*re*)purchase intent and actual behavior is

limited, it was decided to employ the intent surrogate in this study, and to posit the need for future empirical studies that further examine the predictive weight of the relationship between intent and actual behavior.

If this study reveals that the relationship paths between the two satisfaction constructs (*meets expectations* and *feeling state*) and (*re*)purchase intent are mediated by *behavioral loyalty* and *attitudinal loyalty*, this would enhance our understanding of the predictive relationship between satisfaction and (*re*)purchase behavior. It would also suggest that firms should not restrict their focus to increasing consumers' satisfaction. Rather, it would suggest that marketers should also strive to better understand what contributes to consumer loyalty, and incorporate this knowledge into their marketing strategies. To address these thoughts, we assert that the model shown in Figure 1, which builds upon Ross et al. (2008), should be employed in a study which examines satisfaction, loyalty, (*re*)purchase and the potential relationships between the constructs.

To this end, the following research hypotheses are put forth for determining whether loyalty influences the relationship between satisfaction and (*re*)purchase intent:

Hypothesis 3: The predictive relationship between *meets expectations* and (*re*)purchase intent is mediated by *behavioral loyalty*.

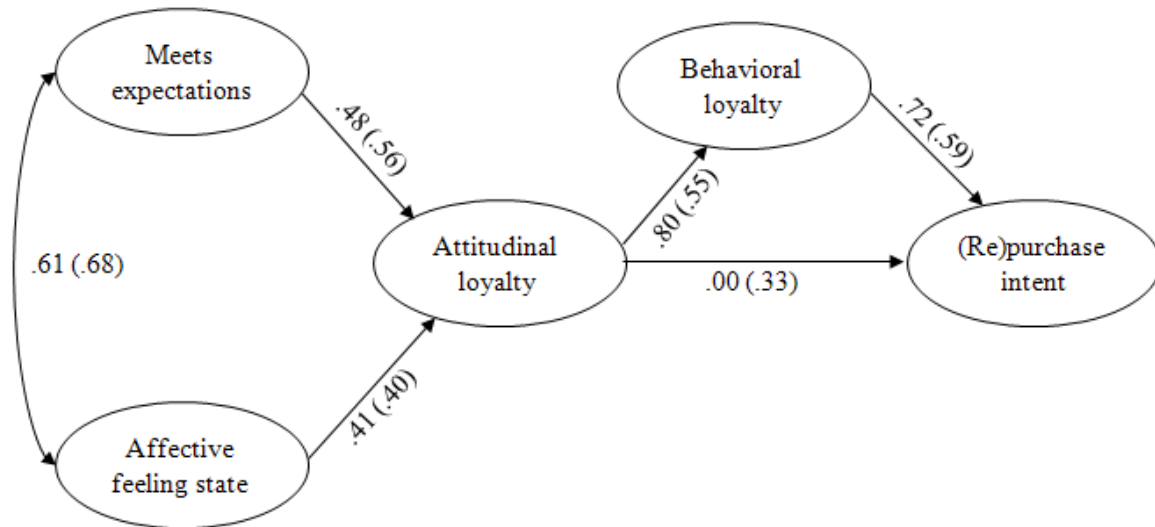
Hypothesis 4: The predictive relationship between *meets expectations* and (*re*)purchase intent is mediated by *attitudinal loyalty*.

Hypothesis 5: The predictive relationship between *affective feeling state* and (*re*)purchase intent is mediated by *behavioral loyalty*.

Hypothesis 6: The predictive relationship between *affective feeling state* and (*re*)purchase intent is mediated by *attitudinal loyalty*.

FIGURE 1

Structural Model for Coca-Cola and the Gap



NOTE: Directional path weights are in the sequence of Coca-Cola followed by the (Gap) in parentheses

NOTE: Directional path weights are significant at the 95% confidence level

THE STUDY

Participant and Brand Selection

Due to their convenience, volunteer students from a Midwestern U.S. university were employed in this study. Qualitative interviews were conducted with 18 volunteers in order to identify some major brands with which they are familiar, and at least periodically use, which we assert are important factors for identifying brands that would be appropriate to use in this study. We further assert that our preference for using national brands in this study is supported, at least in part, by comments of scholars such as Aaker (1996), Yoo, Donthu and Lee (2000) and Keller (2003) about the importance of

major brands to consumers, theorists and practitioners.

Of the brands named by samples, Coca-Cola and the Gap best met our familiarity and usage criteria, and were thus employed in this study. Support for selection of these brands is found in literature noting them as widely recognized by, available for and accessible to consumers (Farquhar 1994; Dawar 1998; Freling and Forbes 2005).

Survey Development

With regard to the measures employed for the *meets expectations* and *feeling state* satisfaction constructs and for *(re)purchase intent* for Coca-Cola, this study used items in Ross et al. (2008) because i.) established

satisfaction measures (such as found in the Marketing Scales Handbook) do not capture the complexities or contextualities associated with this brand (e.g. samples noted they view Coca-Cola as entailing one's evaluation of the degree to which it makes them feel refreshed, and its sweet taste); and ii.) data and analysis of the Structural Equation Model (SEM) in Ross et al. (2008) indicate that the measures loaded well to, and sufficiently reflect each construct, and that the constructs held up under empirical examination. Literature also reveals that established measures do not capture the complexities or contextualities associated with the Gap (such as offering an assortment of clothing desired by consumers).

To capture the contextualities and complexities of these two brands, new measures were developed by employing Churchill's (1979) guidelines. Care was taken to ensure that the items and the survey instrument were easy for respondents to understand and comprehend (Dillman 1978), were not vague or difficult to answer (Belson 1981), were not lengthy (Payne 1951), and did not include redundancies (Bradburn and Sudman 1978). In a similar vein as Ross, et al. (2008), because this study is confirmatory in its nature, it was determined that closed-end measures were best suited in order to avoid problems or misunderstandings that sometimes occur with studies that employ open-end questions.

Data secured through qualitative interviews conducted with volunteer student respondents and with employees of a Coca-Cola bottler and two Gap retail stores were used in developing new measures. The initial survey was reviewed by 4 subject-matter experts (SME's) to confirm the face validity of the measures, and to ensure that they adequately represent the constructs. The SME's also identified any measures that should be dropped, altered, or be added to the survey (Maurer and Tross 2000). The resultant measures were incorporated into a survey that uses a Strongly Disagree – Strongly Agree, 5-point Likert scale

throughout, with the resultant questionnaire examined by various students to confirm that the survey, and its instructions and measures were easily understandable (Dillman 1978, 2000).

Pre-Test and Methodology

Employing the preliminary survey instrument, a pre-test was conducted with 204 respondents to confirm that the instrument and measurement items were readable, while also evaluating the levels of content validity and reliability. Using the pre-test data, descriptive statistics procedures in SPSS 15.0 were utilized for identifying whether any of the measures were problematic (e.g. were poorly worded or had high kurtosis). Any measures identified as being problematic were either corrected or removed if judged to be uncorrectable. Next, confirmatory factor analysis (CFA), utilizing SPSS 15.0 was used to identify the degree of construct validity, and to confirm that no measures were cross-loading onto other measures, referring to a situation where "...a variable is found to have more than one significant loading" (Hair, Black, Babin, Anderson and Tatham 2006, p. 130). CFA also ensured that no measures were loading weakly onto constructs. Results of the measurement model were then run in Structural Equation Modeling (SEM), employing Amos 7.0 in order to confirm that the retained items are suitable for the actual study. The modification indices and normality test in SEM were also satisfied.

Conducting the Actual Study

The purified survey was completed by 298 respondents, of which fifteen were discarded due to missing data, incomplete surveys, outliers (using the multivariate data screening function in NCSS), and indifferent answer patterns. Item purification was performed using descriptive statistic results and CFA (confirmatory factor analysis). The use of descriptive statistics was to identify

any problematic measures with abnormally high kurtosis (i.e. weak item variance) or skewness (Hair et al. 2006). These items were removed. CFA was employed for ensuring the validity of the retained measures by identifying any abnormal factor loading (e.g. cross-loading and/or weak loading) (see Podsakoff and Organ 1986). In addition, results of the modification indices and abnormality tests using the measurement model in AMOS 7.0 satisfied the purification.

AMOS 7 in SEM was used to examine study data because of its appropriateness for studies that entail constructs that cannot be directly observed, but "...can only be measured via observable measures or indicators that vary in their degree of observational meaningfulness and validity" (Steenkamp and Baumgartner 2000, p. 196). Also, this method enables examination of goodness-of-fit statistics, and is apposite for studying a complex model such as employed here (Steenkamp and Baumgartner 2000).

Further, SEM is an appropriate method for examining potential mediation effect on constructs with multiple measurement items (Holbert and Stephenson 2003). At the 95% confidence level, SEM with bootstrapping, and the bias-correction option was run (Shrout and Bolger 2002; Mallinckrodt, Abraham, Wei and Russell 2006), along with the causal steps (Baron and Kenny 1986) and product coefficient (MacKinnon, Lockwood, Hoffman, West and Sheets 2002) mediation testing procedures.

Since the model employed in this study is new and relatively complex, the following cut-off points for acceptability were adopted for the model: i) $CMIN/DF \leq 3$; ii) $RMSEA \leq 0.08$, and iii) $CFI \geq 0.9$ (Hair et al., 2006). As shown in Table 1, the fit statistics for each brand's structural model met these standards, indicating that the measures employed in this study are sufficient (Steenkamp and Baumgartner 1998).

TABLE 1

Structural Models' Fit Statistics

Target (Hair et al. 2006)	Chi-Square: DF		CFI		RMSEA	
	$\leq 3: 1$		$\geq .9$		$\leq .08$	
Results	Coca-Cola	Gap	Coca-Cola	Gap	Coca-Cola	Gap
		1.90: 1	2.56: 1	0.98	0.97	0.06	0.08

As shown in Table 2 (statistical results for Coca-Cola) and Table 3 (statistical results for the Gap), only strong measures were retained for each construct. All of the retained items achieved the goal of having a parameter weight $\geq .7$ at a confidence level of 95% (Hair et al. 2006). These results indicate that the retained measures belong to the

construct to which they loaded (Hair et al. 2006), which provides support that the constructs shown in each brand's structural model hold up as distinct constructs. Further support that the constructs hold up is found in Tables 2 and 3's indication that each construct's Cronbach's Alpha value met the oft cited value of ≥ 0.70 (Hair et al. 2006).

TABLE 2

Statistical Results for the Coca-Cola Structural Model

Constructs and items	Parameter Estimate	Mean	Standard Deviation	Cronbach Alpha	Variance Extracted
<i>Meets expectations: Coca-Cola:</i>					
Makes me feel refreshed	0.84	2.86	1.24	0.85	0.65
Has the sweet taste that I want	0.78	3.05	1.24		
Satisfies my thirst	0.80	2.82	1.19		
<i>Affective feeling state: Typically, whenever I drink Coca-Cola, I feel:</i>					
Content with the product	0.79	3.24	1.14	0.93	0.76
Good about my decision to drink the product	0.88	2.87	1.13		
Happy with my decision to drink the product	0.92	2.92	1.16		
Satisfied with my decision to drink the product	0.91	3.03	1.14		
<i>Attitudinal loyalty: When I drink Coca-Cola, it is because Coca-Cola:</i>					
Makes me feel good	0.79	2.77	1.31	0.88	0.72
Is a brand that I like	0.86	2.55	1.16		
Has a taste that I like	0.89	3.02	1.32		
<i>Behavioral loyalty: Coca-Cola is the brand of soft drink that I:</i>					
Buy whenever I am given a choice of soft drinks	0.95	2.28	1.41	0.96	0.89
Drink more frequently	0.92	2.23	1.37		
Drink whenever I want to treat myself with a soft drink	0.96	2.26	1.37		
<i>(Re) purchase intent: In the future:</i>					
I will drink Coca-Cola more often than other brands of soft drinks	0.96	2.32	1.35	0.91	0.79
The next time I want a soft drink I am likely to buy Coca-Cola	0.95	2.44	1.34		
I will buy a Coca-Cola within the next week	0.74	2.43	1.36		

Additional evidence that the constructs depicted earlier in Figure 1 hold up as distinct constructs is found in most of the constructs having an average variance extracted value $\geq .7$. The only exception is the *meets expectations* construct which has an average variance extracted value of .65 for Coca-Cola and .69 for the Gap. These two values do not meet the target of being $\geq .7$ (Garver and Mentzer 1999), but the values are very close to that goal. In drawing from

Churchill (1979) and Hair, Black, Babin, Anderson and Tatham (2006), we posit that a study, such as discussed here, that examines new models and entails new measurement items calls for reasoned flexibility, instead of rigid adherence to statistical goals. In addition, because each construct's average variance extracted was greater than the squared correlation between that construct and the other constructs, discriminant validity for all the constructs was established (Fornell and Larcker 1981).

TABLE 3

Statistical Results for the Gap Structural Model

Constructs and items	Parameter Estimate	Mean	Standard Deviation	Cronbach Alpha	Variance Extracted
<i>Meets expectations: The Gap:</i>					
Sells clothes that fit me well	0.80	3.06	1.09	0.87	0.69
Sells clothing that fits my needs for work and for leisure	0.82	3.28	1.02		
Has a selection of products that seem like they are designed for me	0.88	2.91	1.09		
<i>Affective feeling state: Typically, whenever I shop at the Gap, I feel:</i>					
Content with their products	0.89	3.37	0.94	0.96	0.86
Good about buying their products	0.95	3.35	0.97		
Happy purchasing their products	0.90	3.37	0.95		
Satisfied with my decision to buy their products	0.97	3.37	0.96		
<i>Future purchase intent: In the future:</i>					
I will shop at the Gap when I want to buy clothes that are comfortable	0.85	2.63	1.33	0.91	0.78
I will shop at the Gap within the next month	0.86	2.31	1.23		
The next time I shop for clothes, I am likely to shop at the Gap	0.94	2.42	1.30		
<i>Attitudinal loyalty: The Gap</i>					
Offers an assortment of clothing that I want	0.85	2.99	1.16	0.91	0.72
Sells clothing that makes me feel good	0.91	2.96	1.11		
Is a brand that I like	0.87	3.09	1.22		
Sells products that I trust	0.77	3.31	1.06		
<i>Behavioral loyalty: Compared to other places where clothing items are sold, I:</i>					
Shop at the Gap whenever I am given a choice	0.91	2.42	1.20	0.97	0.81
Am a loyal Gap consumer	0.86	2.08	1.19		
Buy clothing at the Gap whenever I want to treat myself with some new clothes	0.93	2.34	1.19		

Drawing from Fishbein and Ajzen (1975), it seems intuitively logical that this study's model would have predictive relationship paths from the cognitive-oriented "meets expectations" construct leading to the affective "feeling state" construct for each brand. To this regard, it was necessary to explore whether the model and the directional paths between its constructs hold up similarly with each brand. The result was determination that *meets expectations* and *feeling state* are distinct constructs for each brand that are related only by a certain degree

of covariance (standardized value of .61 for Coca-Cola and .68 for the Gap).

Next, it was necessary to explore whether the model and its directional paths between the constructs hold up with the two brands. The result was determination that the directional paths shown in Figure 1 held up with Coca-Cola and the Gap, and that no different or additional paths emerged. The conclusion is that the structural model and findings are accepted as sufficiently strong for this study.

As suggested by Judd and Kenny (1981) and Baron and Kenny (1986), causal steps were performed to indicate a series of requirements which must be true for the mediational model to hold up. All requirements for causal steps 1-3 were satisfied for the Gap, in that the results for the Gap showed partial mediation. At a confidence level of 95%, two zero-order correlations for the *attitudinal loyalty* → *behavioral loyalty* and *behavioral loyalty* → *(re)purchase intent* were significantly different from zero. Further, multiple regression supports the partial effect of *behavioral loyalty* (controlling for *attitudinal loyalty*) at 95% confidence level. Thus,

partial mediation was revealed with the Gap brand.

With respect to Coca-Cola, all four causal steps were conducted, and the results of the two zero-order correlations (*attitudinal loyalty* → *behavioral loyalty*, and *behavioral loyalty* → *(re)purchase intent*) revealed that all paths are significantly different from zero at a 95% confidence level. Further, multiple regression for the partial effect of *behavioral loyalty* (controlling for *attitudinal loyalty*) was significant, while the predictive relationship path weight for the *attitudinal loyalty* → *(re)purchase intent* was not significant. Thus, complete mediation exists with the Coca-Cola brand.

TABLE 4
Total Effect, Direct Effect, and Indirect Effect

	Standard Total Effect	Standard Direct Effect	Standard Indirect Effect	Standard Indirect (Std Error)	Lower Indirect	Upper Indirect	Significantly different from zero at the 95% level (two-tailed).
COCA-COLA BRAND							
Behavioral loyalty → (re)purchase intent	0.718	0.718	0	..	..	..	..
Attitudinal loyalty → Behavioral loyalty	0.804	0.804	0	..	..	..	..
Attitudinal loyalty → (re)purchase intent	0.777	(0.210)*	0.578	0.088	0.459	0.88	Yes
THE GAP BRAND							
Behavioral loyalty → (re)purchase intent	0.587	0.587	0	..	..	..	..
Attitudinal loyalty → Behavioral loyalty	0.555	0.555	0	..	..	..	..
Attitudinal loyalty → (re)purchase intent	0.655	0.329	0.325	0.089	0.189	0.475	Yes

* not significantly different from zero at 95% level

As shown in Table 4, bootstrapping with the SEM methodology indicated justification for the indirect effect from the mediation (Shrout and Bolger 2002; Preacher and Hayes 2008). The p-value from SEM revealed that *behavioral loyalty* serves as a mediator by carrying the influence of the *attitudinal loyalty* independent variable to the *(re)purchase intent* dependent variable. The unstandardized estimates and standard errors for each brand were calculated, followed by conducting of the Sobel (1982), Aroian (1944) and the Goodman (1960) tests. With Coca-Cola, the z-values for each of these tests are 6.98, 6.90, and 7.00, respectively, indicating that a mediator significantly carried the influence of an independent variable to a dependent variable at a confidence level of 95% (z-value > 1.96).

With respect to the Gap, the z-values from the Sobel (1982), Aroian (1944) and Goodman (1960) tests are 4.15, 4.13, and 4.17, respectively, indicating that a mediator significantly carries the influence of an independent variable to a dependent variable at a 95% confidence level (Baron and Kenny 1986; Preacher and Hayes 2004).

FINDINGS

As depicted in Figure 1, hypothesis testing and data analysis yielded findings that enhance our understanding of *attitudinal loyalty* and *behavioral loyalty* and their influence on the predictive relationships between *meets expectations* and *feeling state* and *(re)purchase intent*. For example:

H1: *Attitudinal loyalty* and *behavioral loyalty* are two distinct constructs. The study found empirical support that *behavioral loyalty* and *attitudinal loyalty* are distinct constructs for the Gap and Coca-Cola. Thus, **H1 is supported.**

H2: *Attitudinal loyalty* has a predictive path that leads to *behavioral loyalty*. The

study found empirical support that *attitudinal loyalty* does have a predictive path that leads to *behavioral loyalty* (the standardized path weights for Coca-Cola and the Gap are .80 and .55, respectively). Thus, **H2 is supported.**

H3: The predictive relationship between *meets expectations* and *(re)purchase intent* is mediated by *behavioral loyalty*. The study found that the relationship path between *meets expectations* and *(re)purchase intent* for each brand is mediated through a predictive path that *meets expectations* leads to *attitudinal loyalty*, which leads to *behavioral loyalty*, which in turn leads to *(re)purchase intent* (see **Figure 1**). For Coca-Cola the indirect effect (Hair et al. 2006) of this mediated path is .27 (.48 * .80 * .72), while the indirect effect is .18 for the Gap (.56 * .55 * .59). Thus, **H3 is supported.**

H4: The predictive relationship between *meets expectations* and *(re)purchase intent* is mediated by *attitudinal loyalty*. The study found that *attitudinal loyalty* does mediate the relationship between *meets expectations* and *(re)purchase intent* for each brand. As depicted in **Figure 1**, the mediating relationship differs with Coca-Cola and the Gap. **For Coca-Cola**, *attitudinal loyalty* mediates the relationship between *meets expectations* and *behavioral loyalty* (indirect effect of .28 (.48 * .80 * .72) for the mediated path). **For the Gap**, *attitudinal loyalty* plays a similar mediating role (indirect effect of .12 (.40 * .55 * .59)). In addition, for the Gap, *behavioral loyalty* mediates the relationship between *attitudinal loyalty* and *(re)purchase intent*, having an indirect effect of .18 (.56 * .55 * .59). Thus, **H4 is supported.** However as indicated, the mediation paths differ for Coca-Cola and the Gap.

H5: The predictive relationship between *affective feeling state* and *(re)purchase intent* is mediated by *behavioral loyalty*.

The study reveals evidence that *behavioral loyalty* does mediate the relationship between *affective feeling state* and *(re)purchase intent* for both Coca-Cola and the Gap. However, the relationship path with each brand is one in which *affective feeling state* leads to *attitudinal loyalty*, which leads to *behavioral loyalty*, which in turn leads to *(re)purchase intent*. The indirect effect of this mediated path is .24 for Coca-Cola (.41 * .80 * .72), and .13 for the Gap (.40 * .55 * .59). Thus, **H5 is supported.**

H6: The predictive relationship between feeling state and (re)purchase intent is mediated by attitudinal loyalty. With respect to the Gap, the study reveals empirical support that *attitudinal loyalty* mediates the predictive relationship between *feeling state* and *(re)purchase intent*. However, there are two paths of mediation. One path is *feeling state* -> *attitudinal loyalty* -> *behavioral loyalty* -> *(re)purchase intent*, which has an indirect effect of .13 (.40 * .55 * .59). The other mediated relationship path for the Gap is *feeling state* -> *attitudinal loyalty* -> *(re)purchase intent*, which has an indirect effect of .13 (.40 * .33). With respect to Coca-Cola, there is only one mediating relationship in that *feeling state* -> *attitudinal loyalty* -> *behavioral loyalty* -> *(re)purchase intent*, which has an indirect effect of .24 (.41 * .80 * .72). Thus, **H6 is supported.** However, the mediation paths are different for the two brands.

DISCUSSION AND CONCLUSIONS

The fundamental necessity for studies such as presented here is primarily based on the need to strengthen our understanding of the satisfaction, loyalty and (re)purchase phenomena and their potential relationships. Knowledge garnered from such research will aid scholar's and practitioners' efforts to develop more effective marketing strategies, which should lead to firms being better positioned to achieve competitive advantages,

which would then strengthen their potential to realize enhanced long-term performance (Woodruff 1997).

For firms with profiles similar to Coca-Cola and the Gap, this study suggests that satisfaction strategies designed to increase consumers' (re)purchase intent also need to reinforce aspects of a firm's product(s) that are associated with consumers' loyalty toward that product(s). For example, most practitioners and theorists are aware that Coca-Cola awakened the wrath of their consumer base in 1985 when they introduced "New Coke" and did away with the traditional Coca-Cola that millions had come to love. Fifty-seven days later they returned to the original formula as "Classic Coke", and eventually withdrew "New Coke" (Collins 1995).

In addition, this study's structural model suggests that with a more complex brand (e.g. the Gap, as compared to Coca-Cola), the model becomes more complicated, suggesting that satisfaction and loyalty models which examine attributes and consequences have the potential to be dissimilar with disparate brands/products. What might be causing this dissimilarity? While Coca-Cola represents the soft drink category which is fairly restrictive and constant, the Gap represents a product class that is multifaceted and more complex, which is reflective of its products being more expensive, entailing greater exclusivity, being more conspicuous, and involving greater consumer involvement (as compared to Coca-Cola) (Bearden and Etzel 1982; Halstead, Jones and Cox 2007). This suggests that strategies for building and sustaining strong *(re)purchase behavior* should differ, in part, as a function of product complexity and involvement.

The greater complexity and level of consumer involvement associated with the Gap's products (e.g. the imagery and social status associated with their products, the various price levels for different products, the quality of service by the employees, and

cleanliness of their stores) may underlie why the structural model indicates that the mediating relationships between *attitudinal loyalty* and *behavioral loyalty* and *(re)purchase intent* are dissimilar for these two brands. Indeed, perhaps we should expect dissimilar models to be revealed across disparate product classes. Thus, marketers of more complex products should probably focus on (using Gap brand products as an example):

- Assuring that the quality of the products sold, including the fit of the clothing and the style and selection of products available, is as the consumer expects (*attitudinal loyalty*);
- Developing a shopping experience that is as “seamless” as possible, with product easily available, and a purchase process that is as simple and enjoyable as possible (*behavioral loyalty*);
- Enhancing the bond developed between the brand and its consumers (*behavioral loyalty* and *attitudinal loyalty*). For example, Chico’s (an upscale women’s clothing retailer) has built a strong consumer following by offering well advertised, high quality fashionable product assortments, as well as through the use of their “Passport” program, which encourages frequent patronage by offering special promotions and ongoing discounts to “Passport” holders.

Based on this study, we believe that future research should examine brands in various product groups in order to further enhance our insights with respect to dissimilar product complexity and different cognitive processes (Zinkhan and Braunsberger 2004). Further, our limited understanding of the relationship between one’s (re)purchase intent and their actual (re)purchase behavior of a

brand indicates that future studies should build upon the one discussed here in order to strengthen our understanding of the predictive effect of intent on behavior.

As with any study, ours was subject to limitations. Because we employed only two brands that are each well known and relatively affordable, it is conceivable that these aspects of Coca-Cola and the Gap played a role in the study’s results. There is evidence in the literature that the outcomes of satisfaction vary in different sectors. For example, it has been shown that satisfaction can positively impact profitability for firms in sectors such as consumer staples, but not in the transportation sector (Yeung and Ennew 2001). By broadening the number and types of products that are studied, the ability to generalize the results of the consumer satisfaction model utilized in the current study will be enhanced. Thus, future study could include brands that are more expensive, less well-known, and are exclusive or conspicuous. This is because people are typically less influenced by others when deciding about purchasing and consuming brands such as used in this study, suggesting that our findings may not be reflective of other brands or product classes (Bearden and Etzel 1982). It may be that the different scales used for Coca-Cola and the Gap may have contributed to the somewhat different findings, and results obtained in a study conducted with university students may not be representative of other age or socioeconomic groups. And, lastly, to help address the limited amount of study that has examined the correlation between (re)purchase intent and actual (re)purchase behavior, future studies need to empirically test the predictive relationship between these constructs.

REFERENCES

- Aaker, David A. (1996), *Building Strong Brand*, The Free Press: New York, NY.

- Aroian, Leo. A. (1944), "The probability function of the product of two normally distributed variables," *Annals of Mathematical Statistics*, 18, 265-271.
- Bandyopadhyay, Subir, Kunal Gupta and Laurette Dube (2005), "Does Brand Loyalty Influence Double Jeopardy? A Theoretical and Empirical Study," *The Journal of Product and Brand Management*, 4 (7), 414-423.
- Baron, Reuben. M. and Kenny, David. A. (1986), "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bearden, William O. and Michal J. Etzel (1982), "Reference Group Influence on Product and Brand Purchase Decisions," *Journal of Consumer Research*, 9 (2), 183-194.
- Bei, Lien-Ti and Yu-Ching Chiao (2001), "An integrated model for the effects of perceived product, perceived service quality, and perceived price fairness on consumer satisfaction and loyalty," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 14, 25-140.
- Belson, William A. (1981), *The Design and Understanding of Survey Questions*, Gower Publishing, England.
- Bennett, Rebekah and Sharyn Rundle-Thiele (2004), "Consumer Satisfaction Should not be the Only Goal," *The Journal of Services Marketing*, 18 (6/7), 514-523.
- Berger, Ida E. and Andrew A. Mitchell (1989), "The Effect of Advertising on Attitude Accessibility, Attitude Confidence, and the Attitude-Behavior Relationship," *Journal of Consumer Research*, 16, 269-279.
- Bradburn, Norman and Seymour Sudman (1978), "Question Threat and Response Bias," *Public Opinion Quarterly*, 42 (2), 221-234.
- Cadotte, Ernest R., Robert B. Woodruff and Roger L. Jenkins (1987), "Expectations and Norms in Models of Consumer Satisfaction," *Journal of Marketing Research*, 24 (3), 305-314.
- Cardozo, R. (1965), "An Experimental Study of Consumer Effort, Expectation, and Satisfaction," *Journal of Marketing Research*, 2 (3), 244-249.
- Chandon, Pierre, Vicki G. Morwitz and Werner J. Reinartz (2004), "The Short-and-Long-Term Effects of Measuring Intent to Repurchase," *Journal of Consumer Research*, 31 (3), 566-572.
- Churchill, Gilbert A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (1), 64-73.
- Clerfeuille, Fabrice and Yannick Poubanne (2003), "Differences in the contributions of elements of service to satisfaction, commitment and consumers' share of purchase: A study from the tetraclass model," *Journal of Targeting, Measurement and Analysis for Marketing*, 12 (1), 66-81.
- Collins, Glen (1995), "Ten Years Later, Coca-Cola Laughs at New Coke," *New York Times*, April 11th edition, Section D 4.
- Dawar, Niraj (1998), "Product-harm crises and the signaling ability of brands," *International Studies of Management & Organization*, 28 (3), 109-119.
- Day, George S. (1969), "A Two-Dimensional Concept Of Brand Loyalty," *Journal of Advertising Research*, 9(3), 29-35.
- Dick, Alan S. and Kunal Basu (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of Academy of Marketing Science*, 22 (2), 99-113.
- Dillman, Don A. (1978), *Mail and Telephone Surveys*, John Wiley Sons: New York, NY.
- _____ (2000), "Chapter Four: Constructing the Questionnaires," in *Mail and Internet Surveys: The Total Design Method*, New York: John Wiley & Sons, 79-148.
- Dimitriades, Zoe S. (2006), "Consumer Satisfaction, Loyalty and Commitment in Service Organizations," *Management Research News*, 29 (2), 782-800.
- East, Robert, Philip Gendall, Kathy Hammond and Wendy Lomax (2005), "Consumer Loyalty: Singular, Additive or Interactive?," *Australian Marketing Journal*, 13 (2), 10-26.
- Farquhar, Peter H. (1994), "Strategic challenges for branding," *Marketing Management*, 3 (2), 8-15.
- Fishbein, Martin and Icek Ajzen (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley: Reading, MA

- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18, 39-50.
- Freling, Traci H. and Lukas P. Forbes (2005), "An examination of brand personality through methodological triangulation," *Journal of Brand Management*, 13 (2), 148-162.
- Garver, Michael S. and John T. Mentzer (1999), "Logistics Research Methods: Employing Structural Equation Modeling to Test for Construct Validity," *Journal of Business Logistics*, 20 (1), 33-57.
- Golicic, Susan L., S. Allen Broyles and Robert B. Woodruff (2003), "A Conceptual Look at the Influence of Relationship Structure on the Disconfirmation Process in a Business-to-Business Context," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 119-131.
- Goodman, L. A. (1960), "On the exact variance of products," *Journal of the American Statistical Association*, 55, 708-713.
- Hair, Joseph F., Jr., William C. Black, Barry J. Babin, Rolph E. Anderson and Ronald L. Tatham (2006), *Multivariate Data Analysis*, sixth edition, Prentice Hall: Upper Saddle River, N.J.
- Halstead, Diane, Michael A. Jones and April N. Cox (2007), "Satisfaction Theory and the Disadvantaged Consumer," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 20 (15), 15-35.
- Holbert, R. Lance and Michael T. Stephenson (2003), "The importance of indirect effects in media effects research: testing for mediation in structural equation modeling," *Journal of Broadcasting & Electronic Media*, 47(4), 556 – 572.
- Jacoby, Jacob and David B. Kyner (1973), "Brand Loyalty Vs. Repeat Purchasing Behavior," *Journal of Marketing Research*, 10, 1-9.
- _____, and Robert W. Chestnut (1978), *Brand Loyalty: Measurement and Management*, New York: Wiley.
- _____, _____ and William A. Fisher (1978), "A Behavioral Process Approach to Information Acquisition in Nondurable Purchasing," *Journal of Marketing Research*, 15 (4), 532-544.
- Jones, Thomas O. and W. Earl Sasser, Jr. (1995), "Why Satisfied Customers Defect," *Harvard Business Review*, 73 (6), 88-99.
- Judd, Charles. M. and David A. Kenny (1981), "Process analysis: Estimating mediation in evaluation research," *Evaluation Research*, 5, 602-619.
- Jun, Sunkyu, Yong J. Hyun, James W. Gentry and Chang-Seok Song (2001), "The Relative Influence of Affective Experience on Consumer Satisfaction Under Positive Versus Negative Discrepancies," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 14, 141-154.
- Keller, Kevin L. (2003), *Market Research and Analysis*, 3rd ed., Richard D. Irwin: Homewood, IL.
- Liska, Allen E. (1984), "A Critical Examination of the Causal Structure of the Fishbein/ Ajzen Attitude-Behavior Model," *Social Psychology Quarterly*, 47 (1), 61-74.
- Lymperopoulos, Constantine and Ioannis E. Chaniotakis (2008), "Price Satisfaction and Personnel Efficiency as Antecedents of Overall Satisfaction from Consumer Credit Products and Positive Word of Mouth," *Journal of Financial Services*, 13 (1), 63-71.
- MacKinnon, David. P., Chondra M. Lockwood, Jeanne M. Hoffman, Stephen G. West and Virgil Sheets (2002), "A comparison of methods to test the significance of the mediated effect," *Psychological Methods*, 7(1), 83-104.
- Mallinckrodt Brent, W. Todd Abraham, Meifen Wei, Daniel W. Russell (2006), "Advances in testing the statistical significance of mediation effects," *Journal of Counseling Psychology*, 53(3), 372-378.
- Maurer, Todd J. and Stuart A. Tross (2000), "SME Committee vs. Field Job Analysis Ratings: Convergence, Cautions, and a Call," *Journal of Business and Psychology*, 14 (3), 489-500.
- Oliver, Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," *Journal of Marketing Research*, 17 (4), 460-469.
- _____, (1997), *Satisfaction: A Behavioral Perspective on the Consumer*, Irwin/McGraw-Hill: New York, NY.
- _____, (1999), "Whence Consumer Loyalty," *Journal of Marketing*, 63, 33-44.

- Pappu, Ravi and Pascale Quester (2006), "Does Customer Satisfaction Lead to Improved Brand Equity? An Empirical Examination of Two Categories of Retail Brands," *The Journal of Product and Brand Management*, 15 (1), 4-14.
- Payne, Stanley (1951), *The Art of Asking Questions*, Princeton University Press: Princeton, NJ.
- Podsakoff, Philip M. and Dennis W. Organ (1986), "Self-Reports in Organizational Research: Problems and Prospects," *Journal of Management*, 12 (4), 531-544.
- Powers, Thomas L. and Dawn Bendall Valentine (2008), "A Review of the Role of Satisfaction, Quality, and Value on Firm Performance," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 21, 80-101.
- Preacher, Kristopher J. and Andrew F. Hayes (2004), "SPSS and SAS procedures for estimating indirect effects in simple mediation models," *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.
- _____ and _____ (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models," *Behavior Research Methods*, 40, 879-891.
- Pritchard, M.P., Havitz, M.E., and Howard, D.R. (1999), "Analyzing the Commitment-Loyalty Link in Service Contexts," *Journal of the Academy of Marketing Science*, 27 (3), 333-348.
- Reast, Jon D. (2005), "Brand Trust and Brand Extension Acceptance: The Relationship," *Journal of Product and Brand Management*, 14 (1), 4-13.
- Reichheld, Frederick F. (1994), "Loyalty and the Renaissance of Marketing", *Marketing Management*, 2 (40), 10-21.
- _____ (1996), "Wrong Move," *Inc.*, 18 (3), 19-20.
- Ross, Robert H., S. Allen Broyles and Thaweephan Leingpibul (2008), "Alternative measures of satisfaction in cross-cultural settings," *Journal of Product and Brand Management*, 17 (2/3), 82-91.
- Russell-Bennett, Rebekah, Janet R. McColl-Kennedy and Leonard V. Coote (2007), "Involvement, Satisfaction, and Brand Loyalty in a Small Business Services Settings," *Journal of Business Research*, 60 (12), 1253-1264.
- Shrout, Patrick. E. and Niall Bolger (2002), "Mediation in experimental and nonexperimental studies: New procedures and recommendations," *Psychological Methods*, 7(4), 422-445.
- Sobel, Mark. E. (1982), "Asymptotic intervals for indirect effects in structural equations models," in S. Leinhardt (Ed.), *Sociological methodology*, San Francisco: Jossey-Bass, 290-312.
- Steenkamp, Jan-Benedict E. M. and Hans Baumgartner (2000), "On the use of structural equation models for marketing modeling," *International Journal of Research in Marketing*, 17 (2/3), 195-202.
- Szymanski, David M. and David H. Henard (2001), "Customer Satisfaction: A Meta-Analysis of the Empirical Evidence," *Journal of the Academy of Marketing Science*, 29 (1), 16-35.
- Thamaraiselvan, N. and J. Raja (2008), "How do Consumers Evaluate Brand Extensions – Research Findings from India," *Journal of Services Research*, 8 (1), 43-62.
- Tucker, W.T. (1964), "The Development of Brand Loyalty," *Journal of Marketing Research*, 1 (3), 32-35.
- Vanhamme, Joelle and Dirk Snelders (2001), "The Role of Surprise in Satisfaction Judgments," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 18, 27-45.
- Westbrook, Robert A. (1987), "Product/Consumption-Based Affective Responses and Postpurchase Processes," *Journal of Marketing Research*, 24 (3), 258-270.
- Woodruff, Robert B. (1997), "Customer Value: The Next Source for Competitive Advantage," *Journal of the Academy of Marketing Science*, 25 (2), 139-153.
- Yeung, Matthew C. H. and Christine T. Ennew (2001), "Measuring the Impact of Customer Satisfaction on Profitability: A Sectoral Analysis," *Journal of Targeting, Measurement and Analysis for Marketing*, 10 (2), 106-116.

Yoo, Boonghee, Naveen Donthu and Sungho Lee (2000), "An Examination of Selected Marketing Mix Elements and Brand Equity," *The Journal of the Academy of Marketing Science*, 28 (20), 195-211.

Zinkhan, George M. and Karin Braunsberger (2004), "The complexity of consumers' cognitive structures and its relevance to consumer behavior," *Journal of Business Research*, 57 (6), 575-582.

Send Correspondence Regarding This Article to:

S. Allen Broyles, Ph.D.
Associate Professor of Marketing
California State University, Fullerton
Mihaylo College of Business and Economics
Fullerton, CA 92834-6848
E-mail: sbroyles@Exchange.FULLERTON.EDU

RELATING SWITCHING COSTS TO POSITIVE AND NEGATIVE WORD-OF-MOUTH

Richard Lee, University of South Australia
Jenni Romaniuk, University of South Australia

ABSTRACT

Scholars typically cast switching costs as entrapments that deter customers from exiting, thereby provoking harmful word-of-mouth. In this article we expand this restricted view by arguing that switching costs relate differently to positive word-of-mouth (PWOM) and negative word-of-mouth (NWOM), depending on the combinations of switching costs and switching intentions.

The findings of our research reinforce studies that suggest switching costs impede switching intentions. However, PWOM increases and NWOM decreases with increasing switching costs. Segregating by customer segments, *calculative* customers who intend to stay but not because high switching costs hinder switching, give the strongest PWOM and have the most PWOM givers. *Captive* customers entrapped by high switching costs give strong NWOM and have high numbers of NWOM givers. While both segments perceive low switching costs, *committed* customers with low switching intentions give stronger PWOM than *disloyal* customers do. Likewise, *disloyal* customers with high switching intentions give stronger NWOM than *committed* customers do. There are also more (less) PWOM (NWOM) givers with committed than with disloyal customers.

This article offers a framework to explain the complex relationships among switching costs, switching intentions, and WOM. The findings should help firms to understand switching costs' roles in retaining customers, identify and harness PWOM supporters, and minimize damages with NWOM distracters.

INTRODUCTION

Switching costs are perceived barriers that can deter customers from leaving especially when negative experiences occur (Jones et al. 2007; Klemperer 1987; Sharma and Patterson 2000). Unlike attributes, such as service quality or value, which entice customers to stay by enhancing loyalty, switching costs discourage customer exits via inconveniences and penalties. Highlighting the importance of switching costs in customer retention, Burnham et al. (2003, p. 119) contend that "marketing's pursuit of the customer satisfaction paradigm has blinded it to the importance of switching costs, or worse, that the field has 'blacklisted' switching costs as customer harming and thus unworthy of study." Switching costs, the authors continue, may be more effective than satisfaction in retaining customers. By ignoring switching costs, scholars and managers alike may over-emphasize the role of satisfaction on customer retention (Bendapudi and Berry 1997; Fornell 1992).

Research typically relates perceptions of switching costs to switching intentions or behavior, whereby consumers who perceive high switching costs are less likely to switch brands (Burnham et al. 2003; Patterson and Smith 2003; Yang and Peterson 2004). Prevented from switching, these consumers may engage in harmful word-of-mouth (WOM) behavior (Jones et al. 2002, 2007; Maute and Forrester 1993).

These findings, however, offer a restricted view of the relationship between switching costs and WOM. The premise is that customers who perceive high switching costs may want to switch, and when

prevented from doing so, they retaliate through negative WOM. What if consumers perceive high switching costs, but have no intentions or desires to switch in the first place? Likewise, consumers may perceive low switching costs, are not blocked from leaving by switching barriers, and choose to stay. How would the relationship between switching costs and WOM differ under these situations? Furthermore, would switching costs give rise to positive rather than negative WOM, and under what circumstances would this occur?

As the 2x2 matrix in Table 1 illustrates, consumers may fall into one of four segments depending on their perceptions of switching costs and switching intentions. Past studies mostly focused on the top right segment – where consumers intended to switch but could not due to high switching costs – and reported that consumers entrapped by high switching costs tended to harm firms through negative WOM (e.g. Jones et al. 2002, 2007; Maute and Forrester 1993).

TABLE 1

Segmenting Customers by Switching Costs and Switching Intentions

		Switching Costs	
		Low	High
Switching Intentions	High	<i>Disloyal customers</i> intend to switch, and low switching costs may not deter them.	<i>Captive customers</i> intend to switch, but are entrapped by high switching costs.
	Low	<i>Committed customers</i> choose to stay notwithstanding low switching costs.	<i>Calculative customers</i> choose to stay, but not because high switching costs entrap them.

No study, however, has explored WOM behavior across the four segments. Bridging re-emerging studies in switching costs (Jones et al. 2007) and WOM (East et al. 2007; Sweeney et al. 2008), we offer a framework for examining WOM behavior in each segment. Extending research that segregates positive from negative WOM (East et al. 2007; Samson 2006; Sweeney et al. 2008), we further determine how positive

word-of-mouth (PWOM) and negative word-of-mouth (NWOM) may differ across the segments, and seek answers to the question: *How do the combinations of perceived switching costs and switching intentions relate to the strength and amount of PWOM and NWOM?*

Given the influence of WOM on consumer behavior, researchers often lament the lack of studies in “this important but

neglected area” (East et al. 2007, p. 183; Sweeney et al. 2008). This study will shed additional light on the complex nature of WOM and the roles of switching costs in retaining customers. The findings will help firms understand what makes consumers give PWOM or NWOM, tap the potential of PWOM supporters, and minimize damages from NWOM distracters. As WOM may be more effective than advertising (Day 1971; Murray 1991), the findings from this study will also help managers to develop marketing programs that harness WOM to increase sales.

CONCEPTUAL DEVELOPMENT

Switching Costs Can Deter Switching

Acting as inconveniences or penalties, switching costs are perceived barriers that can deter consumers from changing brands (Jones et al. 2007; Klemperer 1987; Yang and Peterson 2004). For example, a survey of UK bank customers found that dissatisfied customers remained because they perceived time, effort, and uncertainty costs as higher than the potential benefits from switching banks (Panther and Farquhar 2004). Similarly, Burnham et al.'s (2003) study of credit card and long-distance telephone customers showed that switching costs explained more loyalty intentions than satisfaction did. As switching costs did not interact with satisfaction to determine loyalty intentions, the two factors acted independently on loyalty intentions. The authors concluded that firms should use switching costs as well as satisfaction to maximise customer retention, a call supported by others (Bendapudi and Berry 1997; Patterson and Smith 2003). While customer satisfaction makes it costly for competitors to take away a brand's customers, switching barriers make it costly for customers to switch brands (Fornell 1992).

Bendapudi and Berry (1997) contend that relationship commitments are either

dedication-based, due to customer desires to maintain relationships, or constraint-based, due to high exit barriers such as economic, social, or psychological costs. Constraint-based relationships tend to last so long as the constraints are in place. Once the constraints no longer apply, customers may not want or be obliged to continue the relationships. Switching costs are analogous to constrained-based commitment (Gustafsson et al. 2005; Verhoef et al. 2002). Therefore, using switching costs in lieu of positive actions, such as improving service quality, may fail in the long run, particularly when dissatisfaction persists (Jones et al. 2000).

Despite switching costs' potential downside with customer relationship, previous research reveals that switching costs are effective switching deterrents. In replicating these studies, we offer the following research hypothesis:

- H1:** Overall, customers who perceive high switching costs have low intentions to switch brands.

Switching Costs Might Not Engender Negative Word-of-Mouth

While studies generally report a positive relationship between switching costs and switching intentions, their underlying assumption is that switching costs obstruct what customers wish to do – switching –, thereby giving rise to dissatisfaction and harmful word-of-mouth (e.g., see Jones et al. 2000, 2007; Maute and Forrester 1993). The findings may be reasonable if research considers only entrapped customers, those who intend to switch but could not due to high perceived switching costs.

However, given the intensity of competition with most consumer markets, firms often offer benefits to customers in exchange for locking in the customers through switching costs. Customers may recognize the high switching costs, but they

may not be dissatisfied, have no intentions to exit, and may willingly accept the high switching costs in order to enjoy the benefits. For example, loyalty programs, where customers accumulate points through spending and redeem the points for goods or services, are a form of switching costs as customers have to forfeit their accumulated points upon exiting a firm (Kumar and Shah 2004; Yi and Jeon 2003).

Similarly, within this study's context, mobile service providers often provide free or subsidized handsets coupled with long-term contracts with punitive penalties for premature terminations (Choi et al. 2001; Valletti and Cave 1998). Although customers recognize the switching costs associated with the contracts, they willingly accept the contracts in order to get the handsets. Indeed, they may even favor the firm over its competitors to agree to be locked-in in the first place.

Support for the argument that switching costs need not engender NWOM also comes from Verhoef et al. (2002), who initially hypothesized that customers who maintained relationships with the company out of anticipated termination and switching costs were less likely to make positive referrals. However, their study involving 6,525 customers of a Dutch insurance company found a negative and nonsignificant result ($\beta = -.02$, $p = .26$). This suggests that customers with high perceived switching costs may indeed give PWOM. Therefore, contrary to past studies, we expect the relationship between switching costs and word-of-mouth to be captured in addressing the following two research hypotheses:

H2a: Overall, customers with high switching costs give stronger PWOM than those with low switching costs do.

H2b: Overall, customers with high switching costs give weaker NWOM than those with low switching costs do.

Expanding the Relationships among Switching Costs, Switching Intentions, and Word-of-Mouth

The two research hypotheses above suggest that the relationships among switching costs, switching intentions, and WOM are complex. It appears that past studies mainly tackle the top right segment in the 2x2 matrix in Table 1, where captive consumers intend to switch but cannot due to high switching costs, and are provoked into giving NWOM. As is argued in the following sections, consumers may fall into one of four segments depending on their perceived switching costs and switching intentions. Then depending on the combination of switching costs and switching intentions, NWOM or PWOM may ensue.

Captive Customers

As research hypothesis H1 posits, switching costs are effective switching deterrents. Locked into relationships that they would rather not be in, *captive consumers* may become dissatisfied or even hostile, and may retaliate by giving NWOM (Jones et al. 2000, 2007; Maute and Forrester 1993). As Singh (1990) surmises, customers that could not exit a firm due to high switching costs have no choice but to seek redress through NWOM.

Similarly, some scholars suggest that customers are bound to a brand or firm through either positive affect or constraints (Bendapudi and Berry 1997; Gustafsson et al. 2005; Verhoef et al. 2002). Constraint-based customers maintain relationships out of high-anticipated termination or switching costs, and they tend not to refer or may even provide

negative referrals about a brand. This is analogous to Dick and Basu's (1994) concept of spurious loyalty, where customers remain with a brand despite possessing low favorable disposition for the brand.

With captive customers, high switching costs may lead to dissatisfaction (Patterson and Smith 2003) or negative emotions (Jones et al. 2007), and subsequently NWOM (Anderson 1998; Richins 1983; Szymanski and Henard 2001). We therefore hypothesize that among the four segments in Table 1:

H3a: Captive customers give the strongest NWOM

H3b: Captive customers have the highest proportion of NWOM givers

Calculative Customers

Although exit barriers may increase the costs of terminating a relationship, they do not necessarily bring about dissatisfaction (Maute and Forrester 1993). Customers may recognize the high switching costs, but they may not be dissatisfied with the relationship and have no intentions to switch brands in the first place. This means that determining the impact of switching costs on WOM without accounting for the context in which the switching costs take place may produce misleading findings.

As mentioned earlier, within this research's context, mobile service providers often provide free or subsidized handsets bundled with long-term contracts with punitive exit clauses (Choi et al. 2001; Valletti and Cave 1998). Although these contracts may serve as switching costs to prevent customers from switching, customers willingly accept the contracts in order to get the handsets. In this sense, these customers are *calculative* in that they are willing to bear high switching costs – in exchange for

benefits – because they favor the firm and have low or no intentions to switch in the first place.

Lam et al. (2004) provide further support for this argument. In a study of customer satisfaction with courier services, the authors first demonstrated that customer satisfaction related directly to customer loyalty. Then they showed that rather than a direct relationship between switching costs and loyalty, switching costs positively moderated the relationship between customer satisfaction and loyalty. That is, when switching costs were high, the strength of the relationship between satisfaction and loyalty increased. Hence, among the four segments, we hypothesize that:

H4a: Calculative customers give the strongest PWOM

H4b: Calculative customers have the highest proportion of PWOM givers

Committed and Disloyal Customers

Unlike captive and calculative customers who face high switching costs, committed and disloyal customers perceive low switching costs. We define *committed customers* as those with no or low intentions to switch brands, notwithstanding low switching costs. That is, had these customers wish to leave their current brands, the low switching costs would not have prevented them from doing so. We further define *disloyal customers* as those who intend to switch brands, and low switching costs are unlikely to hinder their intentions. These two customer segments, committed and disloyal, are analogous to Dick and Basu's (1994) concepts of loyalty and no-loyalty, respectively.

As low switching costs are less pertinent to their behavioral intentions, committed and disloyal customers' intentions

to stay or switch may stem from their underlying disposition to a brand (Dick and Basu 1994; Gounaris and Stathakopoulos 2004; Pritchard et al. 1999). Drawing on literature that links satisfaction to WOM, satisfied customers tend to give PWOM, just as dissatisfied customers tend to elicit NWOM (Anderson 1998; Mazzarol et al. 2007; Zeithaml et al. 1996). Hence, comparing committed and disloyal customers, we hypothesize that:

H5a: Committed customers give stronger PWOM than disloyal customers do.

H5b: Disloyal customers give stronger NWOM than committed customers do.

In addition, we expect that:

H6a: There are proportionally more PWOM givers with committed than with disloyal customers

H6b: There are proportionally more NWOM givers with disloyal than with committed customers

METHODOLOGY

A subscription service –mobile phones – served as the research context. With subscription services, consumers typically use one brand for long periods, and switch totally from the brand before adopting another (Romaniuk and Sharp 2003; Sharp et al. 2002). This contrasts with typical consumer goods, such as soft drinks, where consumers may buy multiple brands at each purchase incidence and over short inter-purchase periods (Sharp et al. 2002). As subscription services are intangible and consumers are tied to a brand for long periods, WOM behaviors

may be accentuated with such services (Murray 1991; Samson 2006). Hence, we pick mobile phone service as the research context.

The study was operationalized in Singapore. Common with mature telecommunication markets with intense competition (e.g., see Choi et al. 2001; Valletti and Cave 1998), Singapore mobile service providers often bundle their subscription services with free or subsidized handsets. Customers who want the handsets must agree to stay with the providers for extended periods, usually two years, and face rather severe penalties should they terminate prematurely. As such, the lock-in contracts act as switching costs.

To reduce location bias, mall-intercept surveys took place in four different geographical regions of Singapore. For each region, data were collected at two shopping malls, twice daily, and over three days. Stratifying the surveys by region ensured that the number of respondents in each region was similar to the proportion indicated by a 2000 population census (SingStat 2000). Aided by structured questionnaires, six trained interviewers approached people at mall exits. After discarding 16 questionnaires for multiple missing data or invalid responses (such as when respondents answered all 1's or 7's in their questionnaires), the final sample contained 395 cases, with 180 males and 215 females. Respondents ranged in age from 14 to 64 years (mean = 27 years; median = 25 years), owned a mobile phone, and had active accounts with local mobile phone service providers.

Measures

The survey adapted scales from relevant studies, and used confirmatory factor analyses to operationalize the constructs. To reduce scaling effects (Sudman et al. 1996), all evaluative questions used the same seven-point Likert scale anchored by strongly disagree and strongly agree. The questions

were randomly ordered so as to reduce order effects (Bickart 1993).

As with most WOM research, measuring or observing actual WOM behaviors is unfeasible as respondents can engage in the behavior at any time. Also, simply asking respondents to recall their past WOM behaviors may produce recall bias. East et al. (2007) suggest that rather than volunteering the information, people mostly give WOM when others ask for their opinion. Hence, we contend that subjecting WOM measures to a condition of what respondents would say when someone seeks their advice may reduce recall bias as respondents do not need to recall past behavior. Based on this conditional willingness, the item for *PWOM* was "If someone were to ask you, you would recommend your current mobile service provider to him/her." Similarly, the measure for *NWOM* was "If someone were to ask you,

you would recommend that he/she shouldn't use your current mobile service provider."

Switching costs were perceived barriers that deter customers from switching mobile service providers. Similar to researchers that operationalize switching costs as a multi-item factor, we adapted the three-item scale from Jones et al. (2000) to operationalize switching costs as a factor of the time, effort, and monetary costs in switching mobile service providers. *Switching intentions* were a three-item factor measuring respondents' intentions to switch from their current mobile service providers. The items, two of which were reversed-coded, stemmed from two studies on service loyalty (Patterson and Smith 2003; Sharma and Patterson 2000).

Correlation coefficients among the items ranged from .08 to .55, well below the .9 collinearity threshold (Hair et al. 2006). For the two factors, switching costs and switching

TABLE 2
Descriptive and Test Statistics for
Switching Costs and Switching Intentions

Item	Descriptive Statistics	Factor Loading	Bartlett's Test	Cronbach's Alpha
Switching Costs				
SWC1: For me, the costs in time effort, and money to change service providers are high	Mean=4.92 Range=1 to 7 Std Dev=1.4	.818	$\chi^2 = 310, df = 3, p < .001$	.771
SWC2: It would take a lot of time, money and effort for me to switch to another service provider	Mean=4.68 Range=1 to 7 Std Dev=1.484	.850		
SWC3: In general, I find it a hassle for me to change service providers	Mean=4.95 Range=1 to 7 Std Dev=1.398	.816		
Switching Intentions				
SWI1: I intend to switch to another service provider in the near future	Mean=4.44 Range=1 to 7 Std Dev=1.664	.791	$\chi^2 = 296, df = 3, p < .001$	.742
SWI2: I made the right choice by using MSP instead of another service provider	Mean=4.72 Range=1 to 7 Std Dev=1.222	.792		
SWI3: I intend to continue using MSP	Mean=4.99 Range=1 to 7 Std Dev=1.349	.870		

intentions, confirmatory factor analyses were carried out with Bartlett's test of sphericity. Cronbach's alpha indicated the reliability. Table 2 shows acceptable results for the confirmatory factor analyses and reliability assessments.

Pearson's correlation coefficient between switching costs and switching intentions was .289 ($p < .001$), below the collinearity threshold of .9, and indicated discriminant validity (Hair et al. 2006). We further tested discriminant validity using Fornell and Larcker's (1981) procedure. Discriminant validity was assessed by comparing the variance extracted estimates of a pair of constructs with the square of the correlation between the constructs, and repeating the test for all construct-pairs. Variance extracted estimates for switching costs ($VE = .686$) and switching intentions ($VE = .502$) exceeded the squared correlations between the two constructs (square of $r = .083$). Hence, both factors possessed discriminant validity.

In order to test the hypotheses across the four segments in Table 1, switching costs and switching intentions were each divided into terciles according to their factor scores. The top tercile represented high switching costs or switching intentions, while the third tercile represented low switching costs or switching intentions. Similar to procedures adopted by other researchers, the middle terciles were discarded (Price et al. 2006; Schofield et al. 2001).

RESULTS

Pearson's two-tailed correlation tests indicated that switching costs related positively to switching intentions ($r = .289$, $p < .001$), positively to PWOM ($r = .282$, $p < .001$), and negatively to NWOM ($r = -.161$, $p = .001$). These results supported H1, H2a, and H2b respectively.

Table 3 gives the mean scores and standard deviations of PWOM and NWOM in

TABLE 3

Mean and Standard Deviations of PWOM and NWOM for Customer Segments

PWOM Mean	Low Switching Costs	High Switching Costs
High Switching Intentions	<i>Disloyal</i> 3.78 (SD=1.009) n=124	<i>Captive</i> 3.96 (SD=0.992) n=75
Low Switching Intentions	<i>Committed</i> 5.22 (SD=1.215) n=64	<i>Calculative</i> 5.63 (SD=1.014) n=132
NWOM Mean	Low Switching Costs	High Switching Costs
High Switching Intentions	<i>Disloyal</i> 4.12 (SD=1.266) n=124	<i>Captive</i> 4 (SD=1.252) n=75
Low Switching Intentions	<i>Committed</i> 2.55 (SD=1.391) n=64	<i>Calculative</i> 2.6 (SD=1.295) n=132

each of the four segments. A one-way ANOVA test indicated that the mean scores of PWOM (F -score = 84.534, $df = 3$, $p < .001$) and NWOM (F -score = 44.016, $df = 3$, $p < .001$) differed significantly across the four segments.

Table 4 shows the post-hoc test results using Tukey HSD for multiple pairs of

segment means. With PWOM, all pairs of segment means were significantly different, except for the disloyal-captive segment pair. With NWOM, all pairs of segment means were significantly different, except for the disloyal-captive and committed-calculative segment pairs.

TABLE 4

Results of ANOVA Post Hoc Test using Tukey HSD

Dependent Variable: Positive Word-of-Mouth (PWOM)				
Segment (I)	Segment (J)	Mean Difference (I-J)	Std. Error	Sig.
Disloyal	Captive	-.178	.153	.650
	Committed	-1.436	.161	.000
	Calculative	-1.847	.131	.000
Captive	Committed	-1.259	.178	.000
	Calculative	-1.669	.151	.000
Committed	Calculative	-.410	.159	.050
Dependent Variable: Negative Word-of-Mouth (NWOM)				
Disloyal	Captive	.121	.189	.919
	Committed	1.574	.199	.000
	Calculative	1.522	.162	.000
Captive	Committed	1.453	.220	.000
	Calculative	1.402	.187	.000
Committed	Calculative	-.052	.197	.994

Table 3 and 4 reveal that among the four segments, captive customers had significantly stronger NWOM than calculative and committed customers do. However, the difference in mean between captive and disloyal customers was non-significant. This result failed to support H3a, which hypothesized that captive customers give the most NWOM.

Similarly, hypothesis H3b – that captive customers had the highest proportion

of NWOM givers – was rejected as disloyal customers (36%) had the highest proportion of NWOM givers. Nevertheless, captive customers (28%) still had proportionally more NWOM givers than calculative (8%) and committed (3%) customers did.

The results in Tables 3 and 4 supported H4a and H4b. With calculative customers, PWOM was stronger than and significantly different from the other three

segments. Calculative customers (83%) also had the highest proportion of PWOM givers.

Compared with disloyal customers, committed customers gave significantly stronger PWOM, thus supporting H5a. Hypothesis H5b found support as disloyal customers gave stronger NWOM than committed customers did. Finally, H6a and H6b were supported, as there were proportionally more PWOM givers and proportionally less NWOM givers, respectively, with committed than with disloyal customers.

In order to determine the proportion of PWOM or NWOM givers in each customer

segment, we counted only respondents who answered agree to strongly agree (five to seven on a seven-point Likert scales) regarding their PWOM or NWOM. This method of counting WOM givers resembled Reichheld's (2003) Net-Promoter Score (NPS) scale. Table 5 shows the proportion of respondents who gave PWOM or NWOM in each segment. As an example, out of 124 disloyal customers, 28 or 23% of them were PWOM givers. A chi-square test indicated that the number of PWOM ($\chi^2 = 88.773$, $df = 3$, $p < .001$) and NWOM givers ($\chi^2 = 52.190$, $df = 3$, $p < .001$) differed significantly across the four segments.

TABLE 5

Proportions of PWOM and NWOM Givers across Customer Segments

PWOM	Low Switching Costs	High Switching Costs
High Switching Intentions	<i>Disloyal</i> 28 out of 124 (23%)	<i>Captive</i> 25 out of 75 (33%)
Low Switching Intentions	<i>Committed</i> 48 out of 64 (75%)	<i>Calculative</i> 110 out of 132 (83%)

NWOM	Low Switching Costs	High Switching Costs
High Switching Intentions	<i>Disloyal</i> 45 out of 124 (36%)	<i>Captive</i> 21 out of 75 (28%)
Low Switching Intentions	<i>Committed</i> 2 out of 124 (3%)	<i>Calculative</i> 11 out of 132 (8%)

DISCUSSION AND CONCLUSIONS

This study provides a framework for investigating the relationships among switching costs, switching intentions, and word-of-mouth (WOM). It argues that past studies provide a restricted view of switching costs by treating switching costs as impediments that harm customer relationships and provoke negative word-of-mouth. It

shows that, contrary to past studies, switching costs may relate to positive word-of-mouth (PWOM) or negative word-of-mouth (NWOM) depending on the combinations of switching costs and switching intentions.

The results reinforce past studies, which suggest that switching costs can deter switching. Indeed, using switching costs to help retain customers is a common marketing strategy among firms (e.g., see Choi et al.

2001; Valletti and Cave 1998). However, these companies should be wary that switching costs may also hinder customer acquisition efforts. Potential customers may find switching costs unattractive, and turn away from buying the brand (Burnham et al. 2003; Fornell 1992).

Addressing the research question on how the combinations of switching costs and switching intentions may relate to the strength and amount of PWOM and NWOM, we show that contrary to past research, switching costs need not be an entrapment that produces dissatisfaction and NWOM. Indeed, PWOM strengthens and NWOM weakens with increasing switching costs.

An explanation may be that as firms lock in customers by luring them with incentives, customers willingly accept high switching costs in return for the incentives. This suggests that customers who are willing to accept high switching costs in the first place are probably satisfied with a brand, and harbour no intentions to leave the brand. These results may also help to explain why Jones et al. (2007) initially hypothesized that switching costs gave rise to NWOM, but failed to find a significant relationship between switching costs and NWOM.

Taken together, the above findings have two implications. Firstly, switching costs may be a dynamic two-edged knife in that when customers have no intentions to leave, they see switching costs in a positive light – in exchange for benefits. However, when they want to leave, the same switching costs that they view positively earlier become a burdensome and costly entrapment. The second implication is that switching costs should not be viewed in isolation as negative and harmful to customer relationships. Instead, the valence, strength, or amount of WOM engendered by switching costs depends on the combination of switching costs and switching intentions.

With this study, calculative customers give the strongest and most PWOM among

the four customer segments. Since these customers do not intend to switch providers and are not put-off by high switching costs bundled with free or subsidized handset, they probably have strong preference for their mobile service provider over competing providers. Hence, a high proportion of calculative customers (83%) are strong PWOM givers. Cognitive dissonance (Festinger 1957) may also explain the findings with calculative customers. As these customers accept high switching costs, they justify their behavior and minimize dissonance by saying good things about a brand.

While we hypothesized that captive customers give the strongest NWOM, the findings indicate that captive customers (mean NWOM = 4) lag marginally behind disloyal customers (mean NWOM = 4.12) in NWOM strength, although the difference is nonsignificant. Similarly, the hypothesis that captive customers have the most NWOM givers is rejected, as captive customers have proportionally less NWOM givers (28%) than disloyal customers (36%) do. A post-hoc analysis revealed a nonsignificant difference (t -value = -1.408, p = .161) between the satisfaction of disloyal (mean satisfaction = -.659) and captive customers (mean satisfaction = -.504). This nonsignificant difference in satisfaction may help to explain why NWOM did not differ between captive and disloyal customers, and hence the hypotheses' rejections.

Finally, comparing disloyal and committed customers, the supported hypotheses are unsurprising in that ample research has demonstrated the link between satisfaction (dissatisfaction) and PWOM (NWOM) (e.g. Anderson 1998; Mazzarol et al. 2007; Zeithaml et al. 1996). What is interesting, though, is that the proportional of PWOM givers with committed customers (75%) is substantially higher than the proportion of NWOM givers with disloyal customers (36%). This finding concurs with

East et al. (2007), who argue that market competition ensures that dissatisfied customers would eventually leave. Since majority of customers who remain are satisfied, PWOM should be more prevalent than NWOM. The findings also contradict studies (e.g. Anderson 1998; Sweeney et al. 2008) suggesting the prevalence of NWOM over PWOM because people tend to remember negative incidences better than positive ones.

FUTURE RESEARCH

Future research could address several limitations of this study. Although we group switching costs into a single factor, switching costs may be company-imposed (e.g., contractual penalties) or individual-imposed (e.g., learning effort). Consumers should have better voluntary control over the latter type of switching costs, and research should determine whether WOM behaviors differ between these two types of switching costs.

Likewise, future research could investigate WOM differences among switching costs typologies identified by earlier studies. For instance, switching costs may be due to transactional, financial, or relational (Burnham et al. 2003). Do specific types of switching costs impact WOM valence or strength differently?

East et al. (2007) find that people tend to give PWOM about their current brand and NWOM about other brands. This study did not consider respondents' WOM about other mobile service providers. Studies could consider how customers who give PWOM (NWOM) about their current mobile service provider are also likely to give NWOM (PWOM) about other mobile service providers.

WOM consequences of switching costs may also depend on the attractiveness of competing alternatives (Maute and Forrester 1993; Patterson and Smith 2003). Consumers

are more likely to give NWOM when switching costs prevent them from switching to alternatives that they perceive as more attractive than their current brands (Lee and Cunningham 2001; Maute and Forrester 1993). No published research, however, have investigated the role of alternative attractiveness across the four segments in Table 1.

Finally, according to some researchers, WOM are mostly elicited rather than given voluntarily (East et al. 2007; Mazzarol et al. 2007). Situational circumstances such as satisfying receivers' felt needs or coincidental conversations may give rise to different WOM behavior (Mangold et al. 1999). Questions remain on how these external situations may interact with switching costs to result in PWOM or NWOM.

REFERENCES

- Anderson, Eugene W. (1998), "Customer Satisfaction and Word of Mouth," *Journal of Service Research*, 1, 1, 5-17.
- Bendapudi, Neeli and Leonard L. Berry (1997), "Customers' Motivations for Maintaining Relationships with Service Providers," *Journal of Retailing*, 73, 1, 15-37.
- Bickart, Barbara A. (1993), "Carryover and Backfire Effects in Marketing Research," *Journal of Marketing Research*, 30, 1, 52-62.
- Burnham, Thomas A., Judy K. Frels and Vijay Mahajan (2003), "Consumer Switching Costs: A Typology, Antecedents, and Consequences," *Journal of the Academy of Marketing Science*, 31, 2, 109-126.
- Choi, Seon Kyou, Myeong Ho Lee and Gyu Hwa Chung (2001), "Competition in Korean Mobile Telecommunications Market: Business Strategy and Regulatory Environment," *Telecommunications Policy*, 25, 125-138.
- Day, George S. (1971), "Attitude Change, Media and Word of Mouth," *Journal of Advertising Research*, 11, 6, 31-40.

- Dick, Alan S. and Kuna Basu (1994), "Customer Loyalty: Toward an Integrated Framework," *Journal of Academy of Marketing Science*, 22, 2, 99-113.
- East, Robert, Kathy Hammond and Malcolm Wright (2007), "The Relative Incidence of Positive and Negative Word of Mouth: A Multi-Category Study," *International Journal of Research in Marketing*, 24, 2, 175-184.
- Festinger, Leon, (1957), *A Theory of Cognitive Dissonance*, Row, Peterson, & Co.: Evanston, IL.
- Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, 56, 1, 6-21.
- Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, 56, 1, 6-21.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18, 1, 39-50.
- Gounaris, Spiros and Vlasis Stathakopoulos (2004), "Antecedents and Consequences of Brand Loyalty: An Empirical Study," *Journal of Brand Management*, 11, 4, 283-306.
- Gustafsson, Anders, Michael D. Johnson and Inger Roos (2005), "The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention," *Journal of Marketing*, 69, 4, 210-218.
- Hair, Joseph F. Jr., William C. Black, Barry J. Babin, Rolph E. Anderson and Ronald L. Tatham, (2006), *Multivariate Data Analysis* (6th ed), Pearson Prentice Hall: Upper Saddle River, NJ.
- Jones, Michael A., David L. Mothersbaugh and Sharon E. Beatty (2000), "Switching Barriers and Repurchase Intentions in Services," *Journal of Retailing*, 76, 2, 259-274.
- Jones, Michael A., David L. Mothersbaugh and Sharon E. Beatty (2002), "Why Customers Stay: Measuring the Underlying Dimensions of Services Switching Costs and Managing Their Differential Strategic Outcomes," *Journal of Business Research*, 55, 6, 441-450.
- Jones, Michael A., David L. Mothersbaugh and Sharon E. Beatty (2007), "The Positive and Negative Effects of Switching Costs on Relational Outcomes," *Journal of Service Research*, 9, 4, 335-355.
- Klemperer, Paul (1987), "Markets with Consumer Switching Costs," *Quarterly Journal of Economics*, 102, 2, 375-394.
- Kumar, V. and Denish Shah (2004), "Building and Sustaining Profitable Customer Loyalty for the 21st Century," *Journal of Retailing*, 80, 4, 317-329.
- Lam, Shun Yin, Venkatesh Shankar, M Krishna Erramilli and Bvsan Murthy (2004), "Customer Value, Satisfaction, Loyalty, and Switching Costs: An Illustration from a Business-to-Business Service Context," *Journal of the Academy of Marketing Science*, 32, 3, 293-311.
- Lee, Moonkyu and Lawrence Cunningham (2001), "A Cost/Benefit Approach to Understanding Service Loyalty," *Journal of Services Marketing*, 15, 2, 113-130.
- Mangold, W. Glynn, Fred Miller and Gary R. Brockway (1999), "Word-of-Mouth Communication in the Service Marketplace," *Journal of Services Marketing*, 13, 1, 73-89.
- Maute, Manfred F. and William R. Forrester, Jr. (1993), "The Structure and Determinants of Consumer Complaint Intentions and Behavior," *Journal of Economic Psychology*, 14, 2, 219-247.
- Mazzarol, Tim, Jillian C. Sweeney and Geoff N. Soutar (2007), "Conceptualizing Word-of-Mouth Activity, Triggers and Conditions: An Exploratory Study," *European Journal of Marketing*, 41, 11/12, 1475 - 1494.
- Murray, Keith B. (1991), "A Test of Services Marketing Theory: Consumer Information Acquisition Activities," *Journal of Marketing*, 55, 1, 10-25.
- Panther, Tracy and Jillian Dawes Farquhar (2004), "Consumer Responses to Dissatisfaction with Financial Service Providers: An Exploration of Why Some Stay While Others Switch," *Journal of Financial Services Marketing*, 8, 4, 343-353.
- Patterson, Paul G. and Tasman Smith (2003), "A Cross-Cultural Study of Switching Barriers and Propensity to Stay with Service Providers," *Journal of Retailing*, 79, 2, 107-20.

- Price, Vincent, Lilach Nir and Joseph N. Cappella (2006), "Normative and Informational Influences in Online Political Discussions," *Communication Theory*, 16, 1, 47-74.
- Pritchard, Mark P., Mark E. Havitz and Dennis R. Howard (1999), "Analyzing the Commitment-Loyalty Link in Service Contexts," *Journal of the Academy of Marketing Science*, 27, 3, 333-348.
- Reichheld, Frederick F. (2003), "The One Number You Need to Grow," *Harvard Business Review*, 81, 12, 46-54.
- Richins, Marsha (1983), "Negative Word-of-Mouth by Dissatisfied Customers: A Pilot Study," *Journal of Marketing*, 47, Winter, 68-78.
- Romaniuk, Jenni and Byron Sharp (2003), "Brand Salience and Customer Defection in Subscription Markets," *Journal of Marketing Management*, 19, 1/2, 25-45.
- Samson, Alain (2006), "Understanding the Buzz That Matters: Negative Vs Positive Word of Mouth," *International Journal of Market Research*, 48, 6, 647-657.
- Schofield, Penelope Ellen, Philippa Eleanor Pattison, David John Hill and Ron Borland (2001), "The Influence of Group Identification on the Adoption of Peer Group Smoking Norms," *Psychology & Health*, 16, 1, 1-16.
- Sharma, Neeru and Paul G. Patterson (2000), "Switching Costs, Alternative Attractiveness and Experience as Moderators of Relationship Commitment in Professional, Consumer Services," *International Journal of Service Industry Management*, 11, 5, 470-490.
- Sharp, Byron, Malcolm Wright and Gerald J. Goodhardt (2002), "Purchase Loyalty Is Polarised into Either Repertoire or Subscription Patterns," *Australasian Marketing Journal*, 10, 3, 7-19.
- Singh, Jagdip (1990), "Voice, Exit, and Negative Word-of-Mouth Behaviors: An Investigation across Three Service Categories," *Journal of the Academy of Marketing Science*, 18, 1, 1-15.
- SingStat (2000), *Singapore Census of Population 2000 Statistical Release 4: Geographic Distribution and Travel*, Department of Statistics, Singapore.
- Sudman, Seymour, Norman M. Bradburn and Norbert Schwarz, (1996), *Thinking About Answers: The Application of Cognitive Processes to Survey Methodology*, Jossey-Bass Publishers: San Francisco, CA.
- Sweeney, Jillian C., Geoff N. Soutar and Tim Mazzarol (2008), "Factors Influencing Word of Mouth Effectiveness: Receiver Perspectives," *European Journal of Marketing*, 42, 3/4, 344 - 364.
- Szymanski, David M. and David H. Henard (2001), "Customer Satisfaction: A Meta-Analysis of Empirical Evidence," *Journal of the Academy of Marketing Science*, 29, 1, 16-35.
- Valletti, Tommaso M. and Martin Cave (1998), "Competition in UK Mobile Communications," *Telecommunications Policy*, 22, 2, 109-131.
- Verhoef, Peter C., Philip Hans Franses and Janny C. Hoekstra (2002), "The Effect of Relational Constructs on Customer Referrals and Number of Services Purchased from a Multiservice Provider: Does Age of Relationship Matter?," *Journal of the Academy of Marketing Science*, 30, 3, 202-16.
- Yang, Zhilin and Robin T. Peterson (2004), "Customer Perceived Value, Satisfaction, and Loyalty: The Role of Switching Costs," *Psychology and Marketing*, 21, 10, 799-822.
- Yi, Youjae and Hoseong Jeon (2003), "Effects of Loyalty Programs on Value Perception, Program Loyalty, and Brand Loyalty," *Journal of the Academy of Marketing Science*, 31, 3, 229-240.
- Zeithaml, Valarie A., Leonard L. Berry and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60, 2, 31-46.

Send Correspondence Regarding This Article to:

Richard Lee
Lecturer
Ehrenberg-Bass Institute for Marketing Science
University of South Australia
North Terrace, Adelaide
Australia 5000
richard.lee@unisa.edu.au
Phone: +61-8-83027120
Fax: +61-8-83020442

SEGMENTING THE CUSTOMER BASE IN A CRM PROGRAM ACCORDING TO CUSTOMER TOLERANCE TO INFERIORITY – A MODERATOR OF THE SERVICE FAILURE-CUSTOMER DISSATISFACTION LINK

**Lida L. Zhang, Hong Kong University of Science and Technology
Long W. Lam, University of Macau
Clement S.F. Chow, University of Macau**

ABSTRACT

Market segmentation has long been a successful marketing strategy. In the recent ten years or so, academics and practitioners in customer relationship management (CRM) have respectively proposed and carried out the further segmentation of the customer base into sub-segments to achieve further customized service and they call it customer segmentation. A review of the customer segmentation literature reveals that the customer tolerance to inferiority, an individual difference, has not been advocated as a base for customer segmentation. This study empirically validates that tolerance to inferiority is a moderator of the effect of service failure on customer dissatisfaction, which suggests its utility as a base for customer segmentation. The practicality and advantage of using such a base is discussed.

INTRODUCTION

Service failure can cause customer dissatisfaction (Hedrick et al. 2007), which in turn can lead to complaining behaviors, brand switching, and negative word-of-mouth (Hirschman 1970; Singh 1988). Although service failure is to be avoided, it is inevitable (Hart et al. 1990). The chance of occurrence of service failure can only be minimized; hence, the question is, to what extent? A close to 100% failure-free rate would, of course, be preferable, but the cost would be very high. Indeed, to try to achieve an even higher failure-free rate when it is already high would

increase costs exponentially. Hence, an opportunity exists to segment a customer base into more tolerant and less tolerant segments. For customers in the former segment, a relatively less failure-proof service delivery process could be adopted and less experienced service employees be deployed. This does not mean more tolerant customers would be treated unfairly, since the cost saved could be passed on to them through a preferential pricing scheme or used for the enhancement of other attributes of the same service to the same customer. Moreover, it is assumed that, regardless of the tolerance level of the customers, service failure is to be backed up by service recovery. So the aim is to achieve more customized service, which is one of the most important objectives in customer relationship management (i.e., CRM, a management philosophy in marketing). Surprisingly, there is a dearth of research exploring such a segmentation possibility. Therefore, we attempt to empirically validate that tolerance to inferiority is a customer disposition, or individual difference, that moderates the effect of service failure on customer dissatisfaction. Then we recommend its use as a base for customer segmentation and discuss its practical use in a service context.

LITERATURE REVIEW

Market segmentation has been so important a topic in marketing that after Smith (1956) suggested it as an alternative

marketing strategy, more than 400 scholarly journal articles have been devoted to the study of it. Bases for market segmentation have been frequently discussed in these articles and divided by Kotler and Keller (2006) into four categories: geographic, demographic, psychographic and behavioral. In the last two decades, with the fast growing popularity of CRM in both academic studies (e.g., Rootman, Tait and Bosch 2008; Valos, Bednall and Callaghan 2007; Zineldin 2006; Mitussis, O'Malley and Patterson 2006; Kamakura, Mela, Ansari and Bodapati 2005; Sin, Tse and Yim 2005; Rust and Verhoef 2005; Agrawal 2003-4; Taylor and Hunter 2003; Cho and Hiltz 2003; Feinberg and Kadam 2002; etc.) and practical discussion (e.g., Read 2009; McKay 2008; Lassar, Lassar, and Rauseo 2008; Kale and Klugsberger 2007; Britt 2006; Gillies, Rigby and Reichheld 2002; etc.), scholars have proposed and practitioners have undertaken further segmentation of a company's customer base (i.e., the company's targeted segment[s] resulting from market segmentation). The objective is to achieve a higher degree of customization to enhance customer satisfaction, which in turn leads to customer retention (Lemon, White and Winer 2002) and higher purchase intention. For example, Taylor and Baker (1994, p.172) asserted that the highest level of purchase intentions are observed when both service quality and satisfaction are high. Recently, Carrillat, Jaramillo and Mulki (2009) found support for the indirect effect of customer satisfaction to purchase intention through the mediator attitudinal loyalty.

Whereas published research into market segmentation is abundant, that into customer segmentation is less so, and that specifically related to bases for customer segmentation even less so. This may be due to the short history of CRM (less than two decades); also, customer segmentation does not work as well if it is not part of a CRM program. A review of the customer segmentation literature reveals that customer profitability or value (or potential value) to

the company is the most popular segmentation base (e.g., Garland 2005; Marcus 1998; Emmelhainz and Kavan 1999; Reinartz and Kumar 2000, etc.). Examples of other bases include, but are not limited to, the strength of the customer relationship with the company (Hulten 2007); price-sensitivity (Raju, Narahari and Ravikumar 2006; Barone and Bella 2004); gaming behavior (Ip and Jacobs 2005); the time dimension (Badgett and Stone 2005); loyalty and potential growth of customers (Grisaffe 2004); switching cost, product importance and purchase uncertainty (Wangenheim 2003); service satisfaction (Athanasopoulos 2000); the goodness-of-fit criteria of various rating tools (Baestaens 1999); and customer shopping cost (Bell, Ho and Tang 1998). Moreover, individual differences can also be used for segmentation. For instance, customers can be segmented according to their strength of extraversion and degree of openness (Matzler, Bidmon and Grabner-Kräuter 2006) and extent of maximizing trait (Chowdhury, Ratneshwar and Mohanty 2009). They can also be divided into four personality orientation segments: "thinking", "material", "feeling" and "intuitive" segments (Gountas and Gountas 2007). After an exhaustive attempt to review the literature in segmentation, we have found that tolerance to inferiority – a personality trait that belongs to psychographic segmentation – appears never to have been advocated as either a customer or market segmentation base.

While people are motivated to withdraw from threat, they are able to sustain it to some degree. Tolerance captures the individual response pattern in the face of perceived threat, which is physical or psychological distress (tolerance to distress) (e.g., Daughters, Lejuez and Kahler 2005). Different tolerance constructs have been developed for different threats, such as vague and uncertain situations (tolerance to ambiguity) (e.g., Budner 1962; Frenkel-Brunswik 1949; Frone 1990; Keenan and McBain 1979; Keenan 1994; Norton 1975)

and dissimilar others (tolerance to out-groups) (e.g., Greenberg, Simon, Pyszczynski, Solomon and Chatel 1992; Guindon, Green and Hanna 2003; Martin and Westie 1959).

Among these tolerance concepts is the tendency to endure or accept unfavorable situations. Although the general concept of tolerance has been developed in the psychology literature and embraced within the consumer behavior community, there has been no application related to inferiority in consumer marketing. Consumers are dispositional entities (Baumgartner 2002). Their dispositional characteristics greatly influence their behaviors. Tolerance to inferiority is introduced in this paper to capture individual response patterns under a different kind of threat – poor product performance. A consumer tends to accept poor product performance if he/she has a high capacity to withstand the psychological discomfort that arises from it. ***Tolerance to inferiority is viewed as a personality trait and thus is defined as the tendency of a consumer to withstand the psychological discomfort that arises from poor product performance and thus accept that poor product performance.***

Personality traits refer to the enduring tendencies that one acts or reacts in certain ways (Lazarus 1971). They are presumably carried around from situation to situation and imply a certain likelihood of behaviors. Tolerance to inferiority is a dispositional concept because it describes individual characteristic responses to substandard performance. For example, when consumers with high tolerance to inferiority experience poor product performance, they are less likely to get irritated and more likely to continue and even repeat the consumption.

Tolerance to inferiority is distinct from involvement. First, the former captures one's capacity to sustain poor product performance, whereas the latter refers to one's perceived personal relevance of a product (Zaichkowsky 1985). A consumer is involved with a product to the degree that he/she perceives the product to be self-related or

instrumental in achieving his/her personal goals and values (Celsi and Olson 1988). Second, tolerance to inferiority is an individual dispositional characteristic, whereas consumer involvement is specific to product categories or purchase occasions (Laurent and Kapferer 1985).

One seemingly similar segmentation base is customer expectation of service quality (Diaz-Martin, Iglesias, Vazquez and Ruiz 2000; Thompson and Kaminski 1993; Webster 1989) but tolerance to inferiority is distinct from expectations. Zeithaml, Berry and Parasuraman (1993) suggested a hierarchy of consumer expectations. On the top is desired service, which captures customer ideals about service performance; predicted service, which reflects customer estimations of what will be delivered, follows; at the bottom is adequate service, which is the minimum level of service customers can accept. While tolerance to inferiority is a personality trait, consumer expectations reflect a set of goals pursued in a consumer context. Although one's tolerance to inferiority may influence the minimum level of a particular service he/she can accept, by nature, they are two distinct constructs.

Another seemingly similar segmentation base is tolerance to risk suggested by Nairn (2005). It is specific to the investment context and not conceptualized as a personality trait. Moreover, risk is essentially different from product inferiority in that perceived risk is typically a pre-purchase perceptual phenomenon while product inferiority is learned after the purchase has been made.

In this article, we advocate the use of tolerance to inferiority as a customer segmentation base in the service context not only because it is original [not surprisingly, a review of literature also reveals that the moderating effect of tolerance to inferiority on the effect of service failure on customer satisfaction and/or dissatisfaction has not been tested before], but because it may contribute to more effective CRM. To demonstrate why

tolerance to inferiority can serve as a customer segmentation base, we attempt to develop theory and formulate hypotheses based on the literature. We then empirically test the hypotheses to see whether (or how) tolerance to inferiority moderates the effect of service failure on customer dissatisfaction. In the concluding discussion section of this article, we will explain how tolerance to inferiority can contribute to more effective CRM.

CONCEPTUAL MODEL AND HYPOTHESES

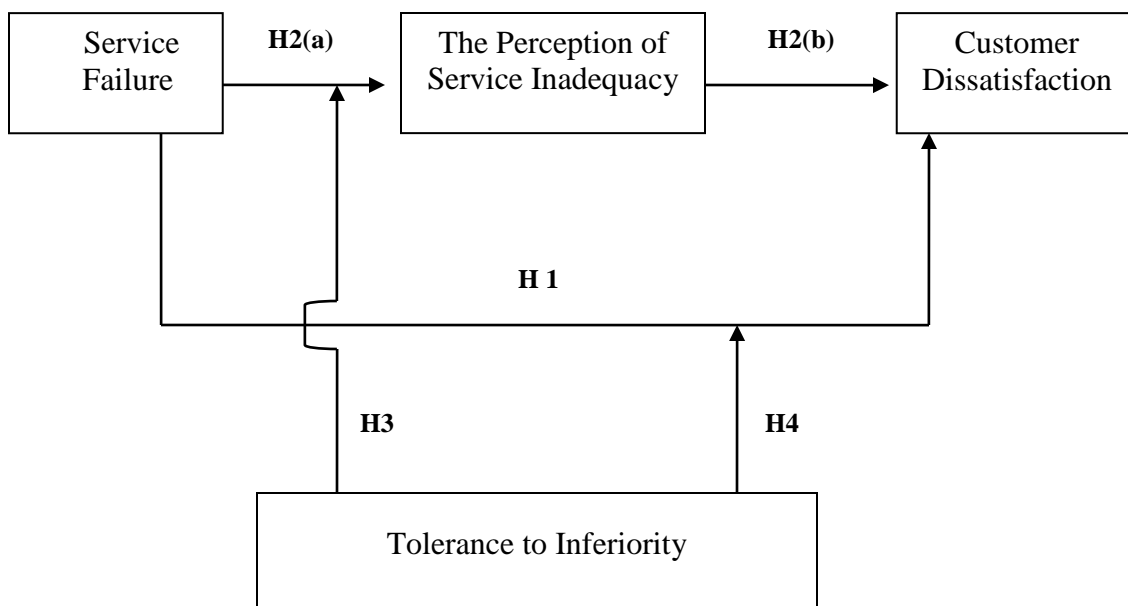
Satisfaction is considered a “consumer’s fulfillment response” (Oliver 1997, p. 13), which represents “a feeling developed from an evaluation of the use experience” (Cadotte, Woodruff and Jenkins 1987, p. 305). Giese and Cote (2000) further suggested that most customers used a variety of affective words to describe and define satisfaction and that more recent literature

avored the notion of satisfaction as an overall affective response to an evaluative response.

Lazarus’ (1991) appraisal theory suggests that people interpret events in terms of the relational meanings of the events with regard to their personal goals and consequently experience discrete emotions. Thus, it provides an ideal framework to understand the impact of service failure on customer dissatisfaction, an overall negative affective state that results from customer’s need fulfillment judgment, and its underlying process.

It is against this backdrop that we offer Figure 1 to summarize our conceptual model. H1, H2 (a, b and c), H3 and H4 are hypotheses to be explained shortly. Based on appraisal theory (Lazarus 1991), it is hypothesized that customer tolerance to inferiority affects the way in which consumers interpret service failures and whether they will become dissatisfied afterwards.

FIGURE 1
The Conceptual Model



Service Failure and Customer Dissatisfaction

Lazarus (1991) argues that human emotions are the products of the cognitive evaluation of events. Specifically, an event-appraisal-emotion link exists in which the evaluations and interpretations of an event determine whether an emotion will be felt and, if so, which one it will be. Goal relevance and goal congruence are two components of the primary appraisal of an event. The former concerns whether an event is relevant to personal goals. No emotion is elicited if the event is irrelevant to any of the appraiser's goals. The latter concerns whether the event that is encountered matches the personal goals of the appraiser. Positive emotions will be elicited by events that are goal congruent and negative emotions by those that are not.

Service failure is an error or other problem that occurs in the delivery of service (Hedrick, Beverland and Minahan 2007), that is, when service performance falls below customer expectations (Hess, Ganesan and Klein 2007). Customers experience loss during service failure, and the magnitude of the experienced loss is called failure severity (Hart, Heskett and Sasser 1990; Hess, Ganesan and Klein 2007).

Service failure is an event that customers are likely to appraise. It is considered to be motivationally relevant because it is a source of pain and customers are personally concerned with service performance, and to be motivationally incongruent because the performance level is not congruent with customer expectations. Such evaluations lead to negative emotions and contribute to customer dissatisfaction – an overall negative affective state (Giese and Cote 2000). For example, Steven gets in a cafeteria for lunch. He is seated and then orders a dish. If later the dish comes with a dead worm in it, Steven must be very dissatisfied. Steven's consumption experience at the cafeteria goes against his personal goal of living a hygienic and healthy life. So he is

obviously dissatisfied with the cafeteria service. Taking the above-detailed into account, then, the following research hypothesis is proposed:

H1: Service failure leads to customer dissatisfaction.

Mediating Effects of the Perception of Service Inadequacy

Because adequate service is at the bottom of Zeithaml, Berry, and Parasuraman's (1993) expectation hierarchy, it is most salient in the appraisal process of service failure.

Appraisal theory (Lazarus 1991) holds that negative emotions are elicited when goals are both relevant and incongruent. As adequate service is a relevant goal, service inadequacy reflects the degree of goal incongruence. When service failure is appraised to be so severe that it cannot even live up to the adequate level, service inadequacy is perceived. The more severe the service failure, the more likely it is that a customer will perceive the service to be inadequate and thus feel dissatisfied. Hence, it is logical to believe that the perception of service inadequacy mediates the relationship between service failure and customer dissatisfaction.

Johnston (1995) and Santos and Boote (2003) proposed that adequate performance and service inadequacy are related to dissatisfaction but did not empirically test for relationship, but we will. Indeed, we posit the following research hypotheses.

H2 (a): Service failure leads to perception of service inadequacy.

H2 (b): Perception of service inadequacy leads to customer dissatisfaction.

H2 (c): The relationship between service failure and customer dissatisfaction is mediated by the perception of service inadequacy.

Moderating Effects of Tolerance to Inferiority

Appraisal theories (e.g., Ellsworth and Scherer 2003; Lazarus 1991) suggest that appraisal processes and emotional experiences vary with individuals. Several individual differences have been proposed to moderate how people respond to service failure. For instance, in the event of service failure, customer satisfaction and loyalty are lower among customers that have no or a weaker relationship with the service provider and the relationship between customer and service provider moderates the effects of failure on consumer satisfaction (Priluck, 2003). Marquis and Filiatrault (2003) found that public self-consciousness moderates customer's response to waiting. While waiting in line with strangers at a movie theater, high public self-consciousness customers have an attentional focus directed toward time, attribute more control to service managers, and evaluate the theater more negatively.

Personality traits have been considered as important individual differences that intervene in the appraisal processes. Appraisal theories (e.g., Ellsworth and Scherer 2003; Lazarus 1991) maintain that personality affects the appraisal process, which means that the emotions that are generated vary with the individual (Lazarus 1991). It is thus argued that tolerance to inferiority, which is an individual dispositional characteristic, affects the customer appraisal process of service failure.

According to Weber's Law, the just noticeable difference between a stimulus and a standard increases as the standard increases (Coren and Ward 1979). Therefore, if customers have a high tolerance to inferiority, then the service failure needs to reach a severe level before they notice that it is greater than they can tolerate. In contrast, if customers have a low tolerance to inferiority, then even a small failure is enough for them to conclude that the service is inadequate.

Thus, the perception of service inadequacy is more likely to occur in customers with a low tolerance to inferiority.

This implies that intolerant customers are more sensitive to service failure and tolerant customers are less sensitive to service failure in the formation of perception of service inadequacy. This can be captured by the following research hypothesis:

H3: *The effect of service failure on customer perception of service inadequacy is stronger (weaker) in customers with lower (higher) tolerance to inferiority.*

The perception of service inadequacy is a reflection of goal incongruence. Hence, if customers have a high tolerance to inferiority, then a large increase in service failure is necessary before they perceive service inadequacy and goal incongruence. Because customer dissatisfaction is an outcome of goal incongruence, a severe service failure is necessary for tolerant customers to feel dissatisfied, whereas only a small failure is enough to make intolerant customers feel dissatisfied.

This implies that intolerant customers are more sensitive to service failure and tolerant customers are less sensitive to service failure in the eventual forming of customer dissatisfaction, which in turn can be captured by the following research hypothesis.

H4: *The effect of service failure on customer dissatisfaction is stronger (weaker) in customers with lower (higher) tolerance to inferiority.*

RESEARCH METHOD

The hypotheses were addressed in a laboratory experiment with a 2 (high versus low tolerance to inferiority) x 2 (presence versus absence of failure) between-subjects full factorial experimental design. Two

hundred and forty-two undergraduate students (56% of whom were males) participated in the experiment and were paid for their participation.

Stimulus

Accommodation service (apartment renting) was chosen as the stimulus in the study. There are several reasons for this choice. First, focus group discussions with the students indicated that they were familiar with apartment renting service. Second, these discussions indicated that accommodation was one of the greatest concerns of students and therefore motivationally relevant to them. Motivationally relevant issues are necessary to elicit emotions and dissatisfaction outcomes. Third, the discussions also revealed that the level of tolerance to inferior accommodation varied among the subjects. Fourth, accommodation features could be clearly presented with pictorial and audio descriptions so that the manipulation of service failure would be effective. Eight aspects that were identified in the focus group discussions were used to characterize the features of the accommodation: building age, building safety, decor/furniture, home appliances, electricity/water supply, drainage, neighbors and air quality.

Procedures

Each subject's tolerance to inferiority was measured before the experiment. In the experiment, the subjects were given a contrived market research report that contained a tolerance to inferiority manipulation. They were then exposed to an apartment that was presented in a flash file, in which the service failure was manipulated, and asked to imagine that they had rented it. Finally, they were asked to complete dependent and demographic measures and manipulation checks were taken.

The Moderator: Tolerance to Inferiority

Tolerance to inferiority represents the capacity to accept poor performance. In this study, it was operationalized as the extent to which an individual could accept various inferior situations in accommodation services (refer to **Appendix 1** for the measures). Before the subjects were exposed to the experimental setting, their tolerance to inferiority was measured. They were asked to express to what degree they could tolerate various inferior situations in an apartment renting context: the renting of a bad apartment in an old building, dangerous building conditions, poor decor/furniture, outdated home appliances, an irregular electricity/water supply, ineffective drainage, bad neighbors and low air quality. Items were rated on a 7-point Likert-type scale ranging from 1 ("not acceptable at all") to 7 ("totally acceptable") with 4 ("neutral") as the midpoint (Cronbach's $\alpha = 0.78$, $n = 238$). A confirmatory factor analysis showed that the 8 items were indicators of one common factor and the model fit was acceptable $\chi^2 = 162.70$ ($df = 20$, $p < .05$; SRMR = .09; IFI = .88; CFI = .88). It is difficult in a laboratory setting to change a tolerant person into an intolerant one or vice versa. Therefore, based on their pre-test scores, the subjects were divided equally into high-tolerance and low-tolerance treatment groups. A manipulation was used to strengthen the pre-existing disposition of the subjects. They were exposed to one of two different contrived housing bureau market research reports about young people's tolerance to inferiority of accommodation services. The high-tolerance version reported that most young people were very tolerant of various inferior situations in apartment renting. The low-tolerance version reported that most young people were not at all tolerant of such situations. After the manipulation, the subjects were asked again to express to what degree they could tolerate the various inferior situations of the apartment renting service (Cronbach's $\alpha = 0.84$, $n =$

215). There was a significant difference between the two treatment conditions. The subjects under the high-tolerance treatment condition were more tolerant ($M = 3.25$) to inferiority than those under the low-tolerance treatment condition ($M = 2.00$, $t(201.87) = 17.19$, $p < 0.01$).

The Independent Variable: Service Failure

Since different subjects have different latitudes of acceptance/rejection towards a particular stimulus (Sherif 1963), they were randomly assigned to presence or absence of failure treatment conditions. They were exposed to one of two video and audio descriptions of an apartment renting service. Eight features of apartment were manipulated. The failure version presented a poor apartment with few appliances, old age, unsafe structure, furniture hazardous to health, unsteady electricity and water supply, drainage sometime clogged, unfriendly neighbors and bad air quality; while the absence of failure version presented an apartment with normal conditions.

The manipulation was created based on two independent sessions of focus group with 16 undergraduate students. The participants discussed their experiences of renting apartments and were directed to talk more about the experiences they considered to be service failures. The frequently mentioned failures were incorporated into the manipulation. We pretested the failure-present and failure-absent scenarios with 90 different undergraduate students and found that the former [$M=2.28$] was evaluated worse than the latter [$M=5.79$, $t(25) = 7.92$, $p < 0.01$]. Then, the manipulation was used in the experiment with confidence.

In this experiment, the manipulation was checked by asking the subjects to indicate the degree to which they thought that failure was absent in the apartment renting service on a 7-point Likert-type scale ranging from 1 (“not at all”) to 7 (“totally”) with 4 (“neutral”)

as the midpoint. The manipulation was effective: the subjects under the absence of failure condition perceived nearly no failure at all in the apartment renting service [$M = 6.20$], whereas those under the presence of failure condition perceived failure [$M = 1.94$, $t(215) = 53.00$, $p < 0.01$].

The Dependent Variable: Customer Dissatisfaction

Customer dissatisfaction is a negative affective state (Giese and Cote 2000). In this study, it was measured with 12 items (dissatisfied, displeased, frustrated, terrible, angry, cold, bad, down, unpleasant, tense, disappointed and unimpressed) that were adapted from Cadotte, Woodruff and Jenkins (1987), Spreng, MacKenzie and Olshavsky (1996) and Spreng and Page (2001). Subjects were asked to indicate the degree to which they agreed that they had these feelings about the apartment renting service on a 7-point Likert scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”) with 4 (“neutral”) as the midpoint (Cronbach’s alpha = 0.98, $n = 214$).

The Mediator: Perception of Service Inadequacy

Perception of service inadequacy refers to the perception of a discrepancy between actual and adequate performance. Its measure was adapted from Oliver (1997). Subjects were asked to compare the presented performance with the worst performance that they would accept and then to rate the difference between the two on a 7-point Likert-type scale ranging from 1 (“much worse”) to 7 (“much better”) with 4 (“exactly the same”) as the midpoint.

RESULTS

The subjects in the four treatment cells exhibit remarkable similarity in age [$F(3, 230) = 0.69$, $p = 0.56$], family income [$F(3, 238) =$

0.88, $p = 0.45$] and sex distribution [chi square = 2.96, $p = 0.40$]. Thus, there is no need to account for demographic effects when addressing the research hypotheses. The results of hypothesis testing are presented in Table 1.

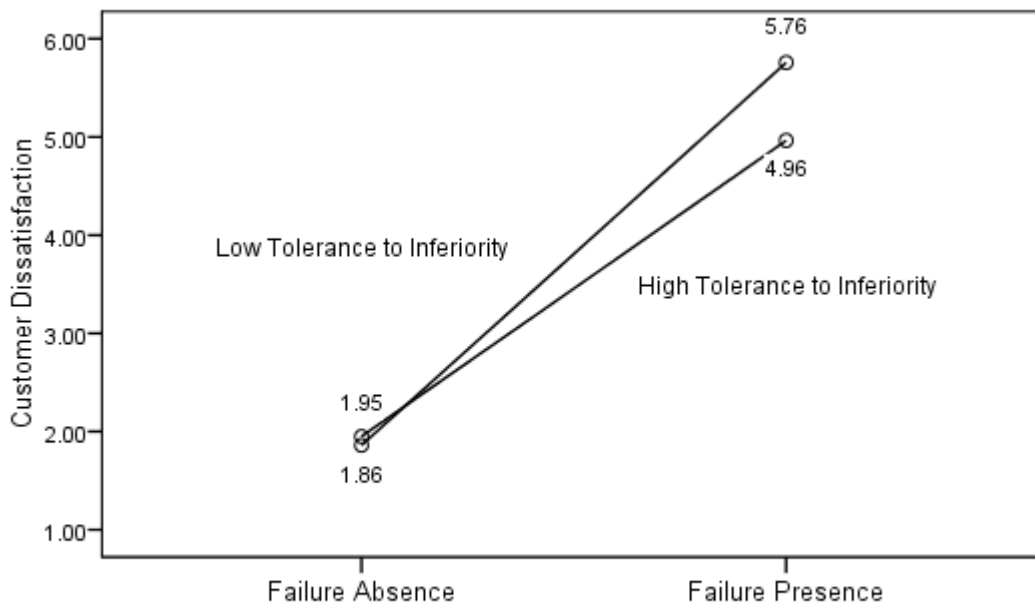
Results of H1 and H4

The ANOVA results of customer dissatisfaction reveal that the main effect of

service failure on customer dissatisfaction is significant [$F(1, 210) = 1337.51, p < 0.01$] and the “service failure x tolerance to inferiority” interaction effect is also significant [$F(1, 210) = 21.82, p < 0.01$]. It can also be realized by eyeballing Figure 2 where the two tolerance lines are obviously not parallel, to the extent that they cross each other at a particular point.

FIGURE 2

ANOVA Results of Customer Dissatisfaction



Simple effect analyses (Keppel and Zedeck 1989) were performed. At high tolerance to inferiority, dissatisfaction is lower in the absence-of-failure than the presence-of-failure treatment group [$M_{(absence)} = 1.95, M_{(presence)} = 4.96, F(1, 210) = 493.25, p < 0.01$]. At low tolerance to inferiority, dissatisfaction is also lower in the absence-of-

failure than the presence-of-failure treatment group [$M_{(absence)} = 1.86, M_{(presence)} = 5.76, F(1, 210) = 878.23, p < 0.01$]. These results demonstrate that when service failure is present, customers are more dissatisfied than when it is absent, thus H1 is supported.

The impact of service failure on customer dissatisfaction is stronger in the low

TABLE 1
Results of Hypothesis Testing

	Sum of Squares	df	Mean Square	F	Sig
ANOVA of Customer Dissatisfaction:					
Failure	629.90	1	629.90	1337.51	.00
Tolerance	6.54	1	6.54	13.89	.00
Failure * Tolerance	10.28	1	10.28	21.82	.00
Error	98.90	210	.47		
Presence vs. Absence of Failure at High Tolerance:					
Contrast	232.30	1	232.30	493.25	.00
Error	98.90	210	.47		
Presence vs. Absence of Failure at Low Tolerance:					
Contrast	413.60	1	413.60	878.23	.00
Error	98.90	210	.47		
ANOVA of Service Inadequacy:					
Failure	337.33	1	337.33	501.09	.00
Tolerance	4.05	1	4.05	6.02	.02
Failure * Tolerance	9.18	1	9.18	13.63	.00
Error	143.39	213	.67		
Presence vs. Absence of Failure at High Tolerance:					
Contrast	116.14	1	116.14	172.52	.00
Error	143.39	213	.67		
Presence vs. Absence of Failure at Low Tolerance:					
Contrast	231.84	1	231.84	344.38	.00
Error	143.39	213	.67		
ANCOVA of Customer Dissatisfaction:					
Service Inadequacy	2.56	1	2.56	5.55	.02
Failure	153.11	1	153.11	332.15	.00
Tolerance	5.16	1	5.16	11.19	.00
Failure * Tolerance	7.48	1	7.48	16.22	.00
Error	96.34	209	.46		
Presence vs. Absence of Failure at High Tolerance:					
Contrast	105.64	1	105.64	229.16	.00
Error	96.34	209	.46		
Presence vs. Absence of Failure at Low Tolerance:					
Contrast	127.22	1	127.22	275.98	.00
Error	96.34	209	.46		

tolerance to inferiority than high tolerance to inferiority treatment group [$MS_{(low)} = 413.60$, $MS_{(high)} = 232.30$, where $MS = \text{Mean Squares}$]. Combining these results with the significant interaction effect [$F(1, 210) = 21.82$, $p < 0.01$], H4 is supported.

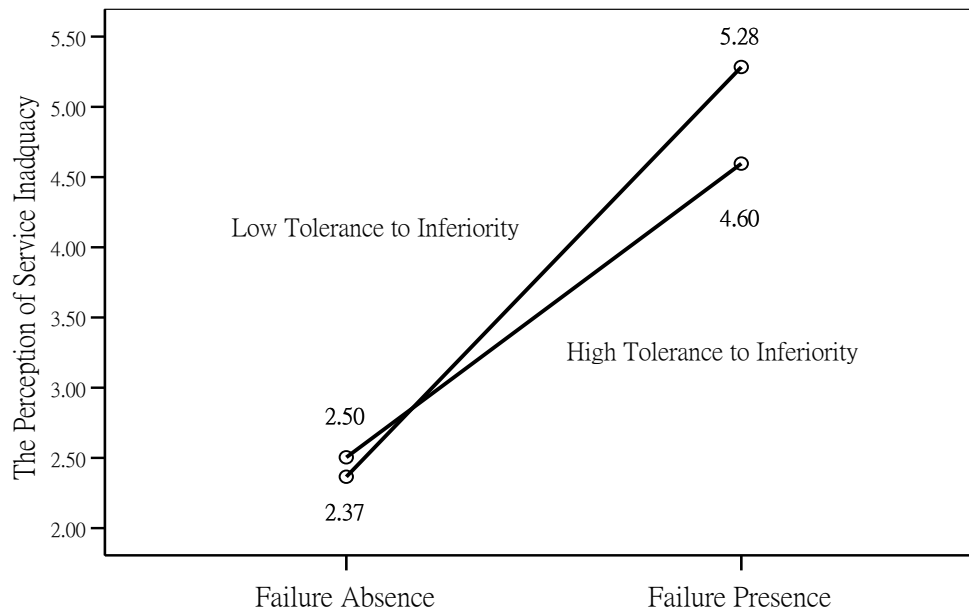
Results of H2 (a) and H3

The ANOVA results of perception of service inadequacy reveal that the main effect

of service failure on perception of service inadequacy is significant [$F(1, 213) = 501.09$, $p < 0.01$] and the “service failure x tolerance to inferiority” interaction effect is also significant [$F(1, 213) = 13.63$, $p < 0.01$]. It can also be realized by eyeballing figure 3 where the two tolerance lines are obviously not parallel, to the extent that they cross each other at a particular point.

FIGURE 3

ANOVA Results of the Perception of Service Inadequacy



Simple effect analyses (Keppel and Zedeck 1989) were performed. At high tolerance to inferiority, perception of service inadequacy is lower in the absence-of-failure than presence-of-failure treatment group [$M_{(absence)} = 2.50$, $M_{(presence)} = 4.60$, $F(1, 213) = 172.52$, $p < 0.01$]. At low tolerance to inferiority, the perception of service inadequacy is also lower in the absence-of-failure than presence-of-failure treatment group [$M_{(absence)} = 2.37$, $M_{(presence)} = 5.28$, $F(1, 213) = 344.38$, $p < 0.01$]. Thus, H2 (a) is supported.

The impact of service failure on the perception of service inadequacy is stronger in low tolerance to inferiority than high tolerance to inferiority treatment group [$MS_{(low)} = 231.84$, $MS_{(high)} = 116.14$]. Combining these results with the significant interaction effect [$F(1, 213) = 13.63$, $p < 0.01$], we assert that H3 is also supported.

Results of H2 (b) and H2(c)

Baron and Kenny's (1986) approach was used to test the mediating effect of the

perception of service inadequacy on the relationship between service failure and customer dissatisfaction.

The ANCOVA results of customer dissatisfaction show that the perception of service inadequacy is a significant covariate [$F(1, 209) = 5.55, p = 0.02$; perception of service inadequacy and customer dissatisfaction are positively correlated: $r = 0.82, p < 0.01$].

The perception of service inadequacy reduce the main effect of service failure [from $F(1, 210) = 1337.51, p < 0.01$ to $F(1, 209) = 332.15, p < 0.01$, and a 76% reduction in the mean squares from 629.90 to 153.11]. Specifically, it reduces the effect of service failure treatment at both high tolerance to inferiority [from $F(1, 210) = 493.25, p < 0.01$ to $F(1, 209) = 229.16, p < 0.01$, and a 55% reduction in the mean squares from 232.30 to 105.64] and low tolerance to inferiority [from $F(1, 210) = 878.23, p < 0.01$ to $F(1, 209) = 275.98, p < 0.01$, and a 69% reduction in the mean squares from 413.60 to 127.22].

These results demonstrate that perception of service inadequacy leads to customer dissatisfaction and that the relationship between service failure and customer dissatisfaction is partially mediated by the perception of service inadequacy. Therefore, H2 (b) and H2(c) are supported.

DISCUSSION

We use students as customers and accommodation as service in an experiment to examine the moderating effect of tolerance to inferiority on the relationship between service failure and customer dissatisfaction. We believe that we have achieved realism in the experimental setup because students are customers of accommodation services in real life. Therefore, we assert that the results can be generalized to real-life situations and thus have valuable implications for managers. The empirical results confirm that 1) there exist customers who are tolerant and those who are intolerant to inferiority, and 2) tolerance to

inferiority moderates the effect of service failure on customer dissatisfaction in such a way that the higher is the tolerance of customers, the less is the dissatisfaction resulting from service failure, and vice versa. Hence, we have addressed the five criteria for effective segmentation of Kotler and Keller (2006), who state that resulting segments should be 1) measurable, 2) substantial, 3) accessible, 4) differentiable and 5) actionable. We advocate the use of tolerance to inferiority to segment one's existing customer base in a CRM program (i.e., customer segmentation), so the resulting segments are, of course, 1) "measurable" because key customer information is available in an adequate CRM program, 2) "substantial" because no segment is ignored after the segmentation and 3) "accessible" because a customer database is available in any CRM program. The empirical results of our experiment confirm that the resulting segments are 4) "differentiable" because tolerant and intolerant customers respond differently to service failure. To demonstrate how the last criterion, 5) "actionable," is achieved, we explain what actions service managers can take to get the most out of the advocated segmentation base in their CRM program.

Managerial Implications

The cost of retaining existing customers is much lower than that of attracting new ones (Marcus 1998). Service failure is a major source of customer loss (Hirschman 1970; Singh 1988); thus, avoiding service failure is a major task of service managers. Unfortunately, service failure is inevitable, and the lower the failure rate the higher the cost of the service. In the past, we can only operate an acceptable failure rate in service delivery for all customers. Now, using customer tolerance to inferiority to segment one's customer base into tolerant and intolerant segments, at least two service failure rates can be managed: a higher failure rate (and thus lower cost) for

tolerant customers, and a lower failure rate (and thus higher cost) for intolerant customers.

For instance, in deciding whether to deliver a service through process A (pA) with a lower cost but higher failure rate or through process B (pB) with a lower failure rate but higher cost, managers could consider the tolerance level of their customers. Delivering a service through pA to tolerant customers and through pB to intolerant customers would help to minimize costs, customer dissatisfaction and switching. Likewise, in deciding whether to provide training program A (tA), which is less rigorous and thus less costly, or training program B (tB), which is more rigorous and thus more costly, for frontline service employees, managers could consider the tolerance level of customers. Providing tA for frontline employees serving tolerant customers and tB for those serving intolerant customers would also help to minimize costs and customer dissatisfaction. By the same token, deploying more experienced staff members to serve intolerant customers and less experienced staff members to serve tolerant customers would have the same effect on costs and dissatisfaction.

This could appear to be an unfair treatment to customers. Does it represent a kind of discrimination against tolerant customers? No! The purpose of such segmentation is not to take advantage of but to deliver an even higher level of customized service to customers. The cost so saved from serving a tolerant customer could be used to enhance other attributes of the same service for the same customer or passed on to him or her through a preferential pricing scheme. The cost saving would be especially significant if the service is a kind of professional service. Consider an advertising agency that deploys less experienced and less rigorously trained service employees to deliver the service through a relatively less failure-proof service delivery process and then offers a lower price to tolerant customers. In such a case, the price difference could be substantial enough to turn around the affordability of the service (i.e., a

service currently unaffordable to some customers could be made affordable). Of course, in our proposition, service failure is to be backed up by service recovery, regardless of whether the customer is tolerant or not.

It is a subject of debate if the cost saved from serving a tolerant customer is not transferred back to the customer but transformed into higher company profitability. Although such practice may not be seen as unethical today as even offering different prices for customers with different price sensitivities has become normal in many industries (e.g., Kurata and Bonifield 2007; Raju, Narahari and Ravikumar 2006), we strongly advocate that tolerance to inferiority be used as a customer segmentation base to achieve a higher degree of customization rather than higher profitability.

Until tolerant and intolerant customers can be identified through demographic variables such as age, income, education level and so forth, tolerance to inferiority as a segmentation base is useful in only customer segmentation but not market segmentation. In a CRM program, a customer database exists that can also be used to store information about the tolerance level of customers. The tolerance of a particular customer can be measured through a questionnaire embedding in other routine measurements such as service quality and/or customer satisfaction level survey. Frontline service employees can also be trained to assess the tolerance level of a particular customer after each service encounter (especially when the service is not perfectly delivered) and record it in the database. Content analysis of customer complaints could also be used to assess the tolerance level of customers. Putting together all of this information, a customer base could be divided into two groups according to tolerance level, which means the segmentation process is then complete. It should be emphasized that in any particular CRM program, tolerance to inferiority is not to be the only segmentation base. Rather, it should be treated as an additional

segmentation base in the existing *multilevel* segmentation of a company's customer base to achieve even greater customized service. Other segmentation bases more important to a company, such as "profitability of customer", should still serve as the primary level segmentation base.

CONCLUSION

In the last decade or so, CRM has become the major battlefield for many service industries including hotels, banking and insurance, among others. Service companies compete with each other in terms of their ability to maximize customer satisfaction and minimize customer dissatisfaction, for which customization of service is an antecedent. To obtain high customization, multilevel customer segmentation should be conducted to divide a company's customer base into many small groups, or segments, within which the demand should be as homogenous as possible. High within-group homogeneity can only be achieved when different and appropriate segmentation bases are used for multilevel segmentation. The empirical findings of this study support the use of an additional segmentation base – tolerance to inferiority. This new way of segmenting the customer base has the benefit of lowering the level of customer dissatisfaction in service failure and delivering an even higher degree of customized service to customers.

LIMITATIONS AND FUTURE RESEARCH

Until research is carried out to identify tolerant and intolerant customers demographically, tolerance of inferiority can be used only in customer, not market, segmentation, because it is able to satisfy the five criteria of effective segmentation (Kotler and Keller 2006) only in the former, as explained previously. Therefore, one research direction is to relate tolerant and intolerant customers with demographic variables such as

age, income and occupation, so that tolerance levels can be observed and predicted when they cannot be measured. When such relationships are established, the possibility and benefit of using tolerance to inferiority in market segmentation can be explored.

In this study, we focused our discussion on the primary appraisal components (i.e., goal relevance and goal congruence), which are sufficient for producing overall positive or negative feelings. We did not explicitly measure and test the discrete emotions that may be immediate to service inadequacy and antecedent to customer dissatisfaction. Future research should further look at other appraisal components in Lazarus's (1991) and other researchers' [see Ellsworth and Scherer (2003) and Scherer and Johnstone (2001) for a review] appraisal frameworks that are necessary for producing discrete positive or negative emotions, such as joy, anger, surprise, etc.

Another direction for future research is to explore how customer emotions and dissatisfaction generated through the appraisal process suggested in this study influence customer judgment and decision making. Dissatisfied consumers may take no action, complain to sellers, create negative word of mouth to family or friends, switch patronage to another firm, or take legal third party action (e.g., Bougie, Pieters and Zeelenberg 2003; Hirschman 1970; Maute and Forrester 1993; Singh 1988; Singh and Pandya 1991). The innate action tendency of each discrete emotion (Lazarus, 1991) may provide implications on customer behaviors. Also, Loewenstein and Lerner's (2003) immediate-expected emotion model and Taylor's (2008) model of emotion, attitude, and goal directed behavior may serve as good frameworks for understanding the roles of emotions in consumer decisions on post-purchase behaviors.

Tolerance to inferiority was treated as an undifferentiated construct in this paper. Nevertheless, cognitive and affective

tolerance may be its two separable dimensions. Cognitive tolerance is the tendency to endure poor performance as the result of rational thinking. It can be traced back to the cardinal trait – conscientiousness (socially prescribed impulse control that facilitates task- and goal-directed behavior). Affective tolerance is the tendency to endure poor performance as the result of emotional feeling. It can be traced back to a different cardinal trait – neuroticism (as contrasted to emotional stability and even-temperedness with negative emotionality). Future research should continue to develop the construct and study its dimensionality.

The operationalization of tolerance to inferiority is also a limitation of the study. It is operationalized here within a housing context. Although this context does allow for a variety of situations, such operationalization cannot fully depict the dispositional property of tolerance to inferiority. This is reflected in the marginal fit of its CFA model. Our study takes the first step in developing the construct. Future research should continue to work on it.

In addition, although the use of students as customers and accommodation as service in this study can capture real-life situations, further external validity can be achieved through the replication of this study by using different respondent types, services and/or research methods.

REFERENCES

- Agrawal, M.L. (2003-4), "Customer Relationship Management (CRM) & Corporate Renaissance," *Journal of Services Research*, 3(2), 149-171.
- Athanassopoulos, Antreas D. (2000), "Customer satisfaction cues to support market segmentation and explain switching behavior," *Journal of Business Research*, 47(3), 191-207.
- Baestaens, Dirk-Emma (1999), "Credit risk modeling strategies: the road to serfdom?," *International Journal of Intelligent Systems in Accounting, Finance and Management*, 8(4), 225-235.
- Badgett, Melody and Merlin Stone (2005), "Multidimensional segmentation at work: Driving an operational model that integrates customer segmentation with customer management," *Journal of Targeting, Measurement and Analysis for Marketing*, 13(2), 103-121.
- Baron, Reuben M. and David A. Kenny (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173-1182.
- Barone, Guglielmo and Mariano Bella (2004), "Price-elasticity based customer segmentation in the Italian auto insurance market," *Journal of Targeting, Measurement and Analysis for Marketing*, 13(1), 21-31.
- Baumgartner, H. (2002), "Toward a Personology of the Consumer," *Journal of Consumer Research*, 29, 286-292.
- Bell, David R., Teck-Hua Ho and Christopher S. Tang (1998), "Determining where to shop: Fixed and variable costs of shopping," *Journal of Marketing Research*, 35(3), 352-369.
- Bougie, R., R. Pieters and M. Zeelenberg (2003), "Angry customers don't come back, they get back: The experience and behavioral implications of anger and dissatisfaction in services," *Journal of the Academy of Marketing Science*, 31, 377-393.
- Britt, Phillip (2006), "CRM Pitches a Help-Desk Tent," *Customer Relationship Management*, 10(5), 42-43.
- Budner, S. (1962), "Intolerance of Ambiguity as a Personality Variable," *Journal of Personality*, 30, 29-50.
- Cadotte, Ernest R., Robert B. Woodruff and Roger L. Jenkins (1987), "Expectations and norms in models of consumer satisfaction," *Journal of Marketing Research*, 24 (3), 305-314.
- Calder, Bobby J., Lynn W. Phillips and Alice M. Tybout (1981), "Designing research for application," *Journal of Consumer Research*, 8 (2), 197-207.
- Calder, Bobby J., Lynn W. Phillips and Alice M. Tybout (1982), "The concept of external validity," *Journal of Consumer Research*, 9 (3), 240-244.

- Calder, Bobby J., Lynn W. Phillips and Alice M. Tybout (1983), "Beyond external validity," *Journal of Consumer Research*, 10 (1), 112-114.
- Carrillat, François A., Fernando Jaramillo and Jay Prakash Mulki (2009), "Examining The Impact Of Service Quality: A Meta-Analysis Of Empirical Evidence," *Journal of Marketing Theory and Practice*, 17(2), 95-110.
- Celsi, Richard L. and Jerry C. Olson (1988), "The Role of Involvement in Attention and Comprehension Processes," *Journal of Consumer Research*, 15, 210-224.
- Cho, Yooncheong Il Im and Roxanne Hiltz (2003), "The Impact Of E-Services Failures And Customer Complaints On Electronic Commerce Customer Relationship Management," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 106-118.
- Chowdhury, Tilottama G., S Ratneshwar and Praggyan Mohanty (2009), "The time-harried shopper: Exploring the differences between maximizers and satisficers," *Marketing Letters*, 20(2), 155-167.
- Coren, Stanley, Clare Porac and Lawrence M. Ward (1979), *Sensation and perception*, Academic Press: New York.
- Gountas, John and Sandra Gountas (2007), "Personality orientations, emotional states, customer satisfaction, and intention to repurchase," *Journal of Business Research*, 60(1), 72-75.
- Daughters, S. B., Lejuez, C. W., & Kahler, C. W. (2005), "Distress Tolerance as a Predictor of Early Treatment Dropout in a Residential Substance Abuse Treatment Facility," *Journal of Abnormal Psychology*, 114, 729-734.
- Diaz-Martin, Ana M., Victor Iglesias, Rodolfo Vazquez and Agustin V. Ruiz (2000), "The use of quality expectations to segment a service market," *The Journal of Services Marketing*, 14(2), 132-146.
- Ellsworth, Phoebe C. and Klaus R. Scherer (2003), "Appraisal Processes in Emotion," in *Handbook of Affective Sciences*, Richard J. Davidson, Klaus R. Scherer, and H. Hill Goldsmith (Eds.). Oxford: Oxford University Press, pp. 572-595.
- Emmelhainz, Margaret A. and C. Bruce Kavan (1999), "Using Information as a Basis for Segmentation and Relationship Marketing: A Longitudinal Case Study of a Leading Financial Services Firm," *Journal of Market - Focused Management*, 4(2), 161-177.
- Feinberg, Richard and Rajesh Kadam (2002), "E-CRM Web service attributes as determinants of customer satisfaction with retail Web sites," *International Journal of Service Industry Management*, 13(5), 432-451.
- Frenkel-Brunswik, E. (1949), "Intolerance of Ambiguity as an Emotional and Perceptual Personality Variable," *Journal of Personality*, 18, 108-143.
- Frone, M. R. (1990), "Intolerance of Ambiguity as a Moderator of the Occupational Role Stress-Strain Relationship: A Meta-Analysis," *Journal of Organizational Behavior*, 3, 309-320.
- Garland, Ron (2005), "Segmenting retail banking customers," *Journal of Financial Services Marketing*, 10(2), 179-191.
- Giese, Joan L. and Joseph A. Cote (2000), "Defining consumer satisfaction," *Academy of Marketing Science Review*, 2000 (1), 1-24.
- Gillies, Crawford, Darrell Rigby and Fred Reichheld (2002), "The story behind successful customer relations management," *European Business Journal*, 14(2), 73-77.
- Greenberg, J., Simon, L., Pyszczynski, T., Solomon, S., & Chatel, D. (1992), "Terror Management and Tolerance: Does Mortality Salience Always Intensify Negative Reactions to Others Who Threaten One's Worldview?," *Journal of Personality and Social Psychology*, 63, 212-220.
- Grisaffe, Douglas (2004), "A Dozen Problems With Applied Customer Measurement," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 17, 1-15.
- Guindon, M. H., Green, A. G., & Hanna, F. J. (2003), "Intolerance and Psychopathology: Toward a General Diagnosis for Racism, Sexism, and Homophobia," *American Journal of Orthopsychiatry*, 73, 167-176.
- Hart, Christopher W. L., James L. Heskett and W. Earl Sasser, Jr. (1990), "The profitable art of service recovery," *Harvard Business Review*, 68 (4), 148-156.
- Hedrick, Natalie, Michael Beverland and Stella Minahan (2007), "An exploration of relational customers' response to service failure," *Journal of Services Marketing*, 21 (1), 64-72.

- Hemmasi, Masoud, William C. Lesch and Lee A. Graf (1991), "Determinants of Investment Strategies in the Trust-Fund Market: An Empirical Study of Self-Directed Retirement Account Holders," *Journal of Professional Services Marketing*, 8(1), 165-175.
- Hess, Ronald L., Jr., Shankar Ganesan and Noreen M. Klein (2007), "Interactional service failures in a pseudo relationship: the role of organizational attributions," *Journal of Retailing*, 83 (1), 79-95.
- Hirschman, Albert O. (1970), *Exit, voice and loyalty: Responses to decline in firms, organizations and states*, Harvard University Press: Cambridge, MA.
- Hultén, Bertil (2007), "Customer segmentation: The concepts of trust, commitment and relationships," *Journal of Targeting, Measurement and Analysis for Marketing*, 15(4), 256-269.
- Ip, Barry and Gabriel Jacobs (2005), "Segmentation of the games market using multivariate analysis," *Journal of Targeting, Measurement and Analysis for Marketing*, 13(3), 275-287.
- Izard, Carroll E. (1977), *Human emotion*, Plenum Press: New York.
- John, Oliver P. and Sanjay Srivastava (1999), "The big five trait taxonomy: history, measurement, and theoretical perspectives," in Pervin, Lawrence A. and John, Oliver P. (Eds.), *Handbook of personality: Theory and research*, Guilford, New York, NY, 102-138.
- Johnston, Robert (1995), "The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service," *International Journal of Service Industry Management*, 6 (2), 46-61.
- Kale, Sudhir N., Peter Klugsberger (2007), "Reaping Rewards," *Marketing Management*, 16(4), 14-18.
- Kamakura, Wagner, Carl F. Mela, Asim Ansari and Anand Bodapati (2005), "Choice Models and Customer Relationship Management," *Marketing Letter*, 16(3-4), 279-291.
- Keenan, A. and McBain, G. D. M. (1979), "Effects of Type A Behaviour, Intolerance of Ambiguity, and Locus of Control on the Relationship between Role Stress and Work-Related Outcomes," *Journal of Occupational Psychology*, 52, 277-285.
- Keinan, G. (1994), "Effects of Stress and Tolerance of Ambiguity on Magical Thinking," *Journal of Personality and Social Psychology*, 67, 48-55.
- Keppel, Geoffrey and Sheldon Zedeck (1989), *Data analysis for research designs: Analysis of variance and multiple regression/correlation approaches*, W. H. Freeman and Company: New York.
- Kotler, Philip and Kevin L. Keller (2006), *Marketing Management*, 12th edition, Pearson Prentice-Hall: Upper Saddle River, New Jersey.
- Kurata, Hisashi and Carolyn M Bonifield (2007), "How customisation of pricing and item availability information can improve e-commerce performance," *Journal of Revenue and Pricing Management*, 5(4), 305-314.
- Lassar, Walfried M., Sharon S. Lassar and Nancy A. Rauseo (2008), "Developing a CRM Strategy in Your Firm," *Journal of Accountancy*, 206(2), 68-73.
- Laurent, Gilles and Jean-Noel Kapferer (1985), "Measuring Consumer Involvement Profiles," *Journal of Marketing Research*, 22, 41-53.
- Lazarus, R. S. (1971), *Personality*, Englewood Cliffs, NJ: Prentice-Hall.
- Lazarus, Richard S. (1991), *Emotion and adaptation*, Oxford University Press: New York.
- Lemon, Katherine N., Tiffany B. White and Russell S. Winer (2002), "Dynamic customer relationship management: Incorporating future considerations into the service retention decision," *Journal of Marketing*, 66(1), 1-14.
- Lichtenstein, Donald R., Richard G. Netemeyer and Scot Burton (1990), "Distinguishing coupon proneness from value consciousness: An acquisition-transaction utility theory perspective," *Journal of Marketing*, 54 (3), 54-67.
- Loewenstein, George and Jennifer S. Lerner (2003), "The Role of Affect in Decision Making," in *Handbook of Affective Sciences*, Richard J. Davidson, Klaus R. Scherer, and H. Hill Goldsmith (Eds.). Oxford: Oxford University Press, pp. 619-642.
- Marcus, Claduo (1998), "A practical yet meaningful approach to customer segmentation," *The Journal of Consumer Marketing*, 15(5), 494-501.

- Marquis, Marie and Pierre Filiatrault (2003), "Public self-consciousness disposition effect on reactions to waiting in line," *Journal of Consumer Behaviour*, 2 (3), 212-231.
- Martin, J. G., & Westie, F. R. (1959), "The Tolerant Personality," *American Sociological Review*, 24, 521-528.
- Maute, M. F. and W. R. Forrester, Jr. (1993), "The structure and determinants of consumer complaint intentions and behavior," *Journal of Economic Psychology*, 14, 219-247.
- Mattila, Anna S. (2001), "The impact of relationship type on customer loyalty in a context of service failures," *Journal of Service Research*, 4 (2), 91-101.
- Matzler, Kurt, Sonja Bidmon and Sonja Grabner-Kräuter (2006), "Individual determinants of brand affect: the role of the personality traits of extraversion and openness to experience," *The Journal of Product and Brand Management*, 15(7), 427-434.
- McKay, Lauren (2008), "The New Breed of CRM Consultant," *Customer Relationship Management*, 12(10), 28-32.
- Midgley, David F. and Grahame R. Dowling (1978), "Innovativeness: The concept and its measurement," *Journal of Consumer Research*, 4 (4), 229-242.
- Mitussis, Darryn, Lisa O'Malley and Maurice Patterson (2006), "Mapping the re-engagement of CRM with relationship marketing," *European Journal of Marketing*, 40(5/6), 572-589.
- Nairn, Agnes (2005), "Beyond Sandler: Risk tolerance and the UK investment deficit," *Journal of Financial Services Marketing*, 9(4), 375-389.
- Norton, R. W. (1975), "Measurement of Ambiguity Tolerance," *Journal of Personality Assessment*, 39, 607-619.
- Oliver, Richard L. (1997), *Satisfaction: A behavioral perspective on the consumer*, McGraw-Hill: New York.
- Priluck, Randi (2003), "Relationship marketing can mitigate product and service failures," *Journal of Services Marketing*, 17 (1), 37-52.
- Raju, C.V.L., Y. Narahari and K. Ravikumar (2006), "Learning dynamic prices in electronic retail markets with customer segmentation," *Annals of Operations Research*, 143(1), 59-75.
- Read, Brendan (2009), "CRM: Complex Needs, Challenging Responses," *Customer Inter@ction Solutions*, 27(10), 22-24.
- Reinartz, Werner J. and V. Kumar (2000), "On the profitability of long-life customers in a non-contractual setting: An empirical investigation and implications for marketing," *Journal of Marketing*, 64(4), 17-35.
- Rootman, Chantal, Madéle Tait and Johan Bosch (2008), "Variables influencing the customer relationship management of banks," *Journal of Financial Services Marketing*, 13(1), 52-62.
- Rust, Roland T., Peter C. Verhoef (2005), "Optimizing the Marketing Interventions Mix in Intermediate-Term CRM," *Marketing Science*, 24(3), 477-489.
- Santos, Jessica and Jonathan Boote (2003), "A theoretical exploration and model of consumer expectations, post-purchase affective states and affective behaviour," *Journal of Consumer Behaviour*, 3 (2), 142-156.
- Scherer, Klaus R., Angela Schorr, and Tom Johnstone (2001), *Appraisal Processes in Emotion: Theory, Methods, and Research*, Oxford: Oxford University Press.
- Sherif, Carolyn W. (1963), "Social Categorization as a Function of Latitude of Acceptance and Series Range," *Journal of Abnormal and Social Psychology*, 67(2), 148-156.
- Shimp, Terence A. and Subhash Sharma (1987), "Consumer ethnocentrism: Construction and validation of the CETSCALE," *Journal of Marketing Research*, 24 (3), 280-289.
- Sin, Leo Y.M., Alan C.B. Tse and Frederick H.K. Yim (2005), "CRM: conceptualization and scale development," *European Journal of Marketing*, 39(11/12), 1264-1282.
- Singh, Jagdip (1988), "Consumer complaint intentions and behavior: definitional and taxonomical issues," *Journal of Marketing*, 52 (1), 93-107.
- Singh, Jagdip and Shefali Pandya (1991), "Exploring the effects of consumers' dissatisfaction level on complaint behaviours," *European Journal of Marketing*, 25, 7-21.
- Smith, Wendell R. (1956), "Product Differentiation and Market Segmentation as Alternative Marketing Strategies," *Journal of Marketing*, 21, 3-8.
-

- Spreng, Richard A., Scott B. MacKenzie and Richard W. Olshavsky (1996), "A reexamination of the determinants of consumer satisfaction," *Journal of Marketing*, 60 (3), 15-32.
- Spreng, Richard A. and Thomas J. Page, Jr. (2001), "The impact of confidence in expectations on consumer satisfaction," *Psychology and Marketing*, 18 (11), 1187-1204.
- Taylor, Steven A. (2008), "Reconciling Satisfaction, Emotions, Attitudes, and Ambivalence within Consumer Models of Judgment and Decision Making: A Cautionary Tale," *Journal of Consumer Satisfaction, Dissatisfaction, & Complaining Behavior*, Volume 21, 41-65.
- Taylor, Steven A. and Gary Hunter (2003), "An Exploratory Investigation Into The Antecedents Of Satisfaction, Brand Attitude, And Loyalty Within The (B2b) eCRM Industry," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 19-32.
- Taylor, Steven A. and Thomas L. Baker (1994), "An Assessment of the Relationship Between Service Quality and Customer Satisfaction in the Formation of Consumers' Purchase Intentions," *Journal of Retailing*, 70(2), 163-178.
- Thompson, A. Marie and, Peter F. Kaminski (1993), "Psychographic and lifestyle antecedents of service quality expectations: A segmentation approach," *The Journal of Services Marketing*, 7(4), 53-61.
- Valos, Michael J., David H.B. Bednall and Bill Callaghan (2007), "The impact of Porter's strategy types on the role of market research and customer relationship management," *Marketing Intelligence & Planning*, 25(2), 147-156.
- Wangenheim, Florian v (2003), "Situational Characteristics as Moderators of the Satisfaction-Loyalty Link: An Investigation In A Business-To-Business Context," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 145-156.
- Webster, Cynthia (1989), "Can Consumers Be Segmented On The Basis Of Their Service Quality Expectations?," *The Journal of Services Marketing*, 3(2), 35-53.
- Zaichkowsky, Judith Lynne (1985), "Measuring the Involvement Construct," *Journal of Consumer Research*, 12, 341-352.
- Zeithaml, Valarie A., Leonard L. Berry and A. Parasuraman (1993), "The nature and determinants of customer expectations of service," *Journal of the Academy of Marketing Science*, 21 (1), 1-12.
- Zineldin, Mosad (2006), "The royalty of loyalty: CRM, quality and retention," *Journal of Consumer Marketing*, 23(7), 430-437.

Send Correspondence Regarding This Article to:

Clement S.F. Chow
Associate Professor of Marketing
Faculty of Business Administration
University of Macau
Avenida Padre Tomás Pereira, Taipa
Macao SAR, China
Email: sfchow@umac.mo
Phone: (853) 66254839 or (852) 94678655
Fax: (853) 838320

APPENDIX 1

Tolerance to Inferiority Measures

To what degree can you tolerate the following apartment features? For each question, please circle a corresponding number to reflect your feeling.

	Not Acceptable At All		Neutral			Totally Acceptable	
	1	2	3	4	5	6	7
The building is old.	1	2	3	4	5	6	7
The decoration/furniture materials are harmful to health.	1	2	3	4	5	6	7
The home appliances are outdated.	1	2	3	4	5	6	7
The electricity/water supply is unstable.	1	2	3	4	5	6	7
Water pipe of the apartment is always clogged or broken.	1	2	3	4	5	6	7
The building structure/condition is dangerous.	1	2	3	4	5	6	7
The neighborhood is terrible.	1	2	3	4	5	6	7
The air quality is low.	1	2	3	4	5	6	7

SIMULTANEITY IN THE RELATIONSHIP BETWEEN SALES PERFORMANCE AND COMPONENTS OF CUSTOMER SATISFACTION

**Rajiv D. Banker, Temple University
Raj Mashruwala, University of Illinois at Chicago**

ABSTRACT

The widespread use of customer satisfaction metrics has prompted researchers to investigate the relationship between customer satisfaction and sales performance. Earlier studies, however, have ignored an important aspect of the relationship – the simultaneity between sales performance and some components of customer satisfaction. This article shows that the bias produced by ignoring simultaneity can significantly alter the conclusions drawn from the analysis. Results from a model that links sales performance with individual components of customer satisfaction, ignoring simultaneity, contradict intuition. Our results from a reformulated model provide evidence of the simultaneity between the components of customer satisfaction and sales performance. The results also document that estimating a model ignoring simultaneity produces estimates that are biased. The authors suggest the need to use simultaneous equation models for future studies that examine the role of customer satisfaction in determining sales performance. The implications of the study are also relevant for managers who use the results of such analyses in the formulation of marketing programs.

INTRODUCTION

Many firms are interested in using insights from customer satisfaction to enhance outcomes such as sales performance. This has led them to spend considerable amounts on tracking customer satisfaction through surveys. To understand the linkages between

customer satisfaction and sales performance, though, it is imperative to correctly estimate the relationship between customer satisfaction and sales performance. Recent research directs attention to the need for minimizing errors made in such estimations that can lead to suboptimal managerial decisions (Gomez, McLaughlin, and Wittink 2004).

Firms measure customer satisfaction and use this information in formulating marketing strategy centered on the measure (Zeithaml, Berry and Parasuraman 1996). Implicit in this emphasis on customer satisfaction is the intuitive notion that increasing customer satisfaction engenders customer loyalty, resulting in higher sales revenue for the firm. But, like other marketing programs, it is important for managers to be able to quantify its effect on financial performance (Wiles 2007; Mittal et al. 2005; Kumar and Shah 2004; Rust and Zahorik 1993). With this aim, researchers have empirically examined the impact of customer satisfaction on sales revenue. While prior research has focused on the impact of customer satisfaction on sales revenue, increased traffic associated with higher sales revenue may also, in turn, impact some of the components of customer satisfaction. Most prior studies use recursive or single-equation models to describe the relationship between customer satisfaction and sales performance treating the relationship as uni-directional from customer satisfaction → sales performance. This methodology assumes implicitly that customer satisfaction is exogenous and tries to evaluate the response of sales performance to differences in customer satisfaction. If, in fact, a feedback

loop exists between customer satisfaction and sales performance, wherein customer satisfaction impacts sales performance and also where sales performance affects customer satisfaction, then the relationship between the two variables is non-recursive or simultaneous, and needs to be modeled appropriately. Ignoring the simultaneity is likely to lead to a downward bias in the estimated coefficient of customer satisfaction and inefficient allocation of resources by managers based on the modeled impact of customer satisfaction on sales performance.

Much of the earlier research on customer satisfaction has focused on fundamentally understanding the construct. But, as several authors have observed, it is important to understand what satisfaction levels of customers mean for the economic success of the enterprise. Some studies have, thus, focused on understanding the economic outcomes of customer satisfaction (Anderson, Fornell and Lehmann 1994; Anderson, Fornell and Rust 1997; Rust and Zahorik 1993). These studies present evidence that customer satisfaction has a positive impact on sales revenue, market share and intention to purchase behavior of customers.

In order to make the results of measuring customer satisfaction more meaningful to managers, it is important to determine what aspects of the service proposition impact customer satisfaction, so that managers can tailor marketing programs to affect the dimensions of customer satisfaction that have the maximum impact on sales revenue (Zeithaml 2000). Much of the literature on customer satisfaction, thus, focuses on developing scales that measure customer satisfaction on different dimensions that would aid managers in identifying specific components of satisfaction that have a positive impact on sales performance.

But, while specific dimensions of customer satisfaction, such as customer service, may impact sales revenue, it is also likely that higher sales revenue affects these dimensions. For instance, in a department

store higher sales revenue implies more traffic in the store. Thus, for a given level of staffing and physical resources, higher traffic may imply fewer resources available per customer, leading to greater congestion and longer wait times, and hence lower customer satisfaction (Grewal, Baker, Levy & Voss 2003; Kumar 2005). Therefore, when estimating the importance of the different components of customer satisfaction and sales revenue, it is essential to account for the simultaneity in the relationship which, if ignored, could bias the results (Haavelmo 1943).

In this article, we examine the relationship between different components of customer satisfaction and sales performance utilizing data obtained from a national department store chain. In doing so, we show that the insights provided by the empirical results change materially if simultaneity in the relationship is taken into account in the empirical model. This article also contributes to the literature in understanding what drives different components of customer satisfaction. In our empirical models we aim to include measures that explain and control for different characteristics that affect the sales performance and customer satisfaction of individual stores. The results from our empirical models provide insights into the drivers and correlates of satisfaction that are useful both for practitioners involved in implementing satisfaction programs as well as researchers interested in building more accurate models explaining customer behavior.

The remainder of this article is structured as follows. The next section discusses the related literature in detail which is used to motivate the research hypotheses. The section following that describes the data and the research site. The next section examines the relationship between the components of customer satisfaction and sales performance. The section following that describes the results recognizing the simultaneity in the relationship. Then a wrap

up section concludes with a discussion of the main findings of the study.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

With marketing programs being increasingly designed based on the measurement of customer satisfaction, researchers have examined the economic consequences of customer satisfaction (Anderson and Sullivan 1993; Zeithaml, Berry and Parasuraman 1996; Bolton 1998, Kamakura et al. 2002). Using customer satisfaction data from Swedish firms, Anderson, Fornell and Lehmann (1994) find that customer satisfaction leads to improved financial performance. But Anderson, Fornell and Rust (1997) find that while customer satisfaction leads to improved productivity for manufacturing firms, there is a tradeoff between satisfaction and productivity for service firms. Niraj et al. (2003) examine the relationship between individual customer level satisfaction and profitability at a beverage distribution company and find that increased customer satisfaction does not necessarily translate to increased net profitability of customers when all allocated costs are factored in.

In establishing links between customer satisfaction and sales performance, analysis of specific components that drive sales provides greater insight for the purpose of directing resources for specific marketing programs. One stream of the literature has focused on identifying these components of service quality and customer satisfaction. Using customer surveys of subjects that had shopped at a department store, Westbrook (1981) measures customers' satisfaction with specific retailer-related experiences. Using factor analysis of customers' evaluative responses he finds that they load on eight factors. In order to determine the most influential components in determining overall customer satisfaction, he regresses the overall satisfaction measure on factor scores.

Wolfenbarger and Gilly (2003) develop scales for the measurement of service quality for online retailing. Similarly, Srinivisan, Anderson, and Ponnnavolu (2002) identify different factors that impact e-loyalty and develop scales to measure these factors. A widely discussed scale for measuring service quality is SERVQUAL, a scale designed to measure five dimensions of service quality: tangibles, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml and Berry 1988). These scales have been validated by others in the field by analyzing identifiable components of customer satisfaction or service quality through factor analysis, and examining the fit with the proposed scale structure (Finn and Lamb 1991; Cronin and Taylor 1992).

Researchers have observed that the purpose of measuring service quality and customer satisfaction is to provide information that can guide managerial actions to enhance customer loyalty and improve overall financial performance of the firm (Oliver 1981, 1997; Rust, Zahorik and Keiningham 1994). The first step in establishing a reliable customer measurement system is to link these constructs to objective measures of performance. Some studies have examined the relationship between these components of customer satisfaction and various outcome variables. Dabholkar, Thorpe and Rentz (1996) examine the predictive ability of different dimensions of a retail service quality scale by studying their correlations with 'intention to shop' and 'intention to recommend'. In a study based in the retail environment, Hurley and Estelami (1998) examine the efficacy of various service quality indexes by studying their relationship with sales revenue and store customer counts as performance measures that should be related to service quality.

Surveying the literature dealing with the economic consequences of customer satisfaction, Zeithaml (2000) observes that we still do not know much about the key drivers of customer satisfaction, customer retention

and sales revenue. An essential step towards understanding these links, is to examine the relationship between different components of customer satisfaction and sales revenue. Rust and Zahorik (1993) provide a mathematical framework to determine which customer satisfaction components have the greatest impact on business outcome measures. To illustrate this framework, they use a pilot study of retail banking and find that customer responses load on three factors. Also, they investigate the link between customer satisfaction components identified in the factor analysis, and customer retention using logistic regression analysis. They find that only one of the components is significant in explaining customer retention. Using the results from the mathematical model they estimate the impact of the individual customer satisfaction components on market share and contribution.

Recent research has begun to address some of the issues that need to be addressed while understanding the linkages between customer satisfaction and sales performance such as asymmetries and nonlinearities in the links (Anderson and Mittal 2000; Mittal and Kamakura 2001; Gomez, McLaughlin and Wittink 2004). A critical element, though, that has been overlooked in the literature is the simultaneous relationship between customer satisfaction components and sales performance. While some authors have hinted at the possibility (Rust and Zahorik 1993; Bolton and Drew 1994), to our knowledge no study has tested this premise.

The setting of our study is a chain of department stores. We focus on three components of customer satisfaction that are likely to be important in a retail setting based on prior research: (a) satisfaction with customer service (b) satisfaction with quality and availability of merchandise, and (c) satisfaction with physical characteristics of individual stores. We examine the simultaneity in the relationship between these individual components of customer satisfaction, and sales performance.

Customer Service and Sales Performance

There is ample empirical research that supports the linkage between customer satisfaction and greater repurchase intentions (Anderson 1994; Anderson and Mittal 2000; Zeithaml, Berry, and Parasuraman 1996) as well as to actual repurchase behavior (cf. Bolton 1998). Studies have also shown that overall customer satisfaction is a function of performance on various attributes that are important to customers. In the retail setting, customer service has been found to be one such attribute (Babakus, Bienstock, and Van Scotter 2004). Thus, we should find that satisfaction with customer service has a positive effect on sales performance. In a retail setting, higher sales performance is associated with greater traffic and more transactions. All else remaining equal, higher traffic will result in fewer resources, such as customer service personnel, being available per transaction. This can lead to longer wait times for customers to obtain service. Several studies have shown that waiting for service in a retail store can lead to consumer dissatisfaction (Grewal, Baker, Levy and Voss 2003; Davis and Heineke 1998; Katz, Larson, and Larson 1991). This is even more critical for a department store since customers need service not just for executing the actual transaction but during the entire shopping process. Also, higher customer density (or crowding) in the store affects customer perceptions of store atmosphere and hence, can negatively affect customer satisfaction (Eroglu and Machleit 1990; Grewal, et al. 2003). Thus, while we expect satisfaction with customer service to result in higher sales for a store, presence of a feedback loop would suggest that higher sales, in return, will affect customer satisfaction with service negatively. This leads to our first set of research hypotheses related to the links between customer satisfaction with service and sales performance:

H1a: Customer satisfaction with the quality of customer service will have a positive effect on the sales revenue of a store.

H1b: Higher sales will result in lower customer satisfaction with the quality of customer service.

Merchandise and Sales Performance

Satisfaction with quality and availability of merchandise is another component of customer satisfaction that has been found to be important determinant of overall customer satisfaction in a retail setting (Ghosh 1990; Grewal et al. 1998). As with customer service, we expect that greater satisfaction with the merchandise will positively affect sales performance. If sales are higher, a store may be able to turn over its merchandise inventory more quickly, allowing the store to keep fresh stock and the newest and latest merchandise. It has been shown that perceived merchandise quality has a positive influence on customer satisfaction (Babakus, et al. 2004). In other settings, such as online auctions, job-search or match-making sites, if sales increase, customers may also benefit from network effects from a larger customer base. Thus, higher sales revenue may have a positive impact on customer satisfaction with merchandise. This leads us to our second set of research hypotheses that examines simultaneity in the relationship between sales performance and satisfaction with merchandise:

H2a: Customer satisfaction with the quality and availability of merchandise will have a positive effect on the sales revenue of a store.

H2b: Higher sales will result in a higher customer satisfaction with the quality and availability of merchandise.

Physical Characteristics and Sales Performance

Satisfaction with the physical characteristics of a store has been found to be another important determinant of overall customer satisfaction in a retail setting (Dabholkar, et al. 1996; Baker et al. 1994; Parasuraman et al. 1988). Hence, we expect that that satisfaction with physical aspects of the store will lead to higher sales revenue. All else being equal, greater traffic in the store is likely to negatively affect the appearance and cleanliness of the physical facilities. This, in turn, will result in lower customer satisfaction with physical characteristics of the store. Our third set of research hypotheses can thus be stated as follows:

H3a: Customer satisfaction with the physical characteristics of the store will have a positive effect on the sales revenue of the store.

H3b: Higher sales will result in lower customer satisfaction with the physical characteristics of the store.

The framework of our study, along with the hypothesized linkages, is presented in **Figure 1**. If the relationship between sales performance and the components of customer satisfaction is in fact simultaneous, and not uni-directional as has been implicit in the literature, ignoring this simultaneity is likely to bias the coefficients on the components of customer satisfaction when sales performance is the dependent variable (Greene 1997). The direction of bias in the coefficients estimated using single equation least-square methods is not always readily apparent. The direction of this bias would depend on the sign of the reverse relationship between sales and

FIGURE 1**Overview of Research Hypotheses***Customer Satisfaction Components*

the customer satisfaction component, and the variance-covariance matrix of the error terms obtained from the system of equations that depict the “true” relationship between the variables (Greene 1997). Notably, the potential for downward bias in the estimation of coefficients measured using OLS techniques while ignoring simultaneity is a potential reason why some earlier studies may not have found significant relationships between customer satisfaction and sales performance. We proceed to analyze our research hypotheses using data from our research site which is described in the next section.

RESEARCH SITE AND DATA**The Research Site**

Our research site is a department store chain (hereafter referred to as RETAILER). We collected data from more than 1000 stores of RETAILER (the actual number of stores is not disclosed to ensure that RETAILER’s true

identity is not revealed). The chain has positioned itself as a fair-priced department store catering to consumers who are looking for quality merchandise at affordable prices. This particular category of department stores has seen an increasing amount of competition from discounters as well as newer specialty stores. In order to track the attitudes of its customers more closely, it has begun a program of measuring customer satisfaction on an annual basis. The program consists of administering a customer survey through two sources – mailers sent to existing customers, and mall interceptions. RETAILER also has plans of using the customer satisfaction measures in the performance evaluation and compensation of store managers. In doing so, the management believes that the focus of the program should be on those components of customer satisfaction that are linked to the overall strategy of the firm, rather than an overall measure of customer satisfaction.

There are several ways in which customer satisfaction may impact sales.

Customers who are satisfied would be willing to pay a higher price for the same merchandise, buy in larger quantities and more frequently. Also, satisfaction leads to positive word-of-mouth which increases overall sales volume. But there are different dimensions that may lead to higher customer satisfaction. Customers may be satisfied with the quality of merchandise at the store or with the attentiveness and friendliness of the staff on the shop-floor. Customers may also be satisfied or dissatisfied with the physical characteristics of the store such as store layout and cleanliness. On the other hand, there are several ways in which higher sales may impact the different dimensions of customer satisfaction. Higher store traffic implies longer lines at the sales registers, less shopping space, and less attention paid to each customer by sales associates. Higher store traffic also means that the merchandise would have quicker turnover, implying more fresh updates in merchandise, thus leading to higher satisfaction with merchandise. Thus, the causal relationship between customer satisfaction and sales revenue may be bi-directional.

An increase in customer satisfaction may not have an immediate impact on sales. There may be a lag between an increase in customer satisfaction and its impact on sales, and also a lag in the impact of increased sales revenues on satisfaction. Since the relationship between customer satisfaction and sales in both directions develops over time, each one of them is an aggregation of a series of influences that have occurred over time. Estimating the relationship in two directions modeled as reciprocally related equations using cross-sectional data is likely to pick up the ongoing processes of change and influence (Maruyama and McGarvey 1980). Hence, we use contemporaneous annual data on sales and customer satisfaction.

Customer Satisfaction Data

We were provided access to RETAILER's customer survey data for one year covering all stores. An objective of this article is to model the links between the different components of customer satisfaction and sales performance. Since the sales performance data is only available at the store level, we aggregate the individual level customer satisfaction data to the store level for analysis. The surveys contain questions relating to satisfaction with the quality and value of merchandise, the level and quality of customer service, and the cleanliness of the store. All responses to the survey questions are on a 10-point scale. Our data consists of mean responses to each question for individual stores.

In the first stage of our analysis, we conduct factor analysis of responses to all questions to identify different components of satisfaction. Since this particular survey instrument has not been studied before in the literature, we performed exploratory factor analysis with varimax rotation which revealed three factors with eigenvalues greater than one. The individual items load on to three clearly interpretable factors of satisfaction: customer service (Factor 1), merchandise (Factor 2) and physical characteristics (Factor 3). The factors correspond to some of those found by Dabholkar, Thorpe and Rentz (1996) and Hurley and Estelami (1998).

The hypothesized model consisting of these three factors was then tested by confirmatory factor analysis using the Linear Equations (LINEQS) model developed by Bentler and Weeks (1980). Initial tests conducted by including all question responses suggested an over-fitted model due to the lack of parsimonious use of survey items. Accordingly, some items were dropped after a careful analysis performed using recommended Wald tests. The final measurement model chosen consists of 3 items measuring satisfaction with customer

service, 3 items measuring satisfaction with merchandise, and 2 items measuring satisfaction with the physical characteristics

of stores. These survey questions are described in Table 1.

TABLE 1

Description of Items Used to Measure the Customer Satisfaction Factors

Scale/Item(a)	Cronbach's Alpha	Factor Loading(b)	Average Variance Extracted(c)
<p style="text-align: center;">Customer Service</p> <p>Thinking of the sales service in this RETAILER store, how satisfied are you on having salespeople who....</p> <ul style="list-style-type: none"> • Provide you with useful fashion/product knowledge about the merchandise they sell • Allow you to make a purchase in a timely manner • Thank you by name for shopping RETAILER, whenever possible 	0.920	<p style="text-align: center;">0.958</p> <p style="text-align: center;">0.890</p> <p style="text-align: center;">0.826</p>	0.797
<p style="text-align: center;">Merchandise</p> <p>Thinking of the RETAILER store at which most frequently shop, please rate your satisfaction on....</p> <ul style="list-style-type: none"> • Having the merchandise that you want in stock • Having good value merchandise for the price paid • Having the merchandise that is advertised 	0.927	<p style="text-align: center;">0.886</p> <p style="text-align: center;">0.845</p> <p style="text-align: center;">0.962</p>	0.808
<p style="text-align: center;">Physical Characteristics</p> <p>Thinking of customer service conveniences in this RETAILER store, how would you rate it on....</p> <ul style="list-style-type: none"> • Having clean and well-maintained restrooms • Having an overall clean and well-maintained store 	0.841	<p style="text-align: center;">0.725</p> <p style="text-align: center;">1.000(b)</p>	0.763

(a) All items are measured using a ten-point scale anchored by “very dissatisfied” (1) and “very satisfied” (10).

(b) All coefficients are significant at the 1% level.

(c) Parameter fixed at 1 for identification purpose

Adequacy of the three-factor measurement model was evaluated using the

CFI (Comparative Fit Index), GFI (Goodness of Fit Index), NFI (Normed Fit Index), and

the Non-normed Fit Index (NNFI). Ideally, a statistically non-significant chi-square statistic is desirable. However, our sample size is not within the range recommended ($100 < n < 200$) for this statistic (Hair et al., 2006). Hence, the chi-square statistic is not an appropriate measure for testing our measurement model. The fit indices for the measurement model (CFI = 0.92; GFI = 0.90; NFI = 0.92; NNFI = 0.92) were all above the recommended thresholds for an adequate fit to the data (Hu and Bentler, 1999). Moreover, the t-values for each loading are statistically significant at $p < 0.01$. Accordingly, we use the survey item means to capture the three customer satisfaction scales. We will refer to these scales as **CUSTSERV**, **MERCHANDISE**, and **PHYSICAL**, respectively.

Following Gerbing and Anderson (1988), we carried out additional tests to evaluate the reliability and validity of the multi-item constructs. The coefficient alpha for all three constructs exceeded 0.7, the threshold typically proposed in the literature (Hair et al. 2006; Nunnally 1978). In addition, the average variance extracted for customer satisfaction scales exceeded the squared correlation between them. This indicates discriminant validity of the three customer satisfaction scales (Fornell and Larcker 1981). The results appear in **Table 1**.

Sales Performance Data

We measure the sales performance (**SALES**) of each individual store as annual sales revenue per square foot of store space. **SALES** revenue is measured net of discounts and markdowns. This measure of performance has been commonly used both in the research literature on retailing as well as in practice (Berry and Lusch 1996; Donthu and Yoo 1998). Also, scaling by store space controls for effect size in our empirical models.

Other Variables Used in Analysis

While the main contribution of this article perhaps is in examining the

simultaneous relationship between components of customer satisfaction and sales performance, we believe that another significant contribution is in understanding the drivers and correlates of different components of customer satisfaction. This understanding can then be employed to control for exogenous factors that may impact the dependent variables in our empirical model, which is important since we rely on cross-sectional analysis. In this section, we describe the other variables that are used as control variables in our estimation models.

- **Employee turnover (TURNOVER):** We measure the employee turnover for each store as the proportion of regular employees leaving during a particular year. Employees in a retail store play a key role in providing valued service to customers and hence may impact customer perceptions of service. Employee retention can influence customer satisfaction because more experienced employees may have greater knowledge of customer goals (Schneider and Bowen 1985). In a similar vein, Ostroff (1992) reported a negative relationship between high school teacher turnover and students' satisfaction. This leads to the following research hypothesis:

H4: Employee turnover has a negative association with satisfaction with customer service.

- **Relative wages (RELWAGE):** Several studies in psychology have found that there are strong links between employee attitudes and customer perceptions of service quality (Schneider and Bowen 1985). Also, these studies have established that a key determinant of employee attitudes is monetary compensation provided to them (Schmit and Allscheid 1995). Based on these findings we expect that if employees are paid higher wages, they would be more

motivated to provide a higher level of service, thus affecting customer perceptions. We measure RELWAGE as the mean level of wages for a store, scaled relative to the median income of the region in which the store is located. This leads to the following research hypothesis:

H5: Relative wages of store employees will have a positive association with satisfaction with customer service.

- **Average length of employment of sales associates (AVGEXPER):** The longer an employee has been working with a store, the more likely is it that she is knowledgeable about the store's products and in understanding what customers want. Dabholkar et al. (1996) emphasize the importance of personal interaction between the customer and service employees in customers' evaluation of service quality. In building their scales, they reference earlier studies that have tested the SERVQUAL dimensions of responsiveness and assurance. The rationale for using this construct is that service employees that inspire confidence and are helpful to customers will have a significant impact on service quality. This ability of employees is likely to be influenced by the level of experience that they have. This leads to the following research hypothesis:

H6: The average length of employment of sales associates will be positively related to satisfaction with customer service.

- **Average length of experience of supervisors (SUPEREXPER):** The managerial staff of the store has control over the ordering and management of merchandise inventory. Hence, their experience with the job may impact the availability of merchandise and customer perceptions thereof. This leads to the

following research hypothesis:

H7: The average experience level of supervisors will have a positive association with customers' satisfaction with store merchandise.

- **Age of the store (LNAGE):** The age of a store is likely to influence sales revenue per square foot, since a store that has been in existence for a longer period would be known to a larger base of customers. Thus, the age of the store will have a positive association with sales performance. In addition, the age of the store is likely to affect customer perceptions of the physical characteristics of the store. Retail literature suggests that store appearance is important to retail customers (e.g. Baker et al. 1994). Thus, customer satisfaction is likely to be affected by the appearance of the physical facilities of a service business (Dabholkar et al. 1996). Since older stores are more likely to wear a more tired look than newer stores, we expect customers to be less satisfied with the physical aspects of the store for older stores. This leads to the following research hypothesis:

H8: The older the store, the higher will be the sales revenue per square foot, but the lower will be customers' satisfaction with physical characteristics of the store.

- **Sales potential per square foot (POTENTIAL):** RETAILER calculates the total sales potential for each store using demographic data including total household expenditure on selected categories of goods sold by RETAILER. Household expenditure data is collected for the primary trade area of the store, which consists of zip codes accounting for the highest percentage of sales of the given store. The sales potential per square foot, POTENTIAL, thus, is

intended to capture differences in demographics across store locations believed to be relevant in explaining variations in sales per square foot between stores. Since this is a proprietary measure used by RETAILER we were not provided further details on how it was measured. To validate that this measure is based on demographic differences across store locations, we regress POTENTIAL on variables measuring the population in the primary trade area and the median income of this population. We find that 81% of the variation in POTENTIAL is captured by these two variables. The coefficients on both the variables are positive and significant. The result confirms that POTENTIAL does in fact capture differences in demographics across store locations. Ceteris paribus, the sales per square foot of a store in a location with higher POTENTIAL is posited to be higher. Thus, we use the POTENTIAL measure as a control variable in the sales performance model. This leads to the following research hypothesis:

H9: The higher the sales potential of a store, the higher will be sales per square foot achieved by the store.

- **Soft-line (SOFTLINE):** RETAILER owns two categories of department stores. One category of stores (soft-line) carries only soft merchandise such as apparel, accessories and cosmetics, while the other category (hard-line) includes durables like furniture and household appliances in addition to the soft merchandise. Since customer perceptions of the quality and value of the different categories of merchandise may vary, we introduce a dummy variable to capture the type of store: SOFTLINE is 0 for hard-line and 1 for soft-line stores. Nearly half of all stores are hard-line, while the remaining are soft-line. We

introduce this variable as a control in the model explaining customer satisfaction with store merchandise, but we do not have any directional expectation for the relationship between the control variable and the component of satisfaction.

- **Store location (MALL):** While most of the stores (93%) are situated in malls, the rest are stand-alone stores. Since customers' perception of store cleanliness and physical facilities is likely to be influenced the general appearance of the mall, we introduce a dummy variable to control for store location without any expectation on the sign: MALL is 0 if store is stand-alone and 1 if it is situated in a mall.

REGRESSION OF SALES PERFORMANCE ON CUSTOMER SATISFACTION COMPONENTS

Model Specification

To examine the importance of the three components of satisfaction in terms of their impact on sales, we regress sales performance on customer satisfaction components. This is similar to other studies in the literature that have followed the same procedure (e.g. Dabholkar, Thorpe and Rentz 1996; Hurley and Estelami 1998). We add POTENTIAL and LNAGE as control variables that may have an impact on sales of individual stores. Here is the model:

$$Sales_i = \Omega_0 + \Omega_1 CUSTSERV_i + \Omega_2 MERCHANDISE_i + \Omega_3 PHYSICAL_i + \Omega_4 POTENTIAL_i + \Omega_5 LNAGE_i + \xi \quad (1)$$

If the relationship between sales revenue and the individual satisfaction components involves simultaneity, this would suggest that the estimated coefficients of the satisfaction components in equation (1) may be biased.

TABLE 2

**Results of OLS Regressions Examining the Relationship between
Sales Revenue and Components of Customer Satisfaction
(t-statistics in parentheses)**

$$\text{Model: } Sales_{1t} = \Omega_0 + \Omega_1 CUSTSERV_{1t} + \Omega_2 MERCHANDISE_{1t} + \Omega_3 PHYSICAL_{1t} + \Omega_4 POTENTIAL_{1t} + \Omega_5 LNAGE_{1t} + \xi$$

Dependent Variable: SALES

Intercept	37.1944 (0.95)	13.8294 (0.33)
CUSTSERV	-22.3696*** (-4.98)	-35.1598*** (-7.29)
MERCHANDISE	32.1207*** (7.43)	33.7860*** (6.28)
PHYSICAL	1.0490 (0.26)	4.3983 (1.12)
POTENTIAL	4.6355*** (8.94)	6.4153*** (12.02)
LNAGE	11.1157*** (5.97)	9.7415*** (4.90)
TURNOVER		-0.0590 (-1.28)
RELWAGE		8.8405*** (9.92)
AVGEXPER		-1.2528 (-1.16)
SOFTLINE		-4.5208 (-1.25)
SUPEREXPER		-0.1816 (-0.87)
MALL		11.5066* (1.83)
Adj. R-square	0.2089	0.2759

*, ** and *** indicate statistical significance at 10%, 5% and 1% levels (two-tail) respectively.

Econometric Considerations

To address potential heteroscedasticity in the estimation of (1), the dependent variable SALES is appropriately scaled using square footage of the store. After this

transformation, we used White's (1980) test to confirm that the homoscedasticity

assumption is not violated in the estimation model. We used the Belsley, Kuh and Welsch's (1980) criteria to identify influential observations that may drive the results. No

such observations were found. Since the three components of customer satisfaction were obtained using an orthogonal transformation, collinearity is not of concern in the estimation. Examination of Belsley et al. (1980) condition indices confirmed that multicollinearity was not a problem.

Results

The results from estimating equation (1) are presented in Table 2. As can be seen, one of the components of customer satisfaction, MERCHANDISE, is estimated to have a positive and significant relationship with SALES (coefficient = 33.7860, $t = 6.28$). But another component of satisfaction, customer service, is estimated to have a significantly negative relationship with sales performance (coefficient = -35.1598, $t = -7.29$). The estimated impact of the physical component is insignificant (coefficient = 4.3983, $t = 1.12$). A naïve interpretation of these results would suggest that the quality and value of merchandise is the only component of customer satisfaction that is important in influencing customers' purchase decisions. Better customer service appears to lead to lower customer satisfaction. Since we do not expect negative signs on any component of customer satisfaction, the results suggest that the likelihood that the estimated coefficient we obtained is biased downward because we have ignored the simultaneity between the components of satisfaction and sales in the simple regression model in (1).

SIMULTANEITY BETWEEN CUSTOMER SATISFACTION AND SALES

Model Specification

In this section, we examine the simultaneity between components of customer satisfaction and sales performance. We re-estimate model (1) after taking into account the possibility of simultaneity in the

relationship. To do so, we need to formulate instruments for each of the components of satisfaction. Since each of the components of customer satisfaction may have an impact on sales revenue, and sales revenue may, in turn, impact each of the components, our model consists of a system of four equations – one equation in which sales revenue is determined by the three components of customer satisfaction, and one equation each for the individual customer satisfaction components that are influenced by sales revenue. The new model is specified at the top of **Table 3** on the next page. Note that this simultaneous model is identified.

Econometric Considerations

The two-stage least squares method can be used to obtain consistent and efficient estimators of a system of simultaneous equations if the error terms across the equations are uncorrelated (Theil 1971). In this case, though, the error terms across equations are likely to be correlated since they refer to the same set of stores. In fact, the correlations between the error terms range from -0.47 to 0.74 and are significant at the 5% level. The magnitude of these correlations exceeds the cut-off of 0.33 for using two-stage estimation suggested by Kennedy (1987). To obtain a more efficient estimator of the parameters in the model when the error terms are correlated, Zellner and Theil (1962) suggest using three-stage least squares (3SLS) to estimate the parameters. We conduct the Hausman (1978) test to compare 2SLS with 3SLS methods of estimation for the system of equations. The test procedure compares the estimators produced by 2SLS and 3SLS under the null hypothesis that both estimators are consistent but only the 2SLS estimator is asymptotically efficient and under the alternative hypothesis that only the 3SLS estimator is consistent. The results of the test indicate we can reject the null hypothesis ($\chi^2 = 139.1$, $df = 18$, $p < 0.0001$). Thus, the 3SLS estimation method is better than the 2SLS method.

TABLE 3

**Results of Three-stage Least Squares Regression Examining the Relationship between
Sales Performance and Components of Customer Satisfaction
(t-statistics in parentheses)**

The New Model:

$$SALES_i = \phi_0 + \phi_1 CUSTSERV_i + \phi_2 MERCHANDISE_i + \phi_3 PHYSICAL_i + \phi_4 POTENTIAL_i + \phi_5 LNAGE_i + \varepsilon_i$$

$$CUSTSERV_i = \alpha_0 + \alpha_1 SALES_i + \alpha_2 TURNOVER_i + \alpha_3 RELWAGE_i + \alpha_4 AVGEXPER_i + \varepsilon_i$$

$$MERCHANDISE_i = \beta_0 + \beta_1 SALES_i + \beta_2 SOFTLINE_i + \beta_3 SUPEREXPER_i + \varepsilon_i$$

$$PHYSICAL_i = \gamma_0 + \gamma_1 SALES_i + \gamma_2 MALL_i + \gamma_3 LNAGE_i + \varepsilon_i$$

System R-square = 0.3464

Dependent Variable

Independent Variable	SALES	CUSTSERV	MERCHANDISE	PHYSICAL
Intercept	-597.8800*** (-2.77)	7.0020*** (79.66)	7.2927*** (94.71)	8.8551*** (88.81)
SALES		-0.0013*** (-3.00)	0.0026*** (6.89)	-0.0035*** (-6.46)
CUSTSERV	32.9130*** (2.69)			
MERCHANDISE	56.7207*** (6.72)			
PHYSICAL	6.6390 (0.26)			
POTENTIAL	5.3464*** (7.31)			
LNAGE	8.7065 (1.32)			-0.1865*** (-12.45)
TURNOVER		-0.0006* (-1.94)		
RELWAGE		0.0637*** (13.08)		
AVGEXPER		0.0164*** (2.64)		
SOFTLINE			-0.3347*** (-19.03)	
SUPEREXPER			0.0017 (1.55)	
MALL				0.1312*** (2.60)

*,** and *** indicate statistical significance at 10%, 5% and 1% levels (two-tail) respectively.

Results

The results of estimating the model specified in equations (2) to (5) using 3SLS are presented in Table 3. As can be seen, the results change considerably from those obtained in Table 2. All three coefficients on the components of customer satisfaction in the sales equation have the expected positive signs, and two of them are significant: CUSTSERV (coefficient = 32.9130, $t = 2.69$) and MERCHANDISE (coefficient = 56.7207, $t = 6.72$). Thus, CUSTSERV, which was significantly negative when estimated using OLS, is now significantly positive. Note that the coefficient on PHYSICAL is insignificant (coefficient = 6.6390, $t = 0.26$). The PHYSICAL variable is constructed using two survey items that assess cleanliness of restrooms and stores but may not be comprehensive enough to capture the totality of the physical facilities in the stores. This could be a possible reason for the lack of significance. Also, it is evident from the results that sales does, in fact, have a significant impact on all three components of customer satisfaction. As expected, the impact of sales on satisfaction with customer service and on satisfaction with physical components is negative, while that on satisfaction with merchandise is positive.

The results are important for managers who rely on analysis of the relative importance of different components of customer satisfaction when formulating strategy. If the simultaneity were ignored in the case of RETAILER, for instance, the results would show that improving customer service would have a negative impact on sales performance. The strategic implication for the entire organization can be substantial – managers may focus only on improving the quality and value of merchandise in order to generate sales revenue while ignoring the importance of customer service and store cleanliness even though they may actually have a significantly positive impact on sales

revenue. Our results indicate that when simultaneity is considered in the model, sales revenue has a significantly negative impact on customers' satisfaction with service and physical facilities. The implication for store management is that achieving higher sales traffic would have a negative impact on certain dimensions of customer satisfaction, making it essential to bolster resources allocated to improve customer satisfaction on those dimensions.

In addition to finding evidence for our main premise, the results also provide interesting insights on the drivers and correlates of different components of customer satisfaction. For instance, we find that sales potential is significantly (t -statistic = 7.31) related to the actual sales achieved by a store. Moreover, relative wages paid to sales associates and their average experience are both positively associated with the service dimension of customer satisfaction (t -statistics = 13.08 and 2.64 respectively). This finding supports the argument that more motivated and experienced employees are likely to provide better customer service leading to higher customer satisfaction. Also, customers seem more satisfied with hard-line stores that sell a broader line of merchandise (t -statistic = -19.03) which may enhance convenience for the shopper due to the wider assortment of goods carried by these stores. Finally, for the PHYSICAL component of customer satisfaction, we find evidence in line with our expectation that customers are less satisfied with older stores (t -statistic for LNAGE = -2.45) and more satisfied with stores in a mall rather than stand-alone stores (t -statistic for MALL = 2.60).

DISCUSSION

Our primary objective in this article has been to empirically document the simultaneous relationship between components of customer satisfaction and sales performance. The implications of the results

are useful to researchers as well as managers in gaining a more meaningful understanding of the relationships between these constructs. In examining the relationship between the components of customer satisfaction and sales performance, earlier studies had ignored the possibility of simultaneity between them. This may distort conclusions drawn from the results because the coefficients estimated from the misspecified model may be biased.

Using customer survey data more than 1000 stores of a department store chain, we examined the simultaneous relationship between the components of customer satisfaction and sales performance. We used factor analysis of customer responses to a satisfaction survey and found that the responses load on three factors, which could be identified as customer service, merchandise and physical characteristics. The results obtained from a model that ignored the simultaneity between the satisfaction components and sales performance contradicted intuition. Theory suggests that if, in fact, simultaneity does exist and is ignored, results of the estimation will be biased. We found evidence indicating the existence of simultaneity – while the components of customer satisfaction had a significant impact on sales performance, sales, in turn, had a significant impact on the satisfaction components. If simultaneity in the relationship is ignored, decisions based on biased coefficient estimates may lead to suboptimal allocation of resources by managers. The results of this study, thus, have important implications for future studies that model the relationship between customer satisfaction and sales performance, as well as for managers who base strategic decisions on the results of such analyses. In addition to providing support for our main argument in the article, the results also identify several important drivers and correlates of different components of customer satisfaction. While the addition of these variables enhances the robustness of our results by controlling for exogenous factors, they also provide

managers and researchers insights into the different determinants of various components of customer satisfaction.

REFERENCES

- Anderson, E. W. (1994), "Cross-category variation in customer satisfaction and retention," *Marketing Letters*, 5 (Winter): 19-30.
- Anderson, E.W. and M. W. Sullivan (1993), "The antecedents and consequences of customer satisfaction for firms," *Marketing Science*, 16 (2): 129-145.
- Anderson, E.W., C. Fornell and D.R. Lehmann (1994), "Customer satisfaction, market share and profitability: Findings from Sweden," *Journal of Marketing*, 58 (July): 53-66.
- Anderson, E.W., C. Fornell and R. Rust (1997), "Customer satisfaction, productivity and profitability: Differences between goods and services," *Marketing Science*, 16 (2): 129-145.
- Anderson, E.W. and V. Mittal, (2000), "Strengthening the satisfaction-profit chain," *Journal of Service Research*, 3 (November): 107-120.
- Babakus, E., C. Bienstock, and J. R. Van Scotter (2004), "Linking perceived quality and customer satisfaction to store traffic and revenue growth," *Decision Sciences*, 35 (4): 713-737.
- Baker, J., D. Grewal, and A. Parasuraman (1994), "The influence of store environment on quality inferences and store image," *Journal of the Academy of Marketing Science*, 22 (Fall): 328-339.
- Belsley, D., E. Kuh and R. Welsch (1980), *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*, New York, NY: John Wiley and Sons.
- Bentler, P.M. and D. G. Weeks (1980), "Linear structural equations with latent variables," *Psychometrika*, 45: 289-308.
- Berry, L.L. and R.F. Lusch (1996), "Making corporate performance 'SOAR,'" *Marketing Management*, (Fall): 12-24.
- Bitner, M.J. and A.R. Hubbert (1994), "Encounter satisfaction versus overall satisfaction versus quality," Pp. 72-94 in R. T. Rust and R. L. Oliver (Eds.), *Service Quality: New Directions in Theory and Practice*, London: Sage Publications.

- Bolton, R.N. (1998), "A dynamic model of the duration of customer's relationship with a continuous service provider: The role of satisfaction," *Marketing Science*, 17 (1): 45-65.
- Bolton, R.N. and J.H. Drew (1994), "Linking customer satisfaction to service operations and outcomes," Roland T. Rust, Richard L. Oliver eds., *Service Quality: New Directions in Theory and Practice*. Sage Publications, Thousand Oaks, CA, 173-200.
- Cronbach, L.J. (1951), "Coefficient alpha and the internal structure of tests," *Psychometrika*, 16: 297-334.
- Cronin J.J. and S.A. Taylor (1992), "Measuring service quality; A reexamination and extension," *Journal of Marketing*, 56 (July): 55-68.
- Dabholkar, P.A. (1995), "The convergence of customer satisfaction and service quality evaluations with increasing customer patronage," *Journal of Customer Satisfaction, Dissatisfaction and Complaining Behavior*, 8: 32-43.
- Dabholkar, P.A., D. Thorpe and J.O. Rentz (1996), "A measure of service quality for retail stores: Scale development and validation," *Journal of the Academy of Marketing Science*, 24 (1): 3-16.
- Davis, M. M. and J. Heineke (1998), "How disconfirmation, perception and actual waiting times impact customer satisfaction," *International Journal of Service Industry Management*, 9 (1): 64-73.
- Donthu, N. and B. Yoo (1998), "Retail productivity assessment using data envelopment analysis," *Journal of Retailing*, 74 (1): 89-105.
- Eroglu, S. A. and K. Machleit (1990), "An empirical study of retail crowding: antecedents and consequences," *Journal of Retailing*, 66 (2): 201-221.
- Finn, D.W. and C.W. Lamb (1991), "An evaluation of the SERVQUAL scales in a retail setting," pp. 483-490 in R. Holman and M.R. Soloman (Eds.), *Advances in Consumer Research*, Provo, UT: Association for Consumer Research.
- Fornell, C. and D. F. Larcker, (1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, (18): 39-50.
- Gerbing, D. W. and J. C. Anderson (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessments," *Journal of Marketing Research*, 25 (May): 186-92.
- Ghosh, A. (1990), *Retail management*, Chicago: The Dryden Press.
- Gomez, M.I., E.W. McLaughlin, and D.R. Wittink (2004), "Customer satisfaction and retail sales performance: an empirical investigation," *Journal of Retailing*, (80): 265-278.
- Greene, W. (1997), *Econometric Analysis*, New York, NY: Macmillan.
- Grewal, D., J. Baker, M. Levy, and G. B. Voss (2003), "The effects of wait expectations and store atmosphere evaluations on patronage intentions in service-intensive retail stores," *Journal of Retailing*, 79: 259-268.
- Grewal, D., R. Krishnan, J. Baker, and N. Borin (1998), "The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions," *Journal of Retailing*, 74 (3): 331-352.
- Haavelmo, T. (1943), "The statistical implications of a system of simultaneous equations," *Econometrica*, 11: 1-12.
- Hair, J. F., B. Black, B. J. Babin, R. E. Anderson, and R. L. Tatham (2006), *Multivariate data analysis*, 6th ed. Upper Saddle River, NJ: Prentice Hall.
- Hausman, J. (1978), "Specification tests in econometrics," *Econometrica*, (46): 1251-1271.
- Hu, L., and P. M. Bentler (1995), "Evaluating model fit," in R. H. Hoyle, ed. *Structural equation modeling: concepts, issues, and applications*, SAGE Inc., Thousand Oaks, CA, 76-99.
- Hurley, R.F. and H. Estelami (1998), "Alternative indexes for monitoring customer perceptions of service quality: A comparative evaluation in a retail context," *Journal of the Academy of Marketing Science*, 26 (3): 209-221.
- Iacobucci, D., K.A. Grayson and A. Ostrom (1995), "Distinguishing service quality and customer satisfaction: The voice of the consumer," *Journal of Consumer Psychology*, 4 (3): 277-303.
- Kamakura, W.A., V. Mittal, F. Rosa, J.A. Mazzon (2002), "Assessing the service-profit chain," *Marketing Science*, 21 (3): 294-317.

- Katz, K. L., B. M. Larson, and R. C. Larson (1991), "Prescription for the waiting-in-line blues: entertain, enlighten, and engage," *Sloan Management Review*, 32 (2): 44-53.
- Kumar, P. (2005), "The competitive impact of service process improvement: Examining customers' waiting experiences in retail markets," *Journal of Retailing*, 81 (3): 171-180.
- Kumar, V. and D. Shah (2004), "Building and sustaining profitable customer loyalty for the 21st century," *Journal of Retailing*, 80 (4): 317-330.
- Maruyama, G. and B. McGarvey (1980), "Evaluating causal models: An application of maximum likelihood analysis of structural equations," *Psychological Bulletin*, 87: 502-512.
- Mittal, V., E.W. Anderson, A. Sayrak, and P. Tadikamalla (2005), "Dual emphasis and the long-term financial impact of customer satisfaction," *Marketing Science*, 24 (4): 544-555.
- Mittal, V. and W.A. Kamakura (2001), "Satisfaction, repurchase intent, and repurchase behavior: investigating the moderating effect of customer characteristics," *Journal of Marketing Research*, 38 (February): 131-142.
- Niraj, R., G. Foster, M. Gupta and C. Narasimhan (2003), "Understanding customer level profitability implications of satisfaction programs," Working Article: University of Southern California.
- Nunnally, J. C. (1978), *Psychometric Theory*, 2nd ed. New York, NY: McGraw-Hill.
- Oliver, R. L. (1981), "Measurement and evaluation of satisfaction processes in retail settings," *Journal of Retailing*, 57 (3): 25-48.
- Oliver, R.L. (1997), *Satisfaction: A Behavioral Perspective on the Consumer*, New York: McGraw-Hill.
- Ostroff, C. (1992), "The relationship between satisfaction, attitudes, and performance: An organizational-level analysis," *Journal of Applied Psychology*, 77: 963-974.
- Parasuraman, A., V.A. Zeithaml and L.L. Berry (1988), "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality," *Journal of Retailing* 54 (1): 12-40.
- Parasuraman, A., V.A. Zeithaml and L.L. Berry (1994), "Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research," *Journal of Marketing*, 58 (1): 111-124.
- Rust, R.T. and A.J. Zahorik (1993), "Customer satisfaction, customer retention and market share," *Journal of Retailing*, 69 (2): 193-215.
- Rust, R.T., A.J. Zahorik and T.L. Keiningham (1994), *Return on Quality*, Chicago: Probus.
- Schmit, M.J. and S.P. Allscheid (1995), "Employee attitudes and customer satisfaction: Making theoretical and empirical connections," *Personnel Psychology*, 48 (3): 521-532.
- Schneider, B. and D.E. Bowen (1985), "Employee and customer perceptions of service in banks: Replication and extension," *Journal of Applied Psychology*, 70: 423-433.
- Srinivasan, S.S., R. Anderson, and K. Ponnnavolu (2002), "Customer loyalty in e-commerce: an exploration of its antecedents and consequences," *Journal of Retailing*, 78: 41-50.
- Taylor, S.A. (1997), "Assessing regression-based importance weights for quality perceptions and satisfaction judgments in the presence of higher order and/or interaction effects," *Journal of Retailing*, 73 (1): 135-159.
- Taylor, S.A. and T.L. Baker (1994), "An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions," *Journal of Retailing*, 70 (2): 163-178.
- Theil, H. (1971), *Principles of Econometrics*, New York: Wiley.
- Westbrook, R.A. (1981), "Sources of consumer satisfaction with retail outlets," *Journal of Retailing*, 70 (2): 163-178.
- White, H. (1980), "A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity," *Econometrica*, 48 (May): 817-838.
- Wiles, M. A. (2007), "The effect of customer service on retailers' shareholder wealth: The role of availability and reputation cues," *Journal of Retailing*, 83 (1): 19-31.
- Wolfenbarger, M. and M. C. Gilly (2003), "eTailQ: dimensionalizing, measuring and predicting etail quality," *Journal of Retailing*, 79: 183-198.

- Zeithaml, V.A. (2000) "Service quality, profitability, and the economic worth of customers: What we know and what we need to learn," *Journal of the Academy of Marketing Science*, 28 (1): 67-85.
- Zeithaml, V.A., L.L. Berry and A. Parasuraman (1996), "The behavioral consequences of service quality," *Journal of Marketing*, 60: 31-46.
- Zellner, A. and H. Theil (1962), "Three stage least squares: Simultaneous estimation of simultaneous equations," *Econometrica*, 30: 63-68.

Send Correspondence Regarding This Article to:

Raj Mashruwala
Assistant Professor
College of Business Administration (MC 006)
University of Illinois at Chicago
601 South Morgan Street, 2310 UH
Chicago, IL 60607
Phone: 312-996-2529
Fax: 312-996-4520
Email: rajm@uic.edu

TAXONOMY OF THE INFLUENCE OF OTHER CUSTOMERS IN CONSUMER COMPLAINT BEHAVIOR: A SOCIAL-PSYCHOLOGICAL PERSPECTIVE

**Ruoh-Nan Yan, Colorado State University
Sherry Lotz, University of Arizona**

ABSTRACT

Most research in consumer complaint behavior (CCB) emphasizes the motivations for making complaints, complaint responses, and subsequent behavior; however, the role of interpersonal influence on CCB has drawn little attention. This study investigates CCB from a social-psychological perspective according to social facilitation effects and interpersonal influence literature. Based on a qualitative study via a modified critical incident technique, this study identifies four major categories consisting of 17 subcategories of interpersonal influence on CCB. The findings suggest that the mere presence (physical and mental) of other customers (acquainted and unacquainted) may play a critical role in consumers' decisions to make complaints in the service context. Sources of others' influences on complaint decisions are identified. Theoretical and managerial implications are discussed.

INTRODUCTION

Marketing researchers have attempted to better understand consumer complaint behavior (CCB) in the past three decades due to the fact that it is an important post-evaluation response of consumer dissatisfaction (Liu and McClure 2001). Within the service/product context (e.g., Liu and McClure 2001), past research on CCB has mainly focused on consumers' motivations for making complaints (e.g., Morel, Poiesz, and Wilke 1997), complaint responses (e.g., Day and Bodur 1978; Hirschman 1970; Singh 1990), effects of complaining (e.g., Nyer 2000), subsequent behavior (e.g., Blodgett and Anderson, 2000),

consumer complaint handling (e.g., Estelami 2000), and non-complaining (e.g., Chebat, Davidow, and Codjovi 2005).

A neglected area in CCB is the potential effect of other customers on an individual's complaint behavior. It is possible that the mere presence (i.e., simply "being there" with no interaction) of and/or interaction with acquainted or unacquainted others at the time of service failure may influence consumers' complaint decision-making processes and, ultimately, their complaint behavior. Although no known research has directly investigated this issue, there is evidence to suggest such a proposition.

First, the importance of social significance in consumer satisfaction was mentioned by Day (1977). According to Day (1977), people have the desire for the approval of others for publicly- or jointly-consumed products. The reaction of other consumers to a purchase may have influence on the purchaser's satisfaction and/or dissatisfaction level with respect to a purchase. This social factor seems to play a critical role in satisfaction.

Second, the importance of social presence (i.e., presence of other customers) has been investigated in the field of consumer research (e.g., Argo, Dahl, and Manchanda 2005; Dahl, Manchanda, and Argo 2001; Luo 2005; McGrath and Otnes 1995). With respect to the level of acquaintance, McGrath and Otnes (1995) examined different types of influence among unacquainted consumers in the retail setting by using the framework of interpersonal influence. They concluded that strangers are sometimes a source of inspiration and frustration during the shopping process, depending on consumers'

shopping activities and how they perceive challenges of accomplishing tasks. Regarding the type of presence, through the use of a field study approach, Dahl et al. (2001) found that social presence of another individual or group of individuals (either real or imagined) during purchase can create embarrassment for consumers (Dahl et al. 2001). Recently, Luo (2005) further applied the concept of social presence in understanding consumer impulse buying behavior.

Third, Zajonc's (1965) social facilitation theory recognizes the importance of the social environment on individuals' behavior and posits that the mere presence of others (i.e., without interaction between individuals taking place) can affect an individual's behavior. Some studies have been conducted to understand consumer shopping behavior and online auction behavior in relation to this theory (e.g., Sommer and Sommer 1989; Rafaeli and Noy 2002). This study further proposes that consumers' decisions to make complaints may be dependent on their perceptions of other customers' presence.

The purpose of this research is to investigate the role of other customers in CCB, in the service context, from a social-psychological perspective. The service context is chosen because of its inseparability property (Zeithaml and Bitner 2003), i.e., the simultaneous production and consumption of services, requiring the involvement of the customer. As the customer is taking part in the commingled production-consumption process, the same customer is often exposed to other customers. In addition to precepts from CCB literature, the present investigation utilizes the interpersonal influence literature (e.g., Dahl et al. 2001; McGrath and Otnes 1995) and theory of social facilitation effect (Zajonc 1965) as its frameworks.

The exploratory study addresses the question as to whether the presence (physical and mental) of other customers (acquainted

and unacquainted) influence dissatisfied customers' decisions to make complaints. Specifically, we seek to answer the following questions: "Do others in the service environment, acquainted and unacquainted, affect consumers' voicing complaints to service providers? "Can others influence consumers' voice complaint behavior even if they are not physically present with the consumer?" If so, how do acquainted or unacquainted others who are present or not present in the service environment affect consumers' complaint behavior? In other words, what are the sources of influence? In order to answer these questions, we attempt to identify and categorize the potential types of influence via a qualitative method (i.e., modified critical incident technique) in hopes that existing knowledge related to CCB as well as interpersonal influence is enhanced.

This article consists of four sections. First, past literature in CCB and social influences will be discussed with an emphasis on two theories that help guide this research, including interpersonal influence and social facilitation effect. Second, the methodology section explains data collection, nature of respondents, and the coding technique used to obtain meaningful results pertaining to this research. Third, results will be presented. Finally, discussion and conclusions will be presented as well as future research directions.

REVIEW OF LITERATURE

Consumer Complaint Behavior

Complaint behavior is generally related to the emotional reactions of dissatisfied consumers due to a product and/or service failure. According to Jacoby and Jaccard (1981), it is defined as "an action taken by an individual which involves communicating something negative regarding a product or service to either the firm manufacturing or marketing that product or service, or to some third-party organizational

entity [such as the Better Business Bureau or the Federal Trade Commission] (p.6).” Past research categorizes complaint behavior on two levels. At the first (behavioral) level, dissatisfied consumers would take actions and express their unhappiness toward the seller/service provider, their family, and friends, or even a third party (Crie and Ladwein 2002; Singh 1988). They make complaints in order to achieve certain goals, including seeking redress and boycotting the product or service (Day 1984). At the second (non-behavioral) level, no specific action is taken by the displeased consumer due to several reasons, such as no desire to voice complaints or not being able to recall the incident (Crie and Ladwein 2002).

Researchers have investigated different factors that determine complaint behavior, and findings indicate that perceived dissatisfaction is a necessary antecedent (Crie and Ladwein 2002; Oliver 1987). However, complaint behavior does not always take place when dissatisfaction is experienced (e.g., Chebat et al. 2005; Crie and Ladwein 2002). Consumers’ perceptions of cost/profit ratios with respect to complaining, types of purchase, loyalty to the brand and/or store, individual personality, and demographic variables are likely to have an impact on how consumers respond (Crie and Ladwein 2002). Crie and Ladwein (2002) utilized commitment theory to explain complaint behavior and proposed that the buyer-seller relationship may shape the response style of dissatisfaction. Other research suggests that CCB varies by store characteristics, attitudes toward complaining, perceptions of likelihood of success, and factors related to stability and controllability (Blodgett and Anderson 2000; Chebat et al. 2005). As stated, no known studies have examined the role of interpersonal influence as a determinant of complaint behavior. However, Folkes (1984), in a study on the effects of attribution on consumers’ reactions to service failures, acknowledged the possible influence of others’ presence on consumer reactions to product failure.

Interpersonal Influence on Consumer Behavior

The importance of social influence has been addressed in the field of consumer behavior with the focus on interpersonal influence from *acquainted* customers with whom the consumer has a certain relationship, such as family (e.g., Moschis 1985), peers (e.g., Childers and Rao 1992), and reference groups (e.g., Bearden and Etzel 1982). For example, Lascu and Zinkhan (1999) examined how consumers conform to other people’s influence in marketing settings and recognized several factors that influence consumer conformity, including group characteristics, task difficulty (i.e., clarity of outcome), past experiences, and personality traits. In terms of group characteristics, they found that the size of group, leadership, likelihood of future interaction with the group, and extent of consensus affect consumers’ desire to conform.

Researchers have also recognized interpersonal influence from *unacquainted* customers (e.g., McGrath and Otnes 1995). McGrath and Otnes (1995) studied stranger interaction in the retail setting and concluded that interactions among unacquainted consumers do, in fact, take place; these experiences can either help or hamper shopping experiences in both overt and covert manners. The authors defined overt influences as actual face-to-face interactions between strangers; covert influences are referred to as the situation in which only one customer is conscious of the influence during the encounter.

While the importance of physical social presence of acquainted and unacquainted others has been recognized, a scholar suggests that it is not necessary for the social audience to be physically present to have an impact (Miller 1996). Consumers may be alone and imagine that others in the surrounding environment are watching them and their actions. The imagined action of a

social presence may be associated with a person or a group of people (Latané 1981), which has been found to affect consumers' levels of embarrassment during purchase processes (Dahl et al. 2001). It is also posited that imagined social presence may be associated with word-of-mouth (WOM) communication. People are likely to make inferences based on information received through WOM communication (Wilson and Peterson 1989). Sources of WOM communication, regardless of the level of acquaintance, may be regarded as social audiences which are not physically present. Thus, it is proposed that consumers imagine the presence of others and recollect the information that they have learned from them (i.e., WOM communication), which, in turn, may have an effect on their complaining decisions.

Social Facilitation Effects

According to Zajonc (1965), the tenets of social facilitation theory predict that the mere presence of others influence individual behavior and performance. That is, influences may occur even when the individual does not interact with other people in the surrounding environment. The presence of others may either enhance or impair an individual's performance.

Academicians have developed three major explanations for the social facilitation phenomenon (Aiello and Douthitt 2001). Drive theory suggests that the mere presence of others may increase physiological arousal (or drive) within an individual, which, in turn, makes a simple task or well-learned task easier to accomplish. Conversely, the same arousal could render a complicated or new learning task more difficult (Aronson, Wilson, and Akert 1999). The premise is that others may have some significance to the performer (e.g., potential for reward/punishment) that may affect an individual's performance (Zajonc 1980). Based on drive theory, social comparison theorists suggest that individuals

may be affected by others due to their concern that they are being evaluated. Thus, according to this theory, arousal or drive is only elicited when an individual's performance is thought to be assessed by the others (Cottrell 1972). Lastly, cognitive process theory explains the effects of the mere presence of others on the attention to and processing of different types and amounts of information. For instance, rather than processing information about the task at hand, the mere presence of others may cause an individual to redirect his/her attention to the others in an effort to assess whether or not they are monitoring his/her performance or may pose a threat. This theory extends influencers on drive or arousal, and ultimately on performance, to include situational, individual, and group size factors (Paulus 1983).

In a comprehensive review of social facilitation literature and research, Aiello and Douthitt (2001) offered a unifying framework that identifies five major factors that affect how the presence of others influences a performer's behavior. These factors include type of presence factors (e.g., type of presence, relationship of other with performing individual), situational factors (e.g., feedback from others), individual factors including perceptions and reactions of individual as well as their characteristics, task factors (e.g., complexity of task), and performance factors (e.g., cooperation/competition).

Social Facilitation Effects and Consumers

Grounded in the social-psychology field, social facilitation effects have been found in the field of consumer behavior. Depending on situations, social facilitation can have both positive and negative effects on consumption behaviors (Gaumer and LaFief 2005). For example, past research has revealed that consumers who are accompanied by others spend more time shopping in stores. Sommer and Sommer

(1989) found that the presence of others extends consumers' length of stay and, thus, increases purchases. Rafaeli and Noy (2002) harnessed the theory of social facilitation for understanding online auctions and concluded that participants of online bidding tend to stay longer in the auction activity and perform better during the auction when exposed to a higher level of virtual presence of other bidders. On the other hand, Gaumer and LaFief (2005) proposed that social facilitation theory indicates that crowding may influence the customer's purchase decision as well as result in negative emotions and behaviors (e.g., deindividuation). Consumers may buy items that they usually would not or vice versa when they perceive others as evaluating them and, thus, behave differently.

METHOD

The influence of other customers on CCB is explored through a qualitative methodology similar to the critical incident technique (CIT). Critical incidents refer to the descriptions of events and behaviors. CIT is a method of classification that helps determine categories based on an analysis of a specific set of data. It is especially useful when the purpose of the research is to enhance knowledge of a phenomenon that has not been extensively documented (Bitner, Booms, and Tetreault 1990). While CIT has been mainly adopted to analyze data from interviews or observations, the current study utilizes a modified version that allows respondents to provide answers to relevant questions in written form.

Data Collection

In order to explore the role of other customers in CCB, critical incidents were collected from a convenience sample of undergraduate students majoring in business-related programs at a southwestern university. This sampling technique is deemed appropriate when the research is exploratory in nature. The students were

requested to answer the following questions outside of class and to submit them to the researchers within a two-week period. In order to gain more insights into the topic of interest, the students were encouraged to complete the questions by being given extra credit incentives in their respective classes.

- Please think of a situation in which you have experienced poor service in the service setting (e.g., airlines, restaurants, hotels, etc.) and thought about making a complaint.
- Please describe the situation. Why did you feel dissatisfied?
- Did you finally make a complaint? If yes, then please think back, 1) Why did you decide to complain? 2) How did you complain? and 3) What were the processes and the outcome? If you did not complain, then please give reason(s) why you decided not to complain.
- Do you think the presence of other customer(s), including those you knew and those you did not know, had any impact on your decision to complain or not to complain? Why?
- How difficult/easy did you feel it was to make a complaint in your situation? What made it so difficult/easy for you?

The above questions required the respondents to recall past experiences regarding complaint behavior, including the situations and possible factors that encouraged and/or discouraged their decisions to make complaints. More specific questions regarding the presence of other customer(s) were posed to ensure that sufficient information about the influence of

others in a complaint behavior setting would be obtained.

A total of 97 respondents, 82 females and 15 males, documented their dissatisfying experiences which resulted in 97 incidents. Of the 97 incidents, 34 were in the context of restaurants, 20 in airlines, 11 in phone services, 13 in retail services, and the balance in automobile rental, hotel, and other service industries. Of the total sample, 27 respondents were dropped from further analysis due to the fact that no relevant information regarding other customer(s) in the setting was mentioned, culminating in a useable sample of 70 incidents.

Classification of Incidents

For the purpose of this research, a similar analytic technique to the one used by Bitner, et al. (1990) was employed. This study's data analysis involved several stages. First, on a separate basis, each of the researchers carefully read and sorted the incidents into categories. Each researcher reviewed the critical incidents for similarities and differences that pertained to the influence of other customer(s) in reported experiences. Second, the researchers compared the results of the initial stage of analysis, identifying the similarities and differences between researchers' classifications. Each incident was assigned to only one category. Thorough reading of incidents and the actual words used by the respondent were considered in category assignment in cases where potential overlapping might occur. Interjudge agreement on the assignment of incidents into categories was 87%. Differences in categorical results were discussed until a consensus on categories was achieved. Third, the researchers labeled categories through further discussion.

RESULTS

Four major categories of influence of other customers emerged from this study. The

first dimension is concerned with the relationship the consumer has with other customers in the service context (i.e., acquainted versus unacquainted customers). The second dimension is involved with the type of social audience surrounding the consumer (i.e., physical presence versus mental presence) (see Figure 1). The first category, *Acquainted Customers with Physical Presence*, consists of three subcategories:

- (1) Encouragement/Confidence/Support,
- (2) Embarrassment Avoidance, and
- (3) Obligation.

The second category, *Unacquainted Customers with Physical Presence*, encompasses eight subcategories:

- (1) Encouragement/Confidence/Support,
- (2) Embarrassment Avoidance,
- (3) Altruism,
- (4) Problem Awareness through Service Comparison,
- (5) Leadership,
- (6) Diffusion of Responsibility,
- (7) Accessibility, and
- (8) Revenge.

The third category, *Acquainted Customers with Mental Presence*, includes three subcategories:

- (1) Confidence/Support,
- (2) Supplemented Annoyance, and
- (3) Heightened Anticipation.

Finally, the fourth category, *Unacquainted Customers with Mental Presence*, addresses three categories:

- (1) Supplemented Annoyance,
- (2) Altruism, and
- (3) Sympathy.

The following is a description of the major categories and respective subcategories

with respect to respondents' descriptions of how other customers, present at the time of service failure, influenced their CCB.

FIGURE 1

Taxonomy of the Influence of Other Customers in Consumer Complaint Behavior

		Level of Acquaintance	
		Acquainted Customers (family, peers, friends, etc.)	Unacquainted Customers
Type of Social Presence	Physical Presence	<ul style="list-style-type: none"> • Encouragement/Confidence/Support • Embarrassment Avoidance • Obligation 	<ul style="list-style-type: none"> • Encouragement/Confidence/Support • Embarrassment Avoidance • Altruism • Problem Awareness through Service Comparison • Leadership • Diffusion of Responsibility • Accessibility • Revenge
	Mental Presence	<ul style="list-style-type: none"> • Confidence/Support • Supplemented Annoyance • Heightened Anticipation 	<ul style="list-style-type: none"> • Supplemented Annoyance • Altruism • Sympathy

Acquainted Customers with Physical Presence

Past research indicates that interpersonal influence occurs through family, peers, or reference groups (e.g., Bearden and Etzel 1982; Childers and Rao 1992; Moschis 1985). According to the findings, acquainted customers include family members, peers, friends, and significant others.

Encouragement/Confidence/Support

Encouragement/confidence/support refers to the strength from family members,

peers, and friends given to customers in the wake of service failures. The transference of strength results in customers feeling right and correct about their decisions to voice dissatisfaction. The data show strong evidence that family members, especially parents, can have major influence on respondents' complaint behavior. For example, two different female respondents mentioned the impact that their parents had on them when encountering dissatisfying experiences.

“My dad had a huge impact in my complaint. He had such an impact because

he told me how the situation turned out was completely unfair....”

“...I was a little disappointed because I was craving a juicy rare steak. However, my mother finally convinced me to speak up about my order....”

In addition to family influence, findings reveal that the large size of the group of acquaintances helped some respondents feel more confident and supported, driving their decisions to complain. This finding is consistent with the study by Lascu and Zinkhan (1999). Being accompanied by a large group is likely to help consumers have greater confidence in voicing their dissatisfaction to the service provider.

“My party had about 17 people in it, and all of us were very upset...Having a large group definitely encouraged us to complain because we out-numbered the manager and waitress.”

Embarrassment Avoidance

Embarrassment avoidance occurs when consumers feel uncomfortable in making complaints because they are accompanied by other acquainted customers and do not want to bring perceived negative attention to themselves. The lesser tendency to make a complaint appears to be caused by the potential damage to the consumer's self-image and/or reputation.

“I just don't want to look 'difficult' in front of my friends and family...Their presence had a great impact on why I chose not to complain. I didn't want to make a scene or gain a reputation with the group....”

The dampening effect of others on vocalizing dissatisfaction may also be associated with the potential reaction of acquainted others. For example, being accompanied by a person who is highly likely

to cause a raucous when a complaint is registered may reduce the customer's desire to voice dissatisfaction. In an incident related to airline services, a respondent stated that her reasoning behind the decision not to complain was the fear that it might ignite her friend to respond in an embarrassing fashion.

“I didn't want to get her involved as well. This was due to her sometimes getting carried away if she becomes upset. So to avoid a scene and added frustration, I decided to walk away.”

Obligation

Obligation is defined as complaints made due to the customer's consideration and concern for his/her acquaintance's service experience in the hope that it will turn out satisfactory. Most incidents related to this subcategory took place in a restaurant setting.

“...my friends did have an impact on my decision to complain (to request for faster service for the vegetable dish). Since my friends are a middle-age couple, I respect them since they are older than me. I wanted to make this dining experience enjoyable for them. Also, since they really wanted to try this vegetable dish, I did not want to disappoint them...”

The obligation can also be expanded to include the notion that respondents feel the responsibility to help relieve the stress of those accompanying them. In the following example, a respondent reported a very unpleasant dining experience in a café in which the waitress's rude behavior was upsetting a companion.

“My sister's friend became extremely embarrassed, and almost to the point of tears...I decided to complain because I could not believe such behavior was going on. Furthermore, I feel sorry for my sister's friend who was very upset...The presence of

my sister and her friend definitely compelled me to complain....”

Unacquainted Customers with Physical Presence

Through in-store observations, McGrath and Otnes (1995) investigated stranger interactions in the retail setting and detected that strangers can influence consumer behavior via both overt (i.e., actual face-to-face interaction between two customers) and covert (i.e., awareness of influence on the part of only one customer) effects. In this category, eight subcategories were identified. Some of the critical incidents reported by the respondents illustrate how unacquainted customers play different roles in determining complaint actions.

Encouragement/Confidence/Support

Similar to the encouragement provided by acquainted customers (e.g., parents), the findings reveal that unacquainted customers are likely to make the consumer feel confident and supported. This support sends signals to the consumer that it is appropriate to take a stand when a service failure occurs.

“I was unsatisfied because the airline did nothing to remedy the situation...talking to the other customers helped gain more confidence in knowing that I was right and that what the airline was doing was wrong.”

Similar to the context of “acquainted” customers, larger groups of unacquainted customers seem to be associated with greater perceptions of support, potentially resulting in a greater probability that a complaint will be levied.

“They also have the same problem and we thought if more people complain maybe the problem would get fixed...”

The results also reveal that the consumer tends to look for specialized help from other customers in terms of complaining to service providers. The help may take several forms including unacquainted customers serving as witnesses and/or providing testimonials about the severity of the service failure. This is similar to overt stranger influences (e.g., help-seeker; proactive helper) identified by McGrath and Otnes (1995). Here is the example:

“The customers around me which totaled well over 150 people not only acknowledged my argument with the supervisor but were agreeing with me and making comments to him about the rude treatment.”

Embarrassment Avoidance

Embarrassment avoidance, also found in the “acquainted” customer category, refers to the situation in which consumers feel uncomfortable in making complaints because they are surrounded by other unacquainted customers and do not want to make a scene. The fact that these consumers choose not to complain in the presence of other customers, unknown to them, may point to the importance of their public images.

“...if I hadn’t been in a crowded airport I might have caused more of a fuss and demanded to make them let me on the plane. Because of the amount of people around I did not want to cause a huge scene.”

The embarrassment resulting from being surrounded by a group of unknown customers may reflect negative feelings examined in Argo et al.’s (2005) study. They found that the size of the group may increase the negative emotions of customers especially within close proximity (e.g., in the airport).

Altruism

Altruism, similar to “obligation” in the acquainted customer category, refers to customers’ genuine concern for other present customers. The hope appears to be that, if the customer complains, other customers’ suffering will end. This subcategory is labeled *altruism* rather than “obligation” to help differentiate and reflect the fact that these individuals are willing to complain for others with whom they have no relationship (i.e., unacquainted customers). As suggested by Batson (1991), altruism can be defined as a motivational state with the ultimate goal of increasing another’s welfare (p. 6). For example, one respondent who experienced an airline service failure reported the following experience.

“...the other customers’ presence helped me want to complain more. I did not like to see how the other customers were being treated....”

Problem Awareness through Service Comparison

Problem awareness through service comparison is an experience in which customers’ decisions to complain, on their own behalf, are influenced by comparing their own service with that of unacquainted others. The comparison focuses on the equality or inequality of service treatment. In some instances, this comparison precipitates customers’ awareness that, indeed, they are recipients of poor service. Through a comparative evaluation of the service provided to other unacquainted customers, consumers may realize it is necessary for them to speak up about their plight.

“The thing made us all mad was that the table next to us, which had five people at it, got their food before we did and they sat down after us. They had all ordered full meals

and we didn’t understand why it was taking our three mini pizzas so long.”

Customers may also make inferences about the cause of the unequal service provisions. For example, some respondents felt that the reason for their receiving poorer service, as compared to other customers, was their younger status.

“I think the fact that I looked young and like a student had a lot to do with why I did not get the help I needed. I saw many older people who looked like they had money get helped...I complained because I was treated unfairly...”

Although in the abovementioned instances comparisons resulted in complaints being registered, it is possible that comparison helps the consumer to realize that other customers are also experiencing the same level of service, preventing him/her from voicing dissatisfaction. The following example reveals how consumers may choose not to complain after experiencing an unpleasant service failure.

“...the pilot and everyone working aboard the flight were trying to calm everyone down. We were all really annoyed and wanted to complain but it is obvious that the situation affected everyone ...everyone was going through discomfort...”

Leadership

Leadership is an influence that occurs when it becomes apparent that, in order to receive attention from service providers who may correct the situation, someone in a group of people must take the initiative to make a complaint on behalf of the group. Unlike the influence of “problem awareness through service comparison”, which pertains to the degree of fairness with one’s service in comparison to others’ service and the decision to complain for one’s self, leadership arises when the consumer realizes that everyone is

experiencing the same problem and feels that he/she must emerge as a leader to inform the service provider about the situation.

"I think all the other customers that had this woman as a waitress wanted to complain. I decided to take the initiative because working in retail myself I know how important it is to be courteous to customers...."

Diffusion of Responsibility

In contrast to the leadership influence, the findings revealed that some consumers decide not to make complaints because they think other customers will do so in their place. This subcategory is referred to as diffusion of responsibility. *Diffusion of responsibility* influence occurs when an individual's sense of responsibility is diminished in the presence of other onlookers (Crooks and Stein 1991). In the CCB context, when other customers are present, some individuals believe that those around them may take the lead in complaining, relieving these individuals of this unpleasant duty.

"... I figured that someone out of our group would complain and that would be enough for me that the airline is aware of what went on."

Accessibility

Accessibility is defined as the perception that physical presence of other customers may make the task of approaching the service provider a more difficult one. According to the results, some consumers tend to perceive complaining to be more problematic as the number of customers increases. The other customers, acting as physical barriers, pose challenges to individuals in accessing employees. The lack of accessibility, due to the crowding, may deter consumers from finally complaining.

"I think the presence of other customers had an impact on my decision not to complain. First off the pickup area was very crowded and noisy. I didn't want to have to fight my way to the front..."

Revenge

Revenge relates to the consumer's desire to hurt the business by vocalizing complaints within the hearing distance of other present customers. The complaints are expressed when complainers can be sure that their efforts will result in making other customers aware of the service provider's failings. One male respondent sought such revenge on a national retail chain.

"I voiced my complaint loud and proud! I wanted the other customers to know what happened."

The influence discussed in the following section involves dissatisfied consumers whose decisions to make complaints were based on the mental presence, rather than physical presence, of other customers, either acquainted or unacquainted.

Acquainted Customers with Mental Presence

Confidence/Support

This subcategory indicates that acquainted customers who are absent from the service setting may also provide mental support for consumers' decisions to make complaints. Without being accompanied by their acquaintances, dissatisfied consumers may imagine the presence of their family or friends and what their family or friends would have suggested. Then, they choose how to deal with the situation based on their imagination. In this case, family and peers tend to lend support and provide reasons for having to make complaints even though they may not be physically present. A female

respondent stated her problem with the local phone company and decided to complain.

“...it was easy to complain because we had support. Many other people we knew had the same problems...”

Supplemented Annoyance

The subcategory, *supplemented annoyance*, addresses the situation in which consumers may get angrier with the service provider due to the recall of their acquaintance’s disappointing experiences and finally choose to complain even when the acquaintances are not physically present in the situation. The consumer might feel more annoyed simply because they recall how their friends had been treated by the same service provider and know that the service provider had not done much to rectify the problem.

“The negative experiences some of my friends had with Sprint influenced me to make the complaint because I was fed up with the company.”

Heightened Anticipation

Communication with family and/or friends regarding appropriate levels of service may heighten the individual’s anticipation as to how the service should be provided. With expectations influenced by acquainted others’ previous communications, complaints may be levied when they otherwise would not have been made. Here the expectations are formed based on information obtained from WOM communication through acquaintances, such as family and friends. This subcategory is termed *heightened anticipation*.

“I decided to complain because I was told (by friends) that usually beer companies are pretty good about customer satisfaction and it might be worthwhile to let them know I was unhappy.”

Unacquainted Customers with Mental Presence

Supplemented Annoyance

Effects similar to supplemented annoyance in the acquainted customer context may also take place when consumers’ decisions to complain are influenced by unacquainted customers who are not physically present. According to our findings, consumers may seek information provided by other customers from various sources (e.g., consumers’ complaints made to Better Business Bureau, online consumer reviews), which can be regarded as WOM communication (e.g., Chatterjee 2001). After investigating relevant information provided by unacquainted customers and realizing how poor the service was for other customers, dissatisfied consumers may decide to express their frustration with their own service experiences. In this case, confirmation may be what consumers are seeking from other unknown customers.

“But after all of this I was searching online for consumer complaints and found many people who too experienced the same terrible service with Dell...these complaints made me want to express my frustration as well and therefore I am writing the formal complaint.”

“The next thing I decided to do was to contact the Better Business Bureau to see if there were any complaints about Jiffy Lube....”

Altruism

Altruism, similar to “altruism” in the unacquainted-present customer category, refers to customers’ genuine concern for other imagined, future customers. Similarly, the customer hopes that complaints made by him/her would help these other customers from suffering in the future. For example, two respondents who experienced airline/auto

service failures reported their experiences and explicitly mentioned that they did not want other customers to suffer similar failures.

“I complained not only for myself, but also for the other customers of this airline. I did not want anyone to have to go through what I went through in the future.”

“I do not know any other customers at this particular dealership. However, I do hope that my complaining did some good for other customers like myself.”

Sympathy

Sympathy, the last subcategory in this research, refers to genuine concerns for the service provider when a consumer perceives that the business is experiencing a downturn due to physical absence of customers. That is, the consumer may make inferences about the viability of the business from the fact that there are no customers in the service setting. Dissatisfied consumers may choose to ignore the service failure and decide not to make complaints due to sympathetic thoughts toward the service provider. This is especially true when the consumer has built a close relationship with the provider.

“We decided not to complain because we had met the owners before and felt bad because the business wasn’t doing well...considering that we were the only ones in the restaurant...”

In an attempt to provide a preliminary framework of findings relative to the sources of effects of others on consumers’ complaint behavior and whether these sources appear to encourage and/or discourage complaint decisions, Figure 2 is presented. Figure 2 provides a summary of factors or sources of different types of influence revealed in this study that may explain social facilitation and interpersonal effects of others on complaint behavior. These sources are communication from others, group size, perceptions,

individual characteristics, and concern for others. This summary is used as a guideline for the following section.

DISCUSSION AND CONCLUSIONS

The objective of this research was to investigate the role of other customers at the time of service failure in CCB. Justification for this exploratory investigation was based on theories of social facilitation effects from social psychology and interpersonal influence from consumer behavior. Four major categories consisting of 17 subcategories of influences of other customers in the complaint setting, i.e., acquainted and unacquainted customers with physical and mental presence, were identified in this study. This study not only confirms the precepts of social facilitation theory which underlines both positive and negative effects of presence of other customers, i.e., customers can be affected by others even when they have not interacted, but also applies the characterization of mere presence into the context of complaint behavior.

Supportive communication from others, acquainted or unacquainted and present or mental, appears to be a powerful tool in encouraging consumers to complain. Specifically, encouragement, confidence, and support from others were cited as encouraging factors in decisions to complain in three of the four categories, i.e., acquainted/physical, unacquainted/physical, acquainted/mental. In addition, when acquainted and unacquainted others were physically present and provided positive feedback about the service failure, large group size appeared to be a joining positive force in decisions to complain. Social support from friends and family in service establishments has been documented in the literature (Stephens and Gwinner 1998; Wills and Shinar 2000). Although not recognized in the context of complaining, McGrath and Otnes (1995) identified a consumer category they termed “help-seeker.”

FIGURE 2

Social Facilitation and Interpersonal Effects and Consumer Complaint Behavior

Source of Influence	Subcategory of the Influence	Level of Acquaintance/Type of Social Presence	Effect on Complaint Behavior (i.e., encourage or discourage complaint behavior)
Communication from Others <ul style="list-style-type: none"> Feedback from Others 	1. Encouragement/Confidence/Support	Acquainted/Physical Unacquainted/Physical Acquainted/Mental	Encourage Encourage Encourage
	2. Heightened Anticipation	Acquainted/Mental	Encourage
	3. Supplemented Annoyance	Acquainted/Mental Unacquainted/Mental	Encourage Encourage
Group Size	1. Encouragement/Confidence/Support*	Acquainted/Physical Unacquainted/Physical	Encourage Encourage
	2. Embarrassment Avoidance*	Unacquainted/Physical	Discourage
	3. Accessibility	Unacquainted/Physical	Discourage
Perceptions <ul style="list-style-type: none"> Concern about Impressions of Others (or Self Image) Social Comparisons Desire to Make Impression 	1. Embarrassment Avoidance	Acquainted/Physical Unacquainted/Physical	Discourage Discourage
	2. Problem Awareness through Service Comparisons	Unacquainted/Physical	Encourage/Discourage
	3. Revenge	Unacquainted/Physical	Encourage
Individual Characteristics <ul style="list-style-type: none"> Leadership Ideology (or Dominance Personality) 	1. Leadership	Unacquainted/Physical	Encourage
	2. Diffusion of Responsibility	Unacquainted/Physical	Discourage
Concern for Others <ul style="list-style-type: none"> Selfless, Genuine Concern for Others 	1. Obligation	Acquainted/Physical	Encourage
	2. Altruism	Unacquainted/Physical Unacquainted/Mental	Encourage Encourage
	3. Sympathy	Unacquainted/Mental	Discourage

*Group size in conjunction with other factors

This type of customer seeks information and advice from unacquainted McGrath and Otnes (1995) also identified two types of helpers, i.e., reactive and proactive helpers. In the complaint context, these categories may translate to categories of others who may react to the verbal call of support (i.e., reactive helper) from individuals others in order to reduce risk, e.g., risk in purchasing the “wrong” product. (i.e., help-seeker) or volunteer support without prompting (i.e., proactive helper) from individuals. It is not clear from this study’s results whether or not consumers actively sought support from those present in the service setting. Future research is needed to better understand, in the context of complaint behavior, how consumers and those present may interact with one another to seek and/or provide support in service environments.

Interestingly, communications and feedback of family and friends, as well as strangers, can be reproduced in the imagination of the consumer. Largely, this input serves to bolster the consumer’s decision to complain. These communications stem from past conversations with family and friends about appropriate service provisions (i.e., heightened anticipation) in which disconfirmation of expectations likely occurs, imagined words of support for and acknowledgement of a service failure (i.e., encouragement/ or confidence or support), and remembrances and/or knowledge of similar service failures experienced by family and friends and unknown customers (i.e., supplemented annoyance). In the latter case, companies should take note that complaints by unknown others through online customer reviews, blogs, etc. may serve to elicit voiced complaints to company representatives. This sheds light on the existing word of mouth communication literature (Harris, Baron, and Ratcliffe 1995; Wilson and Peterson 1989) in that complaining behaviors may be the outcome of word-of-mouth communication which has not been addressed widely in the existing literature. The

findings regarding the influence of other customers with mental presence under the mentioned categories strongly suggest that customers who judge the service performance based on their knowledge obtained from some personal marketing sources (Steyer, Garcia-Bardidia, and Quester 2006) tend to view the service failure even more severely culminating in a complaint.

Genuine concern for others appears to elicit complaints from consumers to service providers. This concern can extend to family and friends accompanying the consumer at the time of service failure (i.e., obligation), strangers in the servicescape that are perceived by the consumer to be victims of a service failure (i.e., altruism – unacquainted/physical), and imagined future consumers that are thought to likely experience the same service failure fate (i.e., altruism - unacquainted/mental). Alternatively, the absence of consumers may discourage voice in a concern for the service provider (i.e., sympathy). Thus, in this situation, the target for concern is not others in the service environment but rather for the service provider.

In general, the present research findings suggest that others, in particular acquainted others who are present or imagined, may induce consumers to complain. However, the results also imply that others, under certain conditions, can impede consumers’ complaint behavior. Acquainted and unacquainted others, physically present, who may not have verbalized support and/or who, in some manner, are perceived to be non-supportive of complaining in the particular situation, may elicit a consumer’s avoidance response in an attempt to minimize potential embarrassment. In other words, consumers appear to be fearful that others may formulate unwanted impressions of them if they choose to complain. In the case of unacquainted others, large groups of strangers may enhance this effect. These findings are consistent with social comparison theory which

supports the notion that social influence affects behavior because individuals may be concerned how others view them (e.g., Carver and Scheier 1978, 1981, 1982) or that others may be evaluating them (e.g., Cottrell 1972). Lastly, rather than concerns about embarrassment, consumers may be dissuaded from voicing complaints due to strangers' physical presence impeding accessibility to the service provider. Consumers may feel that it would be too difficult to reach the service provider given the obstruction presented by the mass of others. This suggests that practitioners should be cognizant of how waiting lines and service areas are configured so as not to block consumers from accessing service providers in these situations.

Some types of influence from others seemingly both encourage and discourage voicing complaints to service providers. In the "problem awareness through service comparisons" category, respondents indicated that comparisons of their poorer service to that of those unknown to them and present in the service setting instigated complaints. As is the case with embarrassment avoidance, this social facilitation effect type aligns with the social comparison theory (e.g., Carver and Scheier 1978, 1981, 1982). Conversely, in the same category, the knowledge that all consumers were suffering in the same circumstances seemed to squelch some from complaining. Investigations about own comparisons of service with that of others, e.g., service comparisons that are perceived to be similar or different, and how they impact voicing dissatisfaction would be helpful in better understanding this phenomenon.

Feelings of leadership and responsibility, or lack thereof, to unfamiliar others also seem to have an effect on whether complaints are encouraged or discouraged. Interestingly, some felt responsible for speaking up for others experiencing a service failure (i.e., Leadership) whereas other consumers believed that someone from the audience would relieve them of this responsibility (i.e., Diffusion of

Responsibility). According to personality research, individuals may be described and identified by their personality characteristics in various dimensions, one of which is dominance (Gough 1957). Dominance includes aspects of "leadership ability, dominance, persistence, and social initiative" (Robertson and Meyers 1969, p. 165). It is likely that individuals who possess dominance personality characteristics tend to take the initiative to make a complaint. In an attempt to understand "Diffusion of Responsibility," one stream of research that explains how presence of others may reverse social facilitation effects may be helpful (Harkins 1987). Specifically, "social loafing" supports the notion that some individuals are less motivated to perform well when in the presence of others in comparison to situations in which they are alone. Harkins and Szymanski (1988) found that social loafing effects can be eliminated when individuals have a tendency to evaluate themselves or perceive that others are evaluating them. Future research is needed to explain why some consumers defect to others in the service arena to complain whereas other consumers undertake the responsibility for complaint actions. Perceptions of others' evaluations and/or tendency to self evaluate should be noted as possible factors in explaining these different reactions.

In general, the present study's results confirm some theories and findings provided in interpersonal influence and social facilitation literatures. For example, the number of present others was mentioned by some respondents in the present study, in conjunction with other factors, in explicating their complaint decisions. This is consistent with Lascau and Zinkhan's (1999) study in which size of group was found to affect consumers' intentions to comply. Also, individuals' "imagined" communications from strangers and family and friends appear to influence their complaint behavior (Wilson and Peterson 1989). Social comparison theory (Cottrell 1972), purporting social

effects as being driven by evaluations, is supported by this study's findings through such categories as "Embarrassment Avoidance" and "Problem Awareness through Service Comparisons." Communication from acquainted and unacquainted others, instrumental in supplying support to consumers undergoing service failures, seemingly has influence on decisions to complain. Aiello and Douthitt (2001), in their review of social facilitation literature and research, cited "feedback from others" as a subcategory of one of five major factors (i.e., situational factors) that may impact how others affect an individual's performance.

Despite the abovementioned confirmations, questions remain. For instance, concern for others is not known to be specifically identified in interpersonal or social facilitation literatures for having a role in how others affect individuals' performances. Yet, the present findings clearly suggest that these concerns may play a role in how others affect consumers' complaint decisions. In addition, Tombs and McColl-Kennedy (2003) propose that consumers read others' emotions which may, in turn, affect their behavior. However, this study's findings did not corroborate this concept. Lastly, according to social facilitation theory, this study does not reveal whether or not "drive" was heightened through the presence of others and/or whether the perceived complexity of the task of complaining is influential in how others' presence influence complaint performance. Research in these areas is warranted.

Practitioners can use the information gleaned from this study relative to interpersonal influence and social facilitation effects in designing strategies related to CCB. First, in illustration, evidence from this study implies that service managers wishing to glean complaints from customers, rather than facilitating their permanent exit, should be sure to implement complaint processes in multiple ways, e.g., one strategy may allow would-be complainers to be accompanied by

supporters; whereas, another strategy may offer an environment in which no others are present. Secondly, service providers that deal directly with consumers may be trained to identify different types of interpersonal influence on CCB. They may be instructed to manipulate the aspects of the different types of effects so as to encourage complaining behavior among their customers. Thirdly, the findings regarding the influence of other customers with mental presence strongly suggest that customers who judge the service performance based on their knowledge obtained from personal marketing sources (Steyer, Garcia-Bardidia, and Quester 2006) tend to view the service failure even more severely culminating in a complaint. This information confirms extant WOM research and addresses the importance of managing WOM communication for marketers. Fourth, the subcategory "sympathy" has certain implications. When building relationships with customers, the service provider is encouraging dissatisfied customers to make constructive suggestions so that improvements can be made; however, the service provider must note that there is a possibility that disgruntled customers could be less willing to voice complaints due to their concerns for the service provider. Therefore, practitioners should not only build good relationships with their customers but also encourage feedback from customers so that their opinions can be heard.

As is true of any research, the limitations of this study should not be ignored. First, this study uses students as a convenience sample; therefore, the generalizability is limited in scope. For example, the absence of reports of influence by work colleagues (e.g., peers, superiors) is notable. Also, due to limited experiences, students may be less independent than older counterparts in which case they may have a stronger need to elicit support of others in making decisions about voicing complaints to service providers. Second, this research employed a modified critical incident

technique based on retrospective reports. It is possible that recall bias could have influenced the results. Third, this research only addresses voicing complaints to service providers. However, it does not explain how the mere presence of others might affect other types of complaint behavior such as exit.

REFERENCES

- Argo, Jennifer J., Darren W. Dahl, and Rajesh V. Manchanda (2005), "The Influence of a Mere Social Presence in a Retail Context," *Journal of Consumer Research*, 32 (2), 207-212.
- Aiello, John R. and Elizabeth A. Douthitt (2001), "Social Facilitation from Triplett to Electronic Performance Monitoring," *Group Dynamics: Theory, Research, and Practice*, 5 (3), 163-180.
- Aronson, Elliot, Timothy D. Wilson, and Robin M. Akert (1999), *Social Psychology*, 3rd Ed. Addison-Wesley Educational Publishers Inc.
- Batson, C. D. (1991), *The Altruism Question: Toward a Social-Psychological Answer*. New Jersey: Lawrence Erlbaum Associates, Inc. Publishers.
- Bearden, William O. and Michael J. Etzel (1982), "Reference Group Influence on Product and Brand Purchase Decisions," *Journal of Consumer Research*, 9 (3), 183-194.
- Bitner, Mary Jo, Booms, Bernard H., and Mary Stanfield Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," *Journal of Marketing*, 54 (January), 71-84.
- Blodgett, Jeffrey G. and Ronald D. Anderson (2000), "A Bayesian Network Model of the Consumer Complaint Process," *Journal of Service Research*, 2 (4), 321-338.
- Chatterjee, Patrali (2001), "Online Reviews: Do Consumers Use Them?" *Advances in Consumer Research*, 28, 129-133.
- Carver, Charles. S. and Michael. F. Scheier (1978), "Self-focusing Effects of Dispositional Self-Consciousness, Mirror Presence, and Audience Presence," *Journal of Personality and Social Psychology*, 36, 324-332.
- _____ (1981), "The Self Attention Induced Feedback Loop and Social Facilitation," *Journal of Experimental Social Psychology*, 17, 545-568.
- _____ (1982), "Control Theory: A Useful Conceptual Framework for Personality, Social, Clinical, and Health Psychology," *Psychological Bulletin*, 92, 111-135.
- Chebat, Jean-Charles, Moshe Davidow, and Isabelle Codjovi (2005), "Silent Voices: Why Some Dissatisfied Consumers Fail to Complain?" *Journal of Service Research*, 7 (4), 328-342.
- Childers, Terry L. and Akshay R. Rao (1992), "The Influence of Familial and Peer-Based Reference Groups on Consumer Decisions," *Journal of Consumer Research*, 19 (3), 198-211.
- Cottrell, N. B. (1972), "Social Facilitation," in *Experimental Social Psychology*, C. G. McClintock, ed. New York: Holt, 185-236.
- Crie, Dominique and Richard Ladwein (2002), "Complaint Letters and Commitment Theory: An Empirical Approach in Mail-order Selling," *Journal of Targeting, Measurement and Analysis for Marketing*, 11 (1), 45-55.
- Crooks, Robert L. and Jean Stein (1991), *Psychology: Science, behavior, and life*. (2nd Ed.) Holt, Rinehart and Winston, Inc.
- Dahl, Darren W., Rajesh V. Manchanda, and Jennifer J. Argo (2001), "Embarrassment in Consumer Purchase: The Roles of Social Presence and Purchase Familiarity," *Journal of Consumer Research*, 28 (December), 473-481.
- Day, Ralph L. (1977), "Extending the Concept of Consumer Satisfaction," *Advances in Consumer Research*, 4, 149-154.
- _____ (1984), "Modeling Choices among Alternative Responses to Dissatisfaction," *Advances in Consumer Research*, 11, 496-499.
- Day, Ralph L. and Muzaffer Bodur (1978), "Consumer Response to Dissatisfaction with Services and Intangibles," *Advances in Consumer Research*, 5, 263-272.
- Estelami, Hooman (2000), "Competitive and Procedural Determinants of Delight and Disappointment in Consumer Complaint Outcomes," *Journal of Service Research*, 2 (3), 285-300.
- Folkes, Valerie S. (1984), "Consumer Reactions to Product Failure: An Attributional Approach," *Journal of Consumer Research*, 10 (March), 398-409.

- Gaumer, Carol J. and William C. LaFief (2005), "Social Facilitation: Affect and Application in Consumer Buying Situations," *Journal of Food Products Marketing*, 11 (1), 75-82.
- Gough, Harrison. (1957), *California Psychological Inventory Manual*. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Harkins, Stephen. G. (1987), "Social Loafing and Social Facilitation," *Journal of Experimental Social Psychology*, 23, 1-18
- Harkins, Stephen. G. and Kate Szymanski (1988), "Social Loafing and Self-Evaluation with an Objective Standard," *Journal of Experimental Social Psychology*, 24, 354-365.
- Harris, Kim, Steve Baron, and Julie Ratcliffe (1995), "Customers as Oral Participants in a Service Setting," *Journal of Services Marketing*, 9 (4), 64-76.
- Hirschman, Albert O. (1970), *Exit, Voice, and Loyalty*. Cambridge, MA: Harvard U. Press.
- Jacoby, Jacob and James J. Jaccard (1981), "The Sources, Meaning and Validity of Consumer Complaining Behavior: A Psychological Analysis," *Journal of Retailing*, 57, 4-24.
- Lascu, Dana-Nicoleta and George Zinkhan (1999), "Consumer Conformity: Review and Applications for Marketing Theory and Practice," *Journal of Marketing Theory and Practice*, 7 (3), 1-12.
- Latané, Bibb (1981), "The Psychology of Social Impact," *American Psychologist*, 36 (4), 343-356.
- Liu, Raymond R. and Peter McClure (2001), "Recognizing Cross-cultural Differences in Consumer Complaint Behavior and Intentions: An Empirical Examination," *The Journal of Consumer Marketing*, 18 (1), 54-75.
- Luo, Xueming (2005), "How Does Shopping With Others Influence Impulsive Purchasing?" *Journal of Consumer Psychology*, 15 (4), 288-294.
- McGrath, Mary Ann and Cele Otnes (1995), "Unacquainted Influencers: When Strangers Interact in the Retail Setting," *Journal of Business Research*, 32, 261-272.
- Miller, Rowland S. (1996), *Embarrassment: Poise and Peril in Everyday Life*, New York: Guilford.
- Morel, Kaj P. N., Theo, B. C. Poiesz, and Henk A. M. Wilke (1997), "Motivation, Capacity and Opportunity to Complain: Towards A Comprehensive Model of Consumer Complaint Behavior," *Advances in Consumer Research*, 24, 464-469.
- Moschis, George P. (1985), "The Role of Family Communication in Consumer Socialization of Children and Adolescents," *Journal of Consumer Research*, 11 (2), 898-913.
- Nyer, Prashanth U. (2000), "An Investigation into whether Complaining Can Cause Increased Consumer Satisfaction," *Journal of Consumer Marketing*, 17 (1), 9-19.
- Oliver, R. L. (1987), "An Investigation of the Interrelationship between Consumer (Dis)satisfaction and Complaint Reports," *Advances in Consumer Research*, 14, 218-222.
- Paulus, P. B. (1983) "Group Influence on Individual Task Performance," in *Basic Group Processes*, P. B. Paulus, ed. New York: Springer-Verlag, 97-120.
- Rafaeli, S. and A. Noy (2002), "Online Auctions, Messaging, Communication and Social Facilitation: A Simulation and Experimental Evidence," *European Journal of Information Systems*, 11, 196-207.
- Robertson, Thomas S. and James H. Meyers (1969), "Personality Correlates of Opinion Leadership and Innovative Buying Behavior," *Journal of Marketing Research*, 6, 164-168.
- Singh, Jagdip (1988), "Consumer Complaint Intentions and Behavior: Definitional and Taxonomical Issues," *Journal of Marketing*, 52 (January), 93-107.
- _____ (1990), "A typology of consumer dissatisfaction response styles," *Journal of Retailing*, 66 (1), 57-99.
- Sommer, R. and B. A. Sommer (1989), "Social Facilitation Effects in Coffee-Houses," *Environment and Behavior*, 21 (6), 651-666.
- Stephens, Nancy and Kevin P. Gwinner (1998), "Why Don't Some People Complain? A Cognitive-Emotive Process Model of Consumer Complaint Behavior," *Journal of the Academy of Marketing Science*, 26 (3), 172-189.

- Steyer, Alexandre, Renaud Garcia-Bardidia, and Pascale Quester (2006), "Online Discussion Groups as Social Networks: An Empirical Investigation of Word-of-Mouth on the Internet," *Journal of Interactive Advertising*, 6 (2), 51-59.
- Tombs, Alastair and Janet R. McColl-Kennedy (2003), "Social-Servicescape Conceptual Model," *Marketing Theory*, 3 (4), 447-475.
- Wills, Thomas and Ori Shinar (2000), "Measuring Perceived and Received Social Support," in *Social Support Measurement and Intervention*, Sheldon Cohen, Lynn G. Underwood, and Benjamin H. Gottlieb, eds. New York: Oxford University Press, 86-135.
- Wilson, W. R. and Robert E. Peterson (1989), "Some Limits on the Potency of Word-Of-Mouth Information," *Advances in Consumer Research*, 16 (1), 23-29.
- Zajonc, R.B. (1965), "Social Facilitation," *Science*, 149, 269-274.
- _____ (1980), "Compresence," in *Psychology of Group Influence*, P. B. Paulus, ed. New Jersey: Erlbaum, 35-60.
- Zeithaml, Valarie A. and Mary Jo Bitner (2003), "Services Marketing: Integrating Customer Focus Across the Firm," Boston, MA: McGraw-Hill Irwin.

Send Correspondence Regarding This Article to:

Ruoh-Nan Yan, Ph.D.
Assistant Professor
Dept. of Design and Merchandising
161 Aylesworth SE
1574 Campus Delivery
Colorado State University
Fort Collins, CO 80523
Phone: 970.407.9310
ruohnan@cahs.colostate.edu